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WORLD PSYCHIATRIC ASSOCIATION
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"TREATMENTS IN PSYCHIATRY: AN UPDATE"

November 10-13, 2004
Florence, Italy

ABSTRACTS

MASSON

The World Psychiatric Association (WPA)

The WPA is an association of psychiatric societies aimed to increase knowledge and skills necessary for work in the field of mental health and the care for the mentally ill. Its member societies are presently 128, spanning 111 different countries and representing more than 150,000 psychiatrists. The WPA organizes the World Congress of Psychiatry every three years. It also organizes international and regional congresses and meetings, and thematic conferences. It has 60 scientific sections, aimed to disseminate information and promote collaborative work in specific domains of psychiatry. It has produced recently several educational programmes and series of books. It has developed ethical guidelines for psychiatric practice, including the Madrid Declaration (1996). Further information on the WPA can be found in the website www.wpanet.org.

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"TREATMENTS IN PSYCHIATRY: AN UPDATE"

November 10-13, 2004
Florence, Italy

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UL1.
THE CONTEXT OF TREATMENT IN PSYCHIATRY

N. Sartorius
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The ingredients of the treatment process are the treatment methods, the patients and their illnesses, the persons applying the therapy and the environment in which the treatment is taking place. This lecture will address the latter. It will describe the social and economic factors characterizing the context of treatment of mental disorders in different parts of the world, the impact of culture on the perception of the mental disorder and its treatment, the technical and human resources available for the treatment of people with mental illness and the trends and developments in society (and in science) likely to affect the treatment of mental illness in the future.

UL2.
EMPATHY, MEANING, AND THE THERAPEUTIC ALLIANCE IN PSYCHIATRIC PRACTICE

A. Tasman
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Scientific advances in psychiatry in the last several decades have been dramatic, but there has been a concomitant de-emphasis on a biopsychosocial approach to understanding and intervention for psychiatric disorders. For example, the DSM diagnostic changes emphasize symptom checklist approaches to psychiatric diagnosis; neuroscience and psychopharmacology gains emphasize somatic interventions; delivery system changes, and inadequate availability of psychiatrists, diminish attention to the psychological aspects of the patient's presentation and treatment. This lecture will argue for the benefits of a re-emphasis on a comprehensive biopsychosocial approach, which will encompass a number of positive patient care results. Clearly, compliance with treatment is enhanced when the treatment occurs within the context of a trusting therapeutic alliance with a skilled, psychologically minded, and empathic clinician. Attention to psychological factors and developmental stresses allows for a more thorough understanding of psychopathology. In addition, research studies have begun to demonstrate the superiority of combined psychotherapeutic and psychopharmacologic treatment over one-dimensional interventions, especially for seriously ill patients. A key task for psychiatry will be the integration of the best of our humanistic traditions with the latest scientific advances. Clinical vignettes from the author's practice will be used to illustrate the issues being discussed.

UL3.
THE COMPREHENSIVE MANAGEMENT OF SCHIZOPHRENIA

N. Schooler
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Clinical management of schizophrenia represents an ongoing challenge in today's complicated clinical environment. In virtually all countries hospitalization is reserved for the most severely ill patients and is only long enough to accomplish the most limited goals of crisis resolution. Therefore, long-term psychosocial and pharmacological treatments are provided in community settings and implementation of most treatment changes takes place in these settings as well. This presentation will review current information regarding both medications and psychosocial treatments. Over the last decade new antipsychotic medications have become available that have greatly changed the expectations both for clinical response and for side effects. Most recently, a long-acting version of a new antipsychotic has been developed. Data regarding long-term efficacy of these medications in comparison to classic antipsychotics will be presented as will information regarding differential side effect profiles. The complex question of switching from one medication to another will be addressed focusing on when and how to implement changes. The development of novel psychosocial treatments has been almost as fast paced as the changes in the pharmacological environment. Cognitive remediation, cognitive behavior therapy, social skills training and environmental modifications to address cognitive deficits have now been added to family based psychoeducation as treatments with demonstrated long-term efficacy. The presentation will review evidence regarding these treatments and suggest strategies for integrating specific psychosocial interventions in a comprehensive treatment plan for long-term community management. Ultimately, treatment of schizophrenia requires a long-term commitment on the part of a team that integrates patients and family members with professional clinicians. We do not have cures for schizophrenia but the outlook has never been brighter.

UL4.
EARLY PSYCHOSIS: DETECTION AND INTERVENTIONS

P. McGorry
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Early intervention in serious medical illnesses - such as cancer, ischaemic heart disease, stroke, and diabetes - has long been accepted. In recent years this paradigm has been belatedly introduced into the landscape of psychiatric treatment, focusing on psychotic disorders initially, particularly schizophrenia. Transcending the therapeutic nihilism that has plagued the schizophrenia field, this paradigm has been enthusiastically taken up around the world by a large network of clinical researchers and major academic centres, and by many clinicians as well. As a reform process, it is arguably the most strongly evidence-based to date. Naturally critics and sceptics coexist and usefully challenge the process, helping to balance and guide this evidence-based reform. As early intervention shades from clearcut secondary prevention into intervention in subthreshold (prodromal) cases and ultimately further back to asymptomatic but high risk individuals, then the ethical scenario changes significantly. The onus to avoid harm and to demonstrate real benefit and cost-effectiveness becomes much stronger. As David Sackett has trenchantly observed, preventive medicine can be intrinsically arrogant and its proponents must take care. Yet, for most (usually young) people with emerging psychosis, these concerns are far from the reality of their experience. The timing and quality of their initial care remains seriously flawed even in the most affluent societies, despite the current availability of highly effective and better tolerated medicines, a new generation of psychosocial interventions and evolved models of care firmly embedded in the general community. This situation mandates a practical reform process merely to improve the quality of care, whether or not the long-term course of illness ends up being changed for the better. In addition, a focus on the early phases of illness already has the demonstrated benefit of clarifying the neurobiological

and epidemiological processes underpinning onset of psychotic disorders such as schizophrenia. This lecture will articulate the conceptual and ethical framework for early intervention in psychosis, describe the evidence of progress and effectiveness in detecting and managing young people during this period of the disorder, and outline some future directions for this paradigm in the wider context of psychiatry.

UL5.
THE COMPREHENSIVE MANAGEMENT OF RECURRENT MAJOR DEPRESSION

G.A. Fava
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The chronic and recurrent nature of major depressive disorder is getting increasing attention. Approximately 8 of 10 people experiencing a major depressive episode will have one or more further episodes during their lifetime, a recurrent major depressive disorder. In the nineties, prolongation or lifelong pharmacotherapy has emerged as the main therapeutic tool for preventing relapse in depression. Such therapeutic choice is based on the effectiveness of antidepressant drugs compared to placebo in decreasing relapse risk and on the better tolerability of the newer compounds in terms of side effects profiles. However, outcome after discontinuation of antidepressants does not seem to be affected by the duration of their administration. Loss of clinical effects, despite adequate compliance, has also emerged as a vexing clinical problem. Use of intermittent pharmacotherapy with follow-up visits is another therapeutic option which takes into account the fact that a high proportion of patients would discontinue the antidepressant anyway. However, the problems of resistance (the fact that a drug treatment may be associated with a diminished chance of response in those patients who successfully responded to it, but discontinued it) and of discontinuation syndromes are a substantial disadvantage of this therapeutic option. In recent years, several controlled trials have suggested that a sequential use of pharmacotherapy in the treatment of the acute episode and psychotherapy in its residual phase may improve long-term outcome. Patients, however, should be motivated for psychotherapy and skilled therapists should be available. Despite an impressive amount of research in depression treatment, there is still paucity of studies addressing the specific problems that prevention of recurrent depression entails. It is important to discuss with the patient the various therapeutic options and to adapt strategies to the specific needs.

UL6.
COMPREHENSIVE LONG-TERM MANAGEMENT OF BIPOLAR DISORDER

M.E. Thase
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For most, bipolar affective disorder presents a life-long challenge, with an impact on quality of life and mortality comparable to insulin-dependent diabetes mellitus. An early onset of illness and recurrence are hallmarks of the disorder; for many, a highly relapsing and chronic illness course causes profound disability. The depressive phase of the illness is the most pernicious, whether in "pure" or in mixed or rapid cycling variations. Data from recent studies using both longitudinal and cross-sectional survey designs indicates that depression will consume up to one third of the average patient's life. Ultimately, at least one in 10 will die by suicide. Long-term management plans therefore are paramount to lessen the deleterious effects of bipolar affective disorder. The foundation of such a plan begins with identification of an effective and tolerable mood stabilizer to ensure prophylaxis. Psychoeducation is important to optimize adherence and enhance the patient's self-management skills. When prophylaxis with standards such as lithium salts or divalproex fails, several of the atypical antipsychotics and lamotrigine have established efficacy. Although the role of longer-term antidepressant therapy remains controversial, several recent naturalistic studies suggest that at least some patients benefit from maintenance antidepressant therapy. There is now good evidence that focused individual and family therapies can significantly reduce depressive symptoms and/or lessen the risk of relapse/recurrence.

UL7.
UNDERSTANDING AND MANAGING THE CONSEQUENCES OF VIOLENCE AND TRAUMA

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Since post-traumatic stress disorder (PTSD) was first included in the diagnostic nomenclature in 1980, a range of epidemiological studies have demonstrated that its prevalence is greater than originally anticipated. These studies suggest that PTSD accounts for a degree of disability and financial cost second only to major depressive disorder. The more general question remains as to the extent to which traumatic events convey significant risk for the onset of other disorders, such as major depressive disorder, substance abuse and suicidal behaviour. What is particularly noteworthy from these epidemiological studies, is that events characterised by interpersonal violence involving the direct physical assault of individuals account for higher rates of morbidity than other traumatic events, such as accidents. These findings are of particular importance, given the rates of communal violence and violent crime in countries where there are great divides of wealth or endemic poverty. The consequences of violence within these communities can create a cycle of revenge and hatred that locks those involved into a spiral of self-destructiveness. Similar patterns have been identified in indigenous communities struggling with the problems of substance abuse and social disenfranchisement. An emerging body of evidence suggests that the rates of violence directed against psychiatric patients with disorders such as schizophrenia and bipolar disorder are an issue of major concern. The impact of these assaults on the course of their underlying mental illness has largely been unexplored to date. One of the challenges is to create a broad awareness of the importance of post-traumatic morbidity amongst mental health professionals and increase the levels of expertise in this domain. Traumatic events that effect large groups, such as disasters, can provide unusual opportunities to create better understanding of the effects of trauma among mental health professionals generally. Studies in a range of clinical populations indicate that PTSD is often missed as a diagnosis, preventing the instigation of the appropriate treatment. Also, a broader perspective using a public health approach should address the social disadvantage and structural issues that contribute to the prevalence of trauma within the community. A variety of effective treatments exist for PTSD, including medication, cognitive behaviour therapy and eye movement desensitization and reprocessing (EMDR). There is a need for other treatments to be considered in treatment trials, because avoidance leads to less than optimal uptake for treatments using exposure. Also, for the

victims of rape and other forms of violence, addressing the social context and the needs for interpersonal safety are critical components to an effective clinical intervention. Medication can play an important role in facilitating the engagement in treatment and in the management of associated affective symptoms, hyperarousal and dissociation. At the core of effective treatment, is an understanding about the linking of the reactivation of the traumatic memory by triggers in the environment of the individuals, and giving them a degree of control and understanding of their reactivity. Failure to address the PTSD symptoms in the victims of criminal and politically inspired violence such as torture further disadvantages individuals who are already disadvantaged from the experiences they have to endure. Inadequate treatment further exacerbates this disadvantage.

UL8.
INTEGRATING PHARMACOTHERAPY AND PSYCHOTHERAPY IN THE MANAGEMENT OF ANXIETY DISORDERS

J.M. Gorman
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For all of the anxiety disorders, ample evidence exists that both pharmacotherapy and psychotherapy are effective interventions. We and others have proposed a model of anxiety disorder pathophysiology that suggests that antianxiety medications work by decreasing activity at the level of the amygdala, while psychosocial interventions work by increasing activity at the level of the prefrontal cortex, parts of which are known to inhibit the amygdala. This model predicts that medication and psychotherapy should be synergistic in the treatment of anxiety disorders. However, evidence for this synergistic effect is lacking and indeed some studies have suggested that the combination of antianxiety medication and cognitive behavioral therapy (CBT) may actually impair the effectiveness of CBT. One possibility for the lack of observed synergism of combined therapy is that patients may attribute their response to combination treatment to drug alone, therefore not fully attending to the psychosocial treatment. Another possibility is that medications used for anxiety disorders like benzodiazepines may cause cognitive impairment such that the consolidation of information from CBT is not complete. Based on a four site study of the treatment of panic disorder conducted by Barlow, Gorman, Shear and Woods, in which patients who responded to medication and CBT for nine months nevertheless did more poorly during a subsequent no-treatment observation period than patients who had received CBT only, Otto has suggested that medication may form a "context" for the effect of CBT when the two are given together. Extinction of learned fear is known to be context specific, a phenomenon believed to require long-term potentiation of hippocampal memory. Several recommendations about combining medication and psychotherapy emerge from these findings. First, benzodiazepines use should be kept to a minimum and whenever possible not be given on a chronic basis. Second, patients should be told that psychotherapy and medication work by different routes, each contributing to the overall improvement, and therefore, therapeutic benefits should not be attributed to medication effects alone. Finally, whenever possible it may be useful to extend psychotherapy beyond the time medication is discontinued.

UL9.
EVIDENCE BASED MANAGEMENT OF DEMENTIA

A. Burns
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The current evidence base for the management of dementia is growing in a number of different areas. Drugs for the treatment of cognitive deficits are now widely prescribed although not universally available. It is in the management of behavioural disturbances and psychiatric symptoms that many advances are being made. There is an emerging evidence base for the use of the acetylcholinesterase inhibitors to control symptoms such as agitation and psychotic symptoms and their use in practice may be encouraged by safety concerns with antipsychotics. They appear to be able to delay the emergence of behavioural disturbances, ameliorate their presence, are particularly effective against hallucinations and agitation, and their effect seems independent of drug choice. Non-drug approaches are also attracting a significant evidence base. Behavioural management of agitation is an effective first line treatment. Other therapies such as bright light therapy, aromatherapy and exercise have all benefits proven by randomised controlled trials and are popular because of their non-threatening nature. Perhaps combinations of drug and non-drug approaches hold most promise for the future. Interventions to reduce stress on carers are as popular as ever, have proven efficacy and it is surprising that they are not more widely implemented. Finally, prevention of dementia, or at the very least reduction of cognitive decline, is a reality with strategies directed primarily at cerebrovascular risk factors.

UL10.
THE MULTIMODAL TREATMENT OF EATING DISORDERS

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The treatment of eating disorders is based on a multimodal model. This model recognizes that eating disorders do not have a single cause or a predictable course. They begin with dieting or restrained eating behavior. Often the dieting is for the purpose of becoming thinner and more attractive, or it may follow a severe stress or physical illness. Behaviors and influences antecedent to the dieting experience can be categorized as problems of biological vulnerability, psychological predispositions, family disturbances, and environmental-societal influences. The integrative effect of these disturbances on dieting behavior propels the individual person into developing an eating disorder. As the dieting continues, starvation effects, weight loss, nutritional effects, and psychological changes occur. A sustaining cycle of core dysfunctional eating behaviors develop with both psychological and physiological reinforcement. Both the severity of illness and the specific eating disorder diagnosis will determine the treatment strategy for an eating disorder. Guidelines for treatment of the intensity of illness are established from hospitalization to day programs to intensive outpatient to group therapies. The major categories of eating disorders are anorexia nervosa, bulimia nervosa, and binge eating disorder. Variants of these disorders are treated similarly to the major diagnostic category which they approximate. For treatment of anorexia nervosa the key elements are medical management, behavior therapy, cognitive therapy, and family therapy. Pharmacotherapy is at best an adjunct to the other therapies in this disorder. Nutritional rehabilitation and weight restoration are essential. Behavior therapy is useful in

managing weight gain and prevention of binge eating and purging. Cognitive therapy addresses the distorted cognitions of feeling fat, evaluating self-worth solely by body image, and the pervasive sense of ineffectiveness. Family therapy is especially effective for children under the age of 18. Fluoxetine may prevent relapse in patients who have obtained at least 85% of a normal weight. Atypical antipsychotics may be useful in reducing severe anxiety and augmenting weight gain. In contrast to anorexia nervosa, treatment studies of bulimia nervosa have proliferated in the past fifteen years. Controlled studies of specific therapy techniques such as behavior therapy, cognitive therapy, psychodynamic therapy, and psychoeducation therapy have been conducted in both individual and group therapies. Multiple controlled drug treatment studies have also been conducted. Often a variety of therapy techniques are used together in either individual or group therapies. There is no way at present to predict what bulimic patient will respond to what type of treatment. Binge eating disorder is still considered in the category of eating disorders not otherwise specified. This disorder is distinguished from bulimia nervosa by the lack of compensatory behaviors to counteract the caloric intake and weight gain from binge eating episodes. These patients do not purge, exercise, or engage in dieting. Randomized controlled treatment trials have used the same techniques as those used for bulimia nervosa. Patients with binge eating disorder have responded well to cognitive-behavioral therapy and antidepressants that have been effective in treating bulimia nervosa.

UL11.
THE PRINCIPLES AND PRACTICE OF COGNITIVE-BEHAVIOURAL PSYCHOTHERAPY

P. Salkovskis
Department of Psychology, Institute of Psychiatry, de Crespigny Park, Denmark Hill, London, UK

As evidence based approaches become more widely accepted, it is clear that cognitive-behavioural therapy (CBT) is now the first line treatment for those problems where psychological therapy is indicated. The rapid development and continued evolution of CBT is a result of it being not only an evidence based therapy but also an empirically grounded clinical intervention, involving the integration of theory, experimental investigations, clinical practice and treatment outcome research. The cognitive-behavioural approach represents the third generation of psychotherapy. CBT is based on an understanding of clinical phenomenology of particular problems, the cultural and personal experience of the patient and the application of cognitive frameworks in the understanding of emotion and emotional problems. Therapy itself thus requires the skilful blending of clinical art and clinical science. Therapy is formulation driven, and there is a reciprocal relationship between treatment strategies and research into psychopathology. This means that psychotherapists can be clinical scientists as well as scientist practitioners. The cognitive behavioural approach to understanding and treatment will be described with particular reference to anxiety disorders. The CBT approach is characterised by the idea that a) the processes involved in the maintenance of anxiety generalise across different anxiety disorders, and b) the content of concerns is highly specific to the different types of anxiety. This specificity of content, and the impact that this has on maintenance factors, means that the detailed structure of CBT varies considerably across disorders. The implications of these developments for training, service delivery and the clinical management of people with psychiatric problems are described. It is concluded that: a) stepped care models for psychological treatment are required; b) treatment of even minimal quality is not widely available; c) the characteristics of CBT mean that it can be delivered effectively across cultures, as the starting point is the beliefs and values of the individual seeking treatment; d) evidence based patient choice and shared decision making will become an increasingly powerful factor in determining the future of psychological treatments; e) it is no longer possible for psychotherapists to defend ineffective treatments with the notion that therapy effects cannot be evaluated.

UL12.
PSYCHODYNAMIC PSYCHOTHERAPIES: EVIDENCE-BASED AND CLINICAL WISDOM

P. Fonagy
Psychoanalysis Unit, Sub-Department of Clinical Health Psychology, University College of London, UK

The lecture overviews the evidence base of psychoanalytic psychotherapy. The evidence is mixed concerning psychodynamic approaches in a number of areas such as anxiety, obsessive-compulsive disorder, alcohol related problems. In other areas, particularly personality disorders, eating disorders and to some extent depression, the evidence is better, but it is very rarely totally compelling and much depends on how we define the psychodynamic approach and what criteria we use for a study of acceptable quality. The lecture will consider both the extant evidence and the methodological issues that emerge in the review of the evidence base. There is no doubt that in some areas clinical practice extends beyond both the available evidence and the implications of the evidence that is available. However, in relation to other disorders, the quality of evidence available for alternative treatments such as cognitive behavioural therapy or systemic therapy is not as strong as non-expert professionals and lay people at times appear to believe. The future of psychodynamic therapy is in greater flexibility in the development of technique, evolved in relation to emerging evidence.

UL13.
INTEGRATION OF SERVICES IN COMMUNITY MENTAL HEALTH CARE

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This review presents the evidence and the arguments for a balanced, community-based model of mental health care that includes both community and hospital services. This model is proposed because it is supported by the best available research evidence and by the weight of clinical experience in a range of locations worldwide. Within this general model, the specific nature of care will depend to a large extent upon the resources available. Countries with low levels of resources should focus on establishing and improving services in primary care settings, along with specialist back-up. For countries with medium levels of resources, it is recommended, in addition to such primary care mental health, that 'mainstream' mental health care is provided with a series of related components: out-patient/ambulatory clinics, community mental health teams, acute in-patient care, long-term community based residential care and occupation/day care. For countries with high levels of resources, it is suggested that services include all those indicated above, along with various types

of evidence based specialised/differentiated care: specialised outpatient/ambulatory clinics, specialised community mental health teams, assertive community treatment teams, early interventions teams, alternatives to acute in-patient care, alternative types of long-term community residential care, and alternative forms of occupation and vocational rehabilitation.

UL14.
THE CHALLENGE OF PRIMARY PREVENTION IN PSYCHIATRY

S. Saxena
World Health Organization, Geneva, Switzerland

Mental and behavioural disorders cause an enormous burden on individuals, families and societies. According to the latest figures available from the World Health Organization (WHO), 12.9% of all disability adjusted life years (DALYs) lost are accounted for by these disorders. In addition, these disorders decrease quality of life and cause a massive economic burden. Existing methods for treatment, though effective, have serious limitations. If the burden caused by mental and behavioural disorders has to be decreased, it is essential that primary preventive strategies are utilised more effectively and more widely. Some of the main barriers to using preventive interventions are lack of conceptual clarity around the aims, boundaries and overlap between prevention, promotion and treatment interventions, lack of awareness of evidence for their effectiveness and lack of consensus on roles and responsibilities of mental health professionals for prevention. The WHO has recently completed an international review of effectiveness of preventive strategies. While this review has clarified conceptual issues and provided much needed evidence, it has also revealed the extreme paucity of research from low and middle income countries and almost a complete lack of cost-effectiveness information. Efforts to fill these lacunae need to be made urgently, but the available evidence clearly substantiates the effectiveness of a variety of interventions. These range from macro-level strategies, like improving nutrition, housing, education and economic stability, to more specific meso- and micro-level strategies like home-based or school-based programmes for children, work-place interventions and those targeted at vulnerable populations. While the effectiveness of these strategies is established (at least in some cultures), a major challenge is to find financial and professional resources to implement these widely. This involves convincing the policy makers and competing for resources against more immediate demands. Traditional medical thinking has placed more emphasis on treatment and the entire health care system is organized around care rather than prevention. There are also serious issues around financing of prevention activities. How can prevention succeed? The key to implementing prevention programmes is to establish strong links across sectors and to utilize synergies of efforts. Prevention messages need to be delivered to colleagues from sectors as diverse as education, social security, employment, justice, housing, community development, poverty reduction, sports and many more. The role of mental health professionals is to inform, advise, guide, support and lead these sectors into adopting policies and implementing actions that facilitate prevention of mental disorders. Our success will depend on how effectively we fulfil these roles.

SPECIAL LECTURES

SL1.
CURRENT TREATMENT IN PSYCHOSES: DID IT CHANGE THE OUTCOME?

A. Okasha
President, World Psychiatric Association

This lecture will discuss whether there have been any actual changes in the outcome of psychotic illnesses after the introduction of second-generation antipsychotics. There is some confusion in the literature concerning the terms prognosis, course and outcome. Prognosis actually includes course and outcome, while outcome is only one aspect of the course, "the end point of the course in a defined period of time". We shall focus on schizophrenia, bipolar disorder and psychotic depression. An evaluation of outcome from the beginning of the 20th century (i.e. before the introduction of neuroleptics) up to now will be attempted, taking into consideration both symptomatic and functional outcome. Psychotic disorders are long lasting and usually life long disorders. Affective disorders have a better long-term outcome than schizophrenic and schizoaffective disorders. It is still uncertain whether modern treatment has substantially changed the course and outcome of psychotic disorders. Manifest changes in the outcome, if any, will be reflected not on a symptomatic or syndromal level but probably on functional, occupational and interpersonal levels, where psychotic patients are not so dislocated from society as before. Reviewing the literature, outcome studies scarcely differentiate between symptomatic (syndromal) and functional outcome, which may lead to biased results. It is unfortunate that recent outcome studies deal only with intermediate and short-term outcome, influenced by research of the industry, to assess the value of novel antipsychotics. The lecture will review the state of the art in the current literature, in developed and developing countries, regarding the short, intermediate and long-term outcome of psychotic disorders.

SL2.
COMPREHENSIVE DIAGNOSIS AS A BASIS FOR INTEGRATED TREATMENT AND HEALTH PROMOTION

J.E. Mezzich
President Elect, World Psychiatric Association

Diagnosis is recognized as the basis for responsible and effective planning of care. In order to fulfill this objective, a number of so termed *comprehensive* diagnostic models are emerging which deal with diagnosis as both a formulation and a process. As a formulation, comprehensive diagnosis, first, covers a range of domains pertinent to health care, from illnesses to positive aspects of health (e.g., functioning, strengths, supports, and quality of life). The appraisal and measurement of these domains may be approached through standardized typologies (classical and prototypical), dimensional and configural scales, and narratives. The evaluators involved include clinicians, the patient, his/her family, and other relevant community members. As a process, comprehensive diagnostic models recognize the importance of the collaborative and dynamic interaction among all participants in the clinical encounter, unfolding longitudinally. Among illustrative comprehensive diagnostic models one can list, first, the WPA International Guidelines for Diagnostic Assessment (IGDA), which include a multiaxial standardized component (I. Illnesses, II. Functioning, III. Contextual Factors, and IV. Quality of Life) and an idio-

graphic personalized component (covering contextualized clinical problems, patient's positive factors and assets relevant to clinical care, and expectations for health restoration and promotion). Another is the World Health Organization (WHO) International Family of Classifications, which includes presently as main elements the International Classification of Diseases and the International Classification of Functioning and Health. Comprehensive diagnostic models, both by furnishing a wide and differentiated informational statement and by stimulating an interactive and longitudinal process among clinicians, patients and their families, can contribute to a systematic articulation of planning of care (treatment of illness and health promotion) and to the optimization of its outcome.

INTERACTIVE SYMPOSIA

IS1. THE FUTURE OF PSYCHOTHERAPIES

IS1.1. THE FUTURE OF PSYCHOTHERAPIES: COGNITIVE-BEHAVIOURAL THERAPY, PROBABLY

P. Salkovskis
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The future of psychotherapies is a complex matter, but some clarity is emerging in terms of prominent themes. These are: a) the development of empirically grounded clinical interventions; b) the application of clinical science to the understanding and treatment of psychological problems; c) the need for formulation-based (rather than diagnosis based) assessment and intervention strategies; d) the development of effective dissemination of effective therapies; e) the importance of overcoming conservatism and inertia in professionals engaged in delivering psychological treatment; f) the application of stepped care models in clinical practice and the related problem of human resources and g) the development of shared decision making and evidence-based patient choice as part of the process of empowering service users. Although all of these concepts are potentially trans-theoretical, only cognitive-behavioural therapy (CBT) is currently seeking to meet the full range of these challenging ideas. The way each of these themes may affect the future of psychotherapy is considered, although the results so far are patchy. It is concluded that CBT is currently the approach best suited to fully meeting these challenges. To more fully meet it, some integration with other theoretical orientations may be helpful, but not on an indiscriminate basis. It is also suggested that a major re-adjustment of priorities and resources in psychological treatment is now inevitable if psychological treatment is to remain viable in the face of developments in physical treatment methods.

IS1.2. THE FUTURE OF PSYCHOTHERAPIES: PSYCHODYNAMIC

J. Holmes
University of Exeter, UK

A sceptic might ask: does psychodynamic psychotherapy have a future? The allegiance effect ensures that for this author the answer must be – most definitely. I start by defining psychodynamic psychotherapy as the therapeutic practice of developmental, interpersonal psychology. I shall approach the subject from three angles: a) developmental psychopathology (here I shall look at accumulating evidence from neurobiology, mother-infant interaction studies, and attachment research that is consistent with and extends fundamental tenets of dynamic psychotherapy); b) outcome studies of dynamic psychotherapy (here I shall argue that there is a modest but gradually accumulating body of evidence supportive of the efficacy and effectiveness of psychodynamic psychotherapy in treating a range of psychiatric disorders, especially borderline personality disorder); c) applications of dynamic psychotherapy in the psychiatric workplace (using examples drawn from the North Devon Personality Disorder Service, I will illustrate the ways in which, in the context of a multi-modal, multi-disciplinary psychotherapy service, psychodynamic thinking can help mental health workers manage their own feelings and those of their most complex and difficult patients). I shall end by some speculations about an agenda for future developments within the psychodynamic tradition.

IS1.3. THE FUTURE OF INTERPERSONAL PSYCHOTHERAPY

J.C. Markowitz
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Interpersonal psychotherapy (IPT) is a time-limited, diagnosis-focused, relatively simple, here-and-now treatment. Its basic assumptions include diagnosing major depression as a treatable mental illness that is not the patient's fault, and linking mood shifts to the patient's coping with life events. IPT has been shown to build social skills while relieving depressive symptoms. This talk discusses the potential future of IPT in research, training, and clinical use. IPT is among the best researched of psychotherapies. Its efficacy has been demonstrated for patients with major depression, and ongoing research shows promise for a growing list of mood and non-mood diagnostic indications. Part of the research future of IPT will be a continuing series of outcome trials for Axis I and Axis II diagnoses, defining efficacy and comparing IPT to other efficacious psychotherapies. Other trials will examine the sequencing and combination of IPT with pharmacotherapy for specific disorders. Still other studies will explore the neglected area of IPT process research, seeking to determine the mechanisms of this eclectic treatment. In contrast to the slew of careful research studies to which it has been subjected, IPT has received little clinical use. Dissemination to clinicians began only recently. Part of the future of IPT is its further dissemination. Whereas research standards for competence and adherence exist, clinical standards are as yet under development. The International Society for Interpersonal Psychotherapy may help to coordinate clinical training around the world, so that IPT does not lose definition and coherence as it spreads in practice.

IS1.4. THE FUTURE OF FAMILY THERAPY

S. Bloch
Department of Psychiatry and Centre for the Study of Health and Society, University of Melbourne, Australia

The term "family therapy", when used in the adult psychiatric setting, covers a variety of approaches. At one extreme, it is a method drawn from one or more of a range of theoretically-based schools which seeks to help an individual patient who presents with a clinical syndrome. At the other extreme, family therapy is a way of thinking about psychotherapy in general; the intervention may involve the individual alone, the nuclear family or an extended network, but the focus is the relationships between people. According to this view, psychopathology reflects recurring, problematic inter-

actional patterns among family members and between the family and, possibly, other social institutions, which may include doctors and helping agencies. Midway between these two positions is one that views the family as acting potentially as a resource or as a liability for an identified patient; different interventions are thus needed to enhance the positive effects of family relationships as compared with those which seek to minimize or negate their noxious effects. As I shall elaborate in this presentation, such a range of interventions makes it tricky to define and research family therapy, let alone anticipate its future. Notwithstanding, I shall take up the challenge and outline the sort of future I think family should have. This could perhaps be summed up in the following way: guruism out, scientific rigor in, but let us not forget that family therapy, like all the psychotherapies, if it is to be practised effectively, relies on *both* science and art. Indeed, a complementarity between science and art is the ideal. And, let us not forget the ethical dimension, since working with families throws up a whole series of intricate quandaries for the therapist.

IS2.
THE CONTRIBUTION OF NEUROIMAGING RESEARCH TO CLINICAL PSYCHIATRY

IS2.1.
THEORY OF MIND: THE INTERFACE OF EMOTION AND LANGUAGE IN SCHIZOPHRENIA

N.C. Andreasen, C. Calarge, D.S. O'Leary
Department of Psychiatry, University of Iowa, Iowa City, IA, USA

The concept of "theory of mind" (TOM) refers to the ability to infer and attribute mental states to one's self and to others and to recognize that behaviors are guided by these mental states. Examples of mental states include beliefs, wishes, thoughts, goals, and knowledge. This ability is also referred to as "mentalizing". TOM or "mentalizing" requires the understanding that those mental states reflect a subjective reality rather than the real world. This capacity, which is related to the capacity to put oneself in another's place, or to have empathy, is an important component of social interactions. It appears to be impaired in many individuals with schizophrenia. Because of its philosophical and clinical importance, we undertook a study of TOM in a group of healthy volunteers and patients with schizophrenia, using positron emission tomography (PET) to identify the neural circuits used during a language task that required subjects to attribute a mental state to another person. Specifically, they were asked to "imagine that you sat next to a woman on an park bench and you realized she was crying. Make up a story about what led up to her crying". (The gender of the person was changed to female if the subject was a male.) The comparison task consisted of reading a neutral story aloud, in order to control for the speech component of the task. In normal individuals the former task activated a distributed group of nodes that included anterior cingulate and paracingulate regions, left anterior frontal regions, left anterior temporal lobe, and cerebellum. Many of these regions are implicated in the identification of goals and associative memories. The large cerebellar activations add further evidence to the importance of the cerebellum in many types of mental activity. The patients with schizophrenia had decreased flow in multiple regions (lateral cerebellum and vermis, visual association cortex, and thalamus) and increases in others (right inferior frontal, right dorsolateral frontal, right parietal, and right putamen). The areas of decreased flow are consistent with many previous studies indicating problems in recruiting cortical-cerebellar circuits in schizophrenia. The areas of increase may reflect a need to draw on right hemisphere regions to perform the task, in order to compensate for deficits in left frontal and cingulate regions.

IS2.2.
POSITRON EMISSION TOMOGRAPHY STUDIES ON THE DOPAMINE SYSTEMS IN SCHIZOPHRENIA

L. Farde
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The original dopamine (DA) hypothesis of schizophrenia was based on pharmacological evidences and suggested hyperactivity of central DA neurotransmission. It has been supported by findings in vitro that all antipsychotic drugs are D2-DA-antagonists. Positron emission tomography (PET) studies have later confirmed high occupancy of D2-DA-receptors during clinical treatment. It has, however, been difficult to obtain consistent evidence for generally increased activity of DA systems in patients with schizophrenia. Though effective for the treatment of positive symptoms, hitherto developed antipsychotics have poor efficacy or may even worsen negative symptoms. Interestingly, the psychostimulant D-amphetamine may, in some cases, improve negative symptoms. These observations are a basis for the DA dysregulation hypothesis in schizophrenia. The hypothesis has received additional support from a series of experimental neurophysiological studies. PET studies on D1- and D2-DA-receptors have demonstrated up- as well as down-regulation of these DA markers. Strong support for DA hyperactivity has been given by studies indicating increased DA release following challenges with amphetamine. The finding has, due to methodological limitations, only been reported for the striatum, and more sparsely innervated extrastriatal regions have not yet been examined using this PET approach. Another limitation is that most PET measurements have been performed with antagonists having equal affinity for receptors in the high and low affinity state. Agonists, like nor-propyl-apomorphine (NPA) or (R)-2-OCH_3-N-n-propylnorpomorphine (MNPA), bind preferentially to the high affinity state and have been suggested to provide a more valid measure of the functional state of the DA system. Agonist radioligands, such as [11C]MNPA, may thus provide new tools for examination of the DA dysregulation hypothesis in schizophrenia.

IS2.3.
PSYCHOPHARMACOLOGY AND FUNCTIONAL NEUROIMAGING: NEW INSIGHTS INTO DRUG MODELS OF SCHIZOPHRENIA

P.C. Fletcher
University of Cambridge, UK

A drug model of a psychiatric disorder is validated by consistent observations that behaviour under the influence of the drug is redolent of that observed in association with that disorder. This leads us to ask which behavioural measures most sensitively reflect the drug's effects since these are clearly the measures that may most fruitfully be compared with the disordered state. In the main, behavioural measures such as reaction time and performance levels on various tasks may lie some distance downstream of the cognitive processes that generate them and it is possible that, in certain cognitive tasks, standard behavioural measures provide only a vague representation of drug-induced cognitive change. I will present data suggesting that functional magnetic resonance imaging (fMRI) provides a highly sensitive outcome variable: one that may prove complementary to existing behavioural measures and subjective reports in delineating the effects of ketamine – a non-competitive N-methyl-D-aspartate

(NMDA) antagonist that is drawing increasing attention as a model for the schizophrenic state. The effects of ketamine may be seen to have an impact upon task-related changes in regional brain activity. Crucially, under certain circumstances, these changes may be observed even when the subject is unaware of whether he is receiving drug or placebo and when there is no measurable deficit in his ability to perform the task. The key frontal, thalamic and parietal regions that appear to be sensitive to the drug are those that have also been implicated in schizophrenia. I suggest that the functional neuroimaging techniques may, in this respect, provide a new and complementary way of looking at the effects of drugs and, by extrapolation, of evaluating those drugs as models of psychiatric disease.

IS2.4.
FUNCTIONAL BRAIN STUDIES OF EMOTIONAL AND SPIRITUAL BEHAVIOR IN HUMANS: TOWARD A BIOCHEMISTRY OF THE SOUL?

P. Pietrini
Laboratory of Clinical Biochemistry and Molecular Biology, University of Pisa, Italy

With the appearance of non-invasive methodologies for the in vivo functional exploration of the brain, including positron emission tomography (PET) and functional magnetic resonance imaging (fMRI), scientists have been provided with the unprecedented opportunity to examine the biochemical aspects of the human brain in action, as well as the effects of disease and therapeutic interventions. Over the last thirty years, experimental paradigms, which initially were restricted to relatively elementary sensory stimulation or motor tasks, have ventured into the investigation of more elusive aspects of mental function, such as emotional behavior, moral discernment and spirituality. Exposure to physically or morally hurtful events elicits behavioral responses finalized to overcome the painful condition. Forgiveness occurs when a person, hurt by another person resulting in resentment, excuses the offender. We hypothesized that forgiving enables an individual to overcome more effectively a situation that would otherwise represent a major bio-psychological stress. Adapting a previously validated experimental set-up, we designed an fMRI study to examine emotional and behavioral responses and brain activity associated with the imaginal process of giving or withholding forgiving in relation to the experience of hurtful events in healthy young individuals with no psychiatric morbidity. Overall activations were observed in extrastriate and striate visual cortex, intraparietal sulci, motor cortex, superior and middle temporal gyri, anterior cingulate, limbic areas, ventromedial prefrontal cortex, and orbitofrontal cortex. Specifically, the hurtful conditions showed increases in anterior middle frontal and ventral temporal cortices compared to the baseline control condition. The enactment of forgiving versus unforgiving was associated with different neural activity in the right medial, middle and superior frontal cortices, right amygdala, bilateral striatum, left anterior cingulate, bilateral posterior parietal cortices and cerebellum. Thus, imaginal evocation of emotionally relevant hurtful events followed by forgiving or not forgiving was associated with modulation of brain areas implicated in visual/semantic representation and imagery, and more anterior areas, such as frontal cortex, amygdala, anterior cingulate and striatum, that regulate emotional response, moral judgment, perception of physical and moral pain, mood and decision making processes.

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IS3.
THE FUTURE OF PHARMACOTHERAPY FOR MOOD AND ANXIETY DISORDERS

IS3.1.
THE FUTURE OF PHARMACOTHERAPY FOR DEPRESSION: AN AMERICAN PERSPECTIVE

D.J. Kupfer
Department of Psychiatry, University of Pittsburgh, PA, USA

While considerable advances in the treatment, and particularly the pharmacological treatment, for mood disorders have been made in the last two decades, a number of gaps and obstacles remain. This lecture will discuss the American perspective on the future status of pharmacotherapy in depression. Since the Food and Drug Administration (FDA) has emphasized acute trials for efficacy "approval", one major gap in the treatment of depression is the relative paucity of data on long-term treatment. The convergence of FDA regulations, the needs of the pharmaceutical industry and National Institute of Health (NIH) priorities has decreased the likelihood of increasing our knowledge base on long-term treatment of this disorder. On the other hand, there is considerable promise of developing a new generation of "antidepressants" based on molecular targets and the application of clinical and basic neuroscience tools. Medications currently under testing programs include dual reuptake inhibitors, novel dopamine reuptake inhibitors, drugs combining serotonin (5-HT) reuptake inhibition with $5HT_2/5HT_3$ antagonism; corticotropin-releasing factor (CRF) receptor antagonists; substance P (neurokinin) receptor antagonists and compounds modulating glutamatergic neurotransmission. Other novel treatment strategies are also in the pipeline. Most recently, attention has moved from intrasynaptic changes in neurotransmitter levels to focusing on intracellular signaling pathways. Our recent discoveries in genetics and functional imaging, combined with more precise behavioral phenotypes, could lead to better subgrouping of depressive disorders. Furthermore, advances in pharmacogenomics can assist us in such investigations. In short, the future is bright, although there are clearly bumps in the road.

IS3.2.
THE FUTURE OF PHARMACOTHERAPY FOR DEPRESSION: A EUROPEAN PERSPECTIVE

D.S. Baldwin
University of Southampton, UK

There are many treatments for depression, but overall care of depressed patients is usually far from optimal. This presentation examines how future care might be improved by alternative approaches, including enhanced use of existing treatments, modifications to existing antidepressants, and new targets for antidepressant pharmacotherapy. Clinical outcomes might be enhanced simply by better use of existing treatments, for example by prescribing antidepressants according to evidence-based guidelines, with or without supplementary algorithms; or through judicious combinations with structured psychotherapies. Outcomes might also be improved by modifications to some already available antidepressants, such as the production of single enantiomers, when the 'parent' compound is a racemic mixture; changes to the mode of delivery or pharmacokinetic properties; and combination of two psychotropic drugs within a single tablet, the components being in novel formulations. Potential new antidepressants include corticotropin-releasing factor receptor antagonists; glucocorticoid receptor antagonists; vasopressin recep-

tor antagonists; melatonin receptor agonists; and antagonists at the substance P (NK-1) receptor. There are many approaches towards development of potential new antidepressant treatments, but the likely impact of new health technologies is hard to predict. The development of treatments that are more efficacious or earlier to act remains a goal of drug discovery, but if new treatments are complex for doctors to prescribe, hard for patients to tolerate, or too expensive for healthcare providers to offer, they will have limited impact. Groundbreaking treatments can only alter the burden of depression when they are adopted widely by clinicians, and accepted readily by patients.

IS3.3.
THE FUTURE OF PHARMACOTHERAPY FOR BIPOLAR DISORDER

E. Vieta
Bipolar Disorders Program, Hospital Clinic,
University of Barcelona, Spain

Long-term treatment and compliance are crucial issues in the outcome of bipolar disorder, a long-lasting condition with highly recurrent episodes which is associated to high levels of suffering, occupational dysfunction, and impairment of social life and relationships. The length of remission, when the individual is well, is reduced in many cases both with age and the number of previous episodes. Although our current armamentarium for the treatment of mania is quite broad and successful, bipolar depression, mixed states, and prophylaxis are still huge challenges, and we are still far from addressing the true clinically meaningful target, which is interepisode functioning. For many years lithium has been considered the first-line treatment of bipolar disorder, and to some extent it remains so. However, a number of drugs coming from research in schizophrenia and epilepsy have become available for the treatment of bipolar illness. During coming years, a broader use of atypical antipsychotics and third-generation anticonvulsants is expected, but only those which may be able to prove their efficacy beyond the short-term treatment and in different clinical situations may succeed. New research is now focusing on the intimate mechanism of action of lithium, and this may lead to new drugs discovery, not necessarily coming from other indications. Challenges for the future are to succeed to discriminate between true therapeutic progress and marketing issues, to learn how to use novel compounds, and not to forget how to use those that are still important, regardless of their patent status. Combination treatment may become very widespread, and again clinicians will need tools to deal with potential interactions, compliance issues, and cost-effectiveness decisions.

IS3.4.
THE FUTURE OF PHARMACOTHERAPY FOR ANXIETY DISORDERS

D.J. Stein
University of Stellenbosch, Cape Town, South Africa;
University of Florida, Gainesville, FL, USA

Advances in psychiatric nosology and the introduction of modern antidepressant agents have led to significant advances in the treatment of anxiety disorders. Nevertheless, these agents are not without disadvantages, and a significant proportion of patients with anxiety conditions fail to respond to first-line agents. Furthermore, these agents act on the same limited number of neurotransmitter pathways as did the early antidepressants. Developments in the cognitive-affective neuroscience of anxiety indicate, however, that the future will see the introduction of agents with novel mechanisms of action and perhaps particularly useful clinical niches. In this talk, we discuss some of these developments, and new molecular targets for the treatment of anxiety disorders, including corticotropin-releasing factor, glutamate, and neurotrophic factors.

IS4.
CULTURAL ISSUES IN MENTAL HEALTH CARE

IS4.1.
THE PLACE OF CULTURE IN MENTAL HEALTH CARE: A CROSS-NATIONAL COMPARATIVE PERSPECTIVE

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Division of Social and Transcultural Psychiatry,
McGill University, Montreal, Canada

Cultural psychiatry has moved from exoticizing the other through attention to 'culture-bound syndromes' to the recognition that psychiatric theory itself is a cultural product. This shift reflects fundamental changes in our understanding of the nature of culture in a globalizing world. Culture is now understood as a biological construct, both cause and consequence of the social brain. Local cultural worlds emerge from interactions between individual agency and global systems. This presentation will consider the implications of these new notions of culture for mental health care. The cross-national comparative study of models of mental health care reveals some of the cultural assumptions of psychiatric practice. Models of service delivery developed in different countries reflect the demographics of the population and the history of dominant approaches in psychiatry and medicine. However, models of service are also strongly influenced by health policy, which in turn reflects ideologies of citizenship, response to migration, and the politics of national and ethnocultural identity. These social factors in turn influence psychiatric modes of interpreting individual suffering. International psychiatry presents itself as a "value-free" system of rational medical science and evidence-based "best practices". However, there is ample evidence for the social, political and economic shaping of psychiatric theory and practice. The call for evidence-based psychiatry makes attention to culture essential to clarify the context and generalizability of psychiatric theory and practice.

IS4.2.
CULTURAL INFLUENCES ON HELP SEEKING AND MODES OF ADMISSION: IMPLICATIONS FOR THE ORGANIZATION OF MENTAL HEALTH SERVICES

J. Leff
TAPS Research Unit, London, UK

Cultural factors exert an influence on many aspects of mental health care, from the initial seeking of professional help, through the procedures of diagnosis and treatment, to aftercare and social reintegration, including the organisation of mental health services. The first resource that individuals and their families utilise in the case of psychiatric disorders is often the informal network of relatives and friends. If that fails, then the next stage on the pathway to care depends on cultural factors, particularly beliefs about the causes and treatments of mental disorders. In developing countries, traditional beliefs usually lead to consultation with a healer before biomedical services are sought. The scarcity of such services also dictates this course of action. Ethnic minority groups in a developed country also

consult healers in their own community first, at least until some degree of acculturation is achieved. It has been claimed that psychiatric professionals faced with a person from an unfamiliar culture are prone to make incorrect diagnoses, mistaking culturally acceptable ideas and behaviour as indicative of psychopathology. While there is little evidence for these claims, they create an atmosphere of suspicion in ethnic minority communities which inhibits contacting the services. Racial prejudice has also been claimed as the cause of differential treatment experiences of majority and minority ethnic patients. The engagement of patients in follow-up care after treatment of an acute episode is often fraught with difficulties. Beliefs concerning cure as opposed to maintenance are culturally influenced. Furthermore, patients from ethnic minority groups who feel they have been discriminated against during their acute care are less likely to comply with aftercare. Full reintegration into the community depends crucially on the attitudes of the public towards psychiatric illness, and these vary markedly between cultures. A contentious issue in a multicultural society is whether dedicated services should be provided for patients from minority ethnic groups. There are strong arguments for segregated services, including culturally sensitive staff and ease of communication with patients and relatives. However, there is the contrary argument that such services perpetuate difference and foster discrimination. All the above issues are difficult to resolve but open discussion between professionals, clients and family members holds out hope of developing acceptable solutions.

IS4.3.
CULTURAL ISSUES IN MENTAL HEALTH CARE: INTERACTION BETWEEN LEGISLATION AND MENTAL HEALTH

M. Kastrup
Centre for Transcultural Psychiatry, Rigshospitalet, Copenhagen, Denmark

Refugees seeking asylum have a high frequency of traumatic experiences. Such events include pre-flight experiences such as persecution, internment or torture as well as post-flight experiences such as language barriers, discrimination, alienation, or social problems. Mental health professionals meeting refugees should be aware of this and the possible negative consequences on their mental health. There is increasing recognition on how important the conditions in country of exile are for the mental health and quality of life of the refugee population and its integration in the new environment. In many Western countries we are presently experiencing changes in the legislation involving immigrants. Such alterations may relate to family reunions among refugees, social benefits in the host country, conditions for granting asylum, length of permission to stay in the country. These changes and the implied uncertainties for the refugee population may result in an exacerbation of an already fragile mental health situation. The paper will provide an overview of issues of concern regarding refugee mental health and the relationship between altered immigration policy and the mental health status of those involved.

IS4.4.
CULTURAL ISSUES IN MENTAL HEALTH CARE: A VIEW FROM DEVELOPING COUNTRIES

R. Srinivasa Murthy
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All over the world there is a major shift in the organisation of mental health care. In developed countries, the shift is from institutional care to community care. In developed countries, the organisation of mental health care in a systematic manner is less than three decades old. Most of the countries have only in the recent times initiated measures to develop mental health programmes to cover the total populations. The challenges in developing countries are the lack of mental health infrastructures and trained professionals, public ignorance and lack of supportive policies, funding and legislation. There are a number of areas where cultural issues play an important role in the organisation of mental health care. There are both positive and negative aspects of culture that influence mental health care. On the negative side, the existing beliefs about the supernatural causation lead to seeking initially help from traditional healers or not considering the illness as requiring medical care. The differential roles of men and women gets reflected in the differing ways ill men and women are brought to care. The trend of the population to express their psychological distress in somatic terms leads to people seeking help mainly from primary health care and being treated for physical problems rather than the psychological problems. The strong belief of heredity as a cause of mental disorders presents problems in marriage and breakdown of marriage among the ill persons. On the positive side, the high tolerance in the community to deviant behaviour in general and mental illnesses in particular limits "exclusion" of the mentally ill from community life. Ill persons continue to live in families and communities, especially in the rural areas. There is also less resistance to setting up of community care facilities like half-way homes, day care centres and hostels in the residential areas. The family as a readily available and abiding source of support is an advantage in planning of care programmes. Studies in Sri Lanka in the 1970s, Nigeria, Colombia and India as part of the World Health Organization's International Pilot Study on Schizophrenia and from a number of countries in the last decade have pointed to the value of this type of support towards recovery. Some countries in Africa and Pakistan have developed linkages with traditional healers to reach ill persons to the advantage of the patients and to develop services in a culturally acceptable manner. The "external" orientation to understanding the causation in some ways decreases the stigma and blaming of the ill persons. The availability of cultural practices relating to grief and child rearing, and therapeutic measures like yoga and meditation are valuable for prevention of mental health and promotion of mental health. The mental health professionals in developing countries have to recognise that culture can function as a friend and foe. The challenge is to harness the positive aspects and minimise/eliminate the negative aspects of cultural practices, to meet the modern needs of mental health care.

IS5.
THE CURRENT MANAGEMENT OF PERSONALITY DISORDERS

IS5.1.
THE MANAGEMENT OF CLUSTER C PERSONALITY DISORDERS

P. Tyrer
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Both pharmacological and psychological treatments have been used for the treatment of cluster C personality disorders - dependent and avoidant (anxious). However, the management of these disorders may be confused with the treatment of anxiety, depression, drug misuse and somatoform disorders, which often exist in conjunction with the personality disorder. Antidepressant drugs have been evaluated

specifically for the treatment of cluster C personality disorders, and the evidence to date suggests that selective serotonin reuptake inhibitors are effective independent of their antidepressive effects. Psychological treatments for anxiety and depression are hindered by the presence of a cluster C personality disorder, but this is not surprising if the personality abnormality is ignored in treatment, as it usually is. In management of cluster C personality disorders, regular treatment with clear boundaries and constant monitoring of psychological dependence are desirable. In many instances, this can be achieved optimally in a day hospital setting.

IS5.2.
THE MANAGEMENT OF CLUSTER A PERSONALITY DISORDERS

M. Isohanni, J. Miettunen, H. Koponen
Department of Psychiatry, University of Oulu, Finland

The basic epidemiology and state of care of cluster A personality disorders is relatively unknown. Cases are rarely detected and entered into clinical, register or population based databanks. After the 31-year follow-up of 11,017 persons in the register-based Northern Finland 1966 Birth Cohort, we have only four hospital-treated cases. Study samples are usually non-epidemiological and consequently the results of different studies show considerable variation. Cluster A disorders are usually harmful and complicated by common comorbid conditions (both psychiatric and somatic). The most profound core psychopathology includes the cognitive-perceptual dimension, which may relate to disturbances in the dopamine system. This is in line with the current data that low doses of conventional and second-generation antipsychotics are useful medications for these patients. Benzodiazepines may alleviate anxiety and serotonin-selective antidepressants make the patients less sensitive to rejection. Usually pharmacotherapy is short term, although in some cases long-term treatment may be promising. Pharmacotherapy must always combine with supportive therapeutic interaction. Psycho- and sociotherapeutic correction of some traits is theoretically possible. In practice, it is hard to find a psychotherapeutic method that has not been tried for personality disorders. However, empirical data on the psychotherapy for cluster A disorders is minimal. This reflects difficulties in understanding and minimal response of these disorders. Summarising, moderately effective treatments exist to alleviate symptoms and reduce symptomatic behaviours that characterize cluster A personality disorders.

IS5.3.
THE CURRENT MANAGEMENT OF BORDERLINE PERSONALITY DISORDER

C. Maffei
Clinical Psychology and Psychotherapy Unit, Vita-Salute San Raffaele University, Milan, Italy

Borderline personality disorder (BPD) includes a heterogeneous group of subjects with different clinical characteristics and different levels of severity. Each subject can also present with different problems in time. Consequently, psychiatrists have to take into consideration aspects that vary depending on each clinical case and they have to do it very carefully. However, aspects of management common to all the subjects diagnosed as borderline represent a general indispensable framework. Safety is the first issue: borderline subjects are at risk of suicidal attempts and various aspects of self-destructiveness represent a common problem. The evaluation of safety issues determines the treatment setting, that has to be agreed by the patient. Establishing agreement with the patient about the treatment goals is one of the basic principles of management. Psychiatrists should provide clinical management throughout the course of treatment. According to the American Psychiatric Association, important components of this process are: a) responding to crises and monitoring the patient's safety; b) establishing and maintaining a therapeutic framework and alliance; c) coordinating treatment provided by multiple clinicians; d) reassessing the effectiveness of the treatment plan. In this framework, psychiatrists can decide what kind of therapeutic instruments to use. Different psychotherapeutic approaches and different psychotropic medications are available. The choice of specific therapeutic instruments should also take into consideration the presence of comorbid Axis I and Axis II disorders.

IS5.4.
ANTISOCIAL PERSONALITY DISORDER: A THERAPEUTIC PERSPECTIVE

C. Duggan
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When mental health professionals advocate a therapeutic perspective for those with antisocial personality disorder (ASPD), they are faced with questions that appear to go beyond the narrow confines of their discipline. For instance: a) as there is a substantial overlap between ASPD and criminality, does this imply that therapeutic programmes ought to be offered to prisoners? b) Should the focus of such programmes be a reduction in re-offending or a change in personality structure? c) Is it ethical for mental health professionals to collude with the state in protecting the public by legitimizing preventative detention for a small subgroup of those with ASPD? d) If it is the case that interventions for a subgroup of those with ASPD (i.e. those with high psychopathy scores) lead to their deterioration rather than improvement, should we therefore withhold interventions even though this may prolong their detention? As these questions cover important moral and ethical issues, they will continue to be debated for the foreseeable future. Psychiatry, however, could make an important contribution if it were to clarify the nosology of ASPD so that antisocial traits are more clearly separated from antisocial (i.e. criminal) behaviour. In order to do so, I believe that we need to identify the mechanism linking the disorder with the behaviour by investigating the underlying neurobiology of ASPD. If this approach were to be implemented successfully, it would provide an explicit rationale for limited psychiatric intervention in a subgroup with ASPD, and thereby encourage practitioners to become more involved with this disadvantaged group.

IS6.
THE MANAGEMENT OF SOMATOFORM DISORDERS AND MEDICALLY UNEXPLAINED PHYSICAL SYMPTOMS

IS6.1.
MEDICALLY UNEXPLAINED SYMPTOMS AND SOMATOFORM DISORDERS: TIME FOR A NEW APPROACH

M. Sharpe
School of Molecular and Clinical Medicine, University of Edinburgh, UK

Symptoms considered disproportionate to identifiable disease pathology are referred to as 'medically unexplained', 'functional' or 'somatoform'. They represent a major burden to medicine. Psychiatrists are

often called on to assist in the management of these patients. This presentation will consider the current conceptualization of such symptoms as manifestations of 'somatization' and the current psychiatric classification. A new approach to conceptualization and classification based on the concept of functional bodily disturbance will be described. Research data will be presented to support this new approach. The practical implications for patient management will be outlined and illustrated with clinical examples.

IS6.2.
SOMATOFORM DISORDERS AND MEDICALLY UNEXPLAINED SYMPTOMS: FACTORS INFLUENCING OUTCOME

F. Creed
University of Manchester, UK

Improved management of patients with somatoform disorders and medically unexplained symptoms requires a clear model of the influences on outcome. Outcome, as measured by Short Form-36 (SF-36) physical component score (how much the disorder affects the person's daily life) is influenced by depression, anxiety, current social stress, childhood adversity, health anxiety and the individual's perception of his symptoms. A model of these components in relation to functional gastro-intestinal complaints will be presented using data from several studies of patients seen in medical clinics in secondary care. Psychotherapy and antidepressants may lead to improvement through different mechanisms – the former is particularly helpful to those with reported prior abuse whereas antidepressants help through reduction of depression and improvement in pain. The importance of changing illness beliefs as well as treating anxiety, depression and psychosocial difficulties will be stressed. The ways in which these may be delivered in primary and secondary care settings will be presented.

IS6.3.
COGNITIVE BEHAVIOR THERAPY FOR SOMATIZATION

J. Escobar, M. Gara, L. Allen, A. Díaz-Martínez, A. Interian, M. Warman
Department of Psychiatry, UMDNJ-Robert Word Johnson Medical School, Piscataway, NJ, USA

Patients presenting with high levels of medically unexplained symptoms are a frequent, frustrating and costly reality in primary care. While these patients may have underlying psychopathologies, the somatic symptom assumes a dominating role and patients reject psychological labels and referral. Recognition and management of these patients at the primary care site is essential and development of treatments that can be adapted to the primary care environment may have significant practical value. This presentation reports on a controlled National Institute of Mental Health (NIMH)–funded study of cognitive-behavior therapy (CBT) on a large, multiethnic sample of patients visiting a primary care clinic in New Jersey. 150 patients have entered the study thus far. About one half of the patients were randomly assigned to a CBT treatment group, and the other half to a "consultation letter" control group. The treatment group received 10 sessions of a manualized CBT designed for patients with somatoform disorders. Blind raters assessed change in somatic, mood and anxiety symptoms at baseline and frequent intervals with several instrumental measures. Interim analyses of the first 53 patients completing the study show a significant effect of CBT on somatic symptom severity and functional outcomes compared to the control group. For example, in the Clinical Global Impressions anchored for somatic symptoms, over 70% of CBT-treated patients were rated as "much/very much improved" compared to only 30% of patients in the control group. This effect seems to be independent of any effect CBT may have on mood or anxiety symptoms.

IS6.4.
SOMATOFORM DISORDERS AND MEDICALLY UNEXPLAINED PHYSICAL SYMPTOMS: AN ARAB PERSPECTIVE

T. Okasha
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As our societies become more diverse and the world evolves into a global village, the need to integrate culture into medicine and psychiatry becomes more critically important. In the Arab culture, the humanitarian interaction with a doctor is valued as much, if not more, than his or her technical ability or scientific knowledge. The humanitarian nature of this interaction depends on the way the doctor deals with the patient and his or her family and the extent to which the doctor expresses respect for, and acceptance of local cultural norms. The society is more family than individual centered and there is interdependence rather than autonomy. There is no doubt that culture has a marked influence on the presentation of psychiatric symptoms, the understanding of these symptoms and the therapeutic methods adapted. Due to understaffed mental health facilities, it is essential that the general practitioner help in the diagnosis and management of psychiatric disorders under the title of unexplained somatic symptoms, which is an essential part of the undergraduate psychiatric training. In this presentation the main differences between traditional and western societies will be reviewed, with special emphasis on the diagnosis of somatoform disorders in the Arab culture.

IS7.
NEW STRATEGIES IN THE MANAGEMENT OF SEXUAL DISORDERS

IS7.1.
EVIDENCE BASED APPROACH AND DRUG TREATMENT OF PREMATURE EJACULATION

M.D. Waldinger
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Premature ejaculation (ejaculatio praecox) is probably the most common male ejaculatory complaint. In recent years, well-controlled neuropharmacological studies have shown the efficacy of serotonergic drugs to delay ejaculation. A recent meta-analysis demonstrated that paroxetine has the most prominent ejaculation delaying effect compared to the other selective serotonin reuptake inhibitors (SSRIs) and clomipramine. We believe that lifelong premature ejaculation is not an acquired disorder due to learned behaviour, as has been suggested by Masters and Johnson. On the contrary, we postulated that the rapidity is part of the biological variability of the intravaginal ejaculation latency time (IELT) in men who have a possible familial genetic vulnerability. Male rat studies have demonstrated that serotonin (5-HT) and various 5-HT receptors are involved in the ejaculatory process. Activation of 5-HT_{2C} receptors delays ejaculation, whereas activation of 5-HT_{1A} receptors results in shorter ejaculation latency. Based on such animal studies, we have postulated that life-

long premature ejaculation is a neurobiological phenomenon related to decreased central serotonergic neurotransmission, 5-HT_{2C} receptor hyposensitivity and/or 5-HT_{1A} receptor hypersensitivity. Treatment should therefore consist of 5-HT_{2C} receptor stimulation and/or 5-HT_{1A} receptor inhibition.

IS7.2.
NEW DRUGS FOR ERECTILE DYSFUNCTION

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Erectile dysfunction (ED), otherwise known as impotence, is defined as "the persistent inability to attain and maintain an erection adequate to permit satisfactory sexual performance". This indicates that the erection is either too short lived, or not firm enough for the man to penetrate his partner. In extreme cases there may be no erectile response at all, this is termed 'severe' or 'complete' ED. Psychiatrists see patients with conditions where sexual problems and ED are common, including depression, psychoses and substance misuse, as well as prescribing medications that can affect erectile function, e.g. selective serotonin reuptake inhibitors and neuroleptics. Oral agents used to treat ED are reliable, have minimal side effects, and are simple to use. The oral therapies currently licensed for ED are the phosphodiesterase 5 inhibitors (PDE5 inhibitors) sildenafil, tadalafil and vardenafil, which all have a peripheral mechanism of action, and apomorphine, which acts centrally. All of these agents require sexual stimulation to initiate the neuronal activation required to start the haemodynamic erectile response. This is in contrast to the PGE mediated response initiated by intracavernosal and intraurethral alprostadil administration, that 'forces' an erection. The role of psychotherapy to augment response to pharmacological therapies should not be underestimated. Several new formulations are being developed, such as topical alprostadil and intranasal apomorphine. New agents are being developed, such as selective PDE3/4/5 inhibitors including sildenafil nitrate, non-selective inhibitors of post synaptic alpha-adrenoceptors within the corpus cavernosum, phentolamine, melanocortin receptor agonists such as melatonan II and the 5HT1 agonist VML670. In addition, herbal remedies have been scrutinised for potential benefit. These will all be reviewed and discussed as relevant to the practicing clinician.

IS7.3.
WHY DRUGS MAY NOT BE EFFECTIVE IN TREATING WOMEN'S SEXUAL PROBLEMS

E. Laan
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The majority of studies investigating the effect of drugs that may help improve sexual function in women have generated inconsistent results. Earlier this year, Pfizer officially announced that it would give up testing Viagra on women, even though their male program with this drug has been overwhelmingly successful. This paper addresses possible reasons of why drugs may not be effective in treating women's sexual problems. Among these may be: disregard of the importance of sexual stimulation; inadequate outcome measures; inadequate conceptualization of women's sexual problems. Modern motivation theories predict that sexual response is the result of an interaction between the sensitivity of the sexual response system and stimuli that are present in the environment. There is increasing evidence that, in somatically healthy women, sexual problems are unrelated to insensitivity of the sexual response system. Lack of adequate sexual stimulation – whether that is the result of absence of sexual stimulation or of lack of knowledge, bad technique, a lack of attention for, or negative emotions to sexual stimuli – and relationship issues seem to better explain the absence of sexual feelings and genital response in women.

IS7.4.
WHAT IS LOVE ANYWAY?

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Sexology now has a better understanding of the context-sensitive nature of women's sexual function, the successes and limitations of medical treatments for male dysfunctions, and the failure to find prosexual drugs for women. While laymen assume that love is the ultimate context for understanding sex and its psychogenic problems, love is rarely mentioned in professional literature. This may be because clinicians are not sure what it is and how to assess it. This presentation will review the love paradigms of Lewis, Lee, and Sternberg while presenting a new paradigm of seven distinct interlocking meanings of love. These meanings will clarify what "I love you" and "I love my partner but I am not in love with him (her)" means. The definitions are: Love is not a simple feeling; it is an emotion. It consists of pleasure, interest, and only sometimes sexual desire. This emotion is always further complicated by the diverse and sometimes deceitful motives for telling another "I love you". Love is a grand, culturally supported ambition with definable goals. Love is a moral commitment. Love is the mental struggle to live the commitment. Love is a force in nature that provides the framework for life processes. Love is a deal - an arrangement - that enables new attitudes and behaviors toward the partner. Love is a stop sign preventing inquiry about its private mental aspects. The significance of this paradigm for culture and psychotherapy will be discussed along with its role in illuminating otherwise mysterious sexual avoidance patterns.

IS8.
PARTNERSHIPS IN MENTAL HEALTH CARE

IS8.1.
PARTNERSHIPS IN MENTAL HEALTH CARE: THE WHO CONTRIBUTION

B. Saraceno
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The time has come to create partnerships for mental health care. The World Health Organization (WHO), in its capacity as the intergovernmental United Nations (UN) agency for health, will bring its leading authority to create a global body which should reflect the need of local partnerships in care. This global body will act as a forum for mental health. Its main goal will be to support the WHO in carrying out its global mandate that seeks to improve mental health and reduce substance abuse problems worldwide. The partnership will have as its general objectives: a) To bring together diverse constituencies with a real interest in better promoting mental health, preventing and treating mental disorders. Based on their different perspectives and bringing specific points of view from their own environments, these diverse constituencies will contribute to a common vision of the problem in order not only to enhance the opportunities for effective and coordinated action, but also to advance their common and specific aims: from diverse perspectives to a common vision of the problem. b) To stimulate and lend support to action aimed at raising awareness in countries around the world of the burden of mental and

substance abuse problems, the interventions available to reduce them, and the pervasive effects of stigma and discrimination that affect persons with mental disorders and their families. c) To promote the implementation of the Ten Recommendations of the World Health Report 2001 in all regions, and the adoption of the strategies put forth by the Mental Health Global Action Programme.

IS8.2.
PARTNERSHIPS IN MENTAL HEALTH CARE: THE EXPERIENCE OF EUFAMI

B. Ariño
European Federation of Associations of Families of Mentally Ill People (EUFAMI)

The main barriers to user involvement and partnerships in mental health care are lack of confidence and discrimination/stigma. EUFAMI is working directly, by means of programs such as Prospect, to train family members to work with other family members in order to improve their coping skills, and to train those with self-experience to work with others with self-experience in order to give them the confidence to take control of their own lives. The key strengths users and carers can deploy to get stronger voice are: a) working together with professionals in an alliance (this has been shown recently in some countries where the mental health alliance forced the delay in proposed mental health legislation); b) doing their own research (so that they talk with authority from facts, not from individual stories); c) life experience (they speak from the basis of their knowledge living day-to-day with the problem). Carers are pleased to be working with organisations such as the World Health Organization (WHO) and the World Psychiatric Association and for families and users to be given a platform in major conferences to speak of mental health policy as experts on the same level as professionals. Governments must make it practically possible for users and carers to be involved. Professionals do it as part of the work and are employed, trained and paid expenses to be involved. Families and those with self-experience are expected to do this in their own time, to spend their own money and generally are not trained to be involved in the process. Governments must demonstrate that they are listening by changing proposals. Often carers see no results from being involved or have been ignored. This makes it less likely that users and carers will want to be involved in future. Professionals should enable user/carer involvement as equal partners in any mental health policy planning. If we all join forces as the WHO is recommending, the future of many thousands of people is bound to improve.

IS8.3.
PARTNERSHIPS: THE PERSONAL, THE POLITICAL, THE PRACTICAL

S. Caras
People Who, Santa Cruz, CA, USA

Themes of collaboration, partnership and coalition are prominent today. This presentation will set a personal and political context and describe some global and local instances of partnerships. Suggestions about what makes good partnerships work will be offered, using Jean Baker Miller's relational criteria as a frame. A brief history of the consumer movement will provide background for examples of partnerships: how the World Health Organization (WHO) is soliciting input for their Mental Health Policy work; California's Village, an Integrated Service Agency; and last year's Information Society Global Disability Forum. Pointers will be provided to resources about rights and information, the work of the Ad Hoc Committee on the United Nations Comprehensive and Integral International Convention to Promote and Protect the Rights and Dignity of Persons with Disabilities, integrating mental health and general health, a social model of disability, the role of consumers in mental health care, embedding recovery into service provision, how respectful language impacts dignity, and paying attention to abuse and trauma-induced disorders. Suggestions will be made for practical steps toward partnership that psychiatrists might consider, including a strengths-based focus expecting recovery and wellness and attention to basic needs, housing, and meaningful activity.

IS8.4.
PARTNERSHIP: A CHALLENGE IN MENTAL HEALTH CARE

G. Gombos
European Network of (ex-)Users and Survivors of Psychiatry

Partnership in mental health care has become slogan. Publicly denying the need for a partnership approach qualifies politically incorrect. Still, old-fashioned paternalistic, hierarchical relationships have been surviving. Coercion versus collaboration has remained an unresolved dilemma for the care providers. During the last decades we witnessed a controversial process: on the one hand the involvement of users and former users of services resulted in a more democratic care system in several places; on the other hand the temptation to reduce mental, emotional and psychosocial problems to brain biochemistry led to the view that mental health service users are passive objects to be fixed. A pre-requisite for partnership is equality. But how can equality exist when some of the 'actors' (the professionals) are authorized to care for the other 'actors' (users, clients, patients, etc.), under certain conditions even against their will? Does this inherent asymmetry not prevent equality and thus partnership as well? In my contribution I shall argue that equality and partnership can be maintained only if service users are viewed in a holistic way. Without practical implementation of the rights to dignity, to self-determination there is no partnership between the user and the professional. The challenge here is how to exercise self-determination under difficult mental conditions. Partnership also has an important aspect that goes far beyond the personal level. The "expertise by experience" of users, former users and survivors of services is hitherto not used sufficiently. Partnership needs to actively seek for the utilization of this expertise.

IS9.
CURRENT APPROACHES TO AUTISM

IS9.1.
UNDERSTANDING THE SOCIAL NATURE OF AUTISM

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Autism is a neurodevelopmental disorder of early onset marked by a profound social disability affecting a person's capacity for understanding other people, intuiting their feelings, and establishing reciprocal relationships. The core social disorder both defines the condition and significantly contributes to the derailment of development in these other areas and yet remains poorly understood. This presentation will summarize current knowledge regarding the neurobiological foundations of social dysfunction in autism spectrum disorders. Work from our group has also shown that although higher functioning individuals with autism can perform adequately on a facial recognition task from a behavioral standpoint, neurofunctionally they exhibit

decreased fusiform and increased inferior temporal gyrus activation when performing such tasks. Ambiguous stimuli studies suggest that, unlike typically developing children, individuals with autism spectrum disorders are much less able to attribute social meaning to ambiguous situations. Another line of work has shown that, while viewing social scenes, cognitively able individuals with autism exhibit markedly different patterns of looking from typical individuals. An important goal of this research is the refinement of our views of the social phenotype in autism, but also of unraveling central aspects of the pathogenesis of this and related conditions.

IS9.2.
A DEVELOPMENTAL APPROACH TO EARLY DIAGNOSIS OF AUTISM: PREDICTING OUTCOME AND DEVELOPMENTAL TRAJECTORIES

T. Charman
Institute of Child Health, University College of London, UK

Progress has recently been made in the earlier identification of children with autism. Whilst being welcome, this presents new challenges to clinical practice, including the utility of standardised assessment instruments with young pre-schoolers, the accuracy and stability of early diagnosis, and the ability to indicate prognosis. We followed a sample of children diagnosed with autism at age 2 years to ages 3 and 7 years. Standard assessments at age 2 did not predict outcome at age 7 but the same assessments conducted at age 3 did. In contrast, a measure of non-verbal communication at age 2 was significantly associated with language, communication and social outcomes at age 7. On all measures group variability in scores increased with age. The trajectory of autism symptoms over time differed in different domains, suggesting that they may be, at least in part, separable. Understanding the 'natural history' of development in different domains in children with autism has important implications for assessment and for the design of treatment studies.

IS9.3.
NEURAL MECHANISMS OF AUTISM

N.J. Minshew
University of Pittsburgh, PA, USA

Autism is widely accepted as being a developmental neurobiologic disorder of polygenetic origin. Although multiple etiologies are suspected, a common pathophysiology of structural and functional brain abnormalities is hypothesized as the underlying cause of the behavioral syndrome. Exciting new findings about brain structure include an abnormal acceleration in brain growth that coincides with the onset of symptoms. This growth of the brain appears to involve primarily the outer radiate white matter zone that affects intrahemispheric and corticocortical connections that mature postnatally. A second major structural brain anatomic finding has been the report of abnormalities of the minicolumns of the cerebral cortex. These abnormalities have been bilaterally symmetric and involved anterior and posterior regions. Functional magnetic resonance imaging (fMRI) studies of the brain in autism have revealed that autistic individuals often rely on lower brain regions and more basic cognitive skills to accomplish tasks and that their brains are characterized by functional under connectivity. These fMRI studies suggest that there is reduced integrative circuitry and that this results in a deficit in the integration of information at both the neural and cognitive levels. At the cognitive level, studies suggest that there is a generalized problem with complex information processing and that autistic individuals rely on basic skills to function and lack higher order abilities in order to process information and function. A critical issue for intervention in the future is whether novel interventions can trigger the growth of intrahemispheric and corticocortical connections and integrative circuitry.

IS9.4.
GENETICS OF AUTISM: FROM EXPERIMENTAL DATA TO INTERPRETATIVE MODELING OF DISEASE

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The advancements of our current knowledge of the human genome and the development of the technology that makes such knowledge possible are progressing at an unprecedented rate. As a consequence, we deem to be closer than ever to the understanding of the biological bases of even complex traits like psychiatric disorders. We review here the state-of-the-art about the genetic bases of autism and autism spectrum disorders (ASD) and present possible etiopathogenetic pathways of this severe disease. Integrating the already known findings relative to the genetic bases of ASDs with our experimental results, it is possible to begin shaping possible etiologic models of disease. To rebuild the biological pathways representing hypothetical etiological mechanisms and to understand how they correlate to the clinical dimensions of the phenotype, we applied current biostatistic-bioinformatic strategies that collectively are included under the broad definition of supervised learning. More than one etiopathogenetic model of autism and ASDs is possible with a high degree of reliability. The autism-related genes identified so far allow us to hypothesize various possible pathways: this diversity fits with our current awareness of the clinical and genetic heterogeneity of the disease, at the same time reflecting our incomplete knowledge of the central nervous system and of the functional systems underlying cognition and behavior. While we are more and more able to identify the various components of the biological bases of autism, despite still being at an initial stage, our abilities to translate these findings into a coherent understanding of the disease, and consequently improve also our therapeutic practices, are both limited. This present restraint is surely in part due to the far from complete knowledge of the genetics and biology of autism, but in another consistent part is also due to our conception of the disease. We speculate that only considering the overall complexity of autism – both genetic-biological and not – into a unified framework, we will eventually be able to make a substantial breakthrough, giving rise to feasible treatments and proper management of the disease.

IS10.
CURRENT APPROACHES TO SLEEP DISORDERS

IS10.1.
THE INTEGRATIVE APPROACH TO THE TREATMENT OF INSOMNIA

C.R. Soldatos
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Insomnia is a highly prevalent disorder affecting approximately 20% of the general population. Although insomnia is usually a secondary condition, when chronic and severe it may become the focus of the patient's attention and is perceived as a disorder in its own right. Insomnia should be understood as a complex, multifaceted disorder

that requires a multidimensional approach to its treatment. From the outset, whenever insomnia is not secondary to another underlying condition, the clinician should overcome the patient's usual denial of the frequently underlying psychological problems and the consequent resistance to a systematic therapeutic approach. The plan should comprise non-pharmacological interventions and pharmacotherapy as an adjunct. Non-pharmacological management includes sleep hygiene education, relaxation techniques, stimulus control therapy, sleep restriction, chronotherapy, and a variety of cognitive/behavioral and educational strategies. The primary targets of such interventions are cognitive/physiologic arousal, maladaptive sleep habits and faulty beliefs and attitudes about sleep. To help patients with insomnia master their fear of sleeplessness and the consequent psychophysiological arousal, which feeds the vicious cycle of insomnia, hypnotic drugs should generally be administered early in treatment. All modern hypnotics are initially effective. However, the slowly eliminated benzodiazepine hypnotics have been associated with carryover sedative effects, and the rapidly eliminated ones have been associated with early development of tolerance and rebound insomnia upon discontinuation. The introduction of newer benzodiazepine-like hypnotics, such as zolpidem and zaleplon, has been advantageous because of their lower propensity for the development of tolerance and rebound insomnia and their safe 'as needed' administration.

IS10.2. PSYCHIATRIC ASPECTS OF HYPERSOMNIA: CURRENT TREATMENTS

M. Billiard
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Excessive daytime sleepiness (EDS) is a neglected symptom, both by patients and primary care physicians, although it can be at the root of severe socio-professional difficulties. There are several causes of EDS, including insufficient sleep; intake of hypnotics and alcohol; sleep induced respiratory impairment; narcolepsy; the Kleine-Levin syndrome; neurologic, psychiatric, infectious, endocrinologic, and metabolic disorders; disorders of the circadian rhythm of sleep. All these disorders are of potential interest to the psychiatrist. Sleep insufficiency may be responsible for irritability, fatigue, nervousness and sometimes depression. Intake of hypnotics and alcohol is often associated with symptoms of tension, anxiety or depression. Sleep induced respiratory impairment is a cause of aggressiveness, irritability, anxiety or depression. The Kleine-Levin syndrome is remarkable for prolonged episodes of sleep, associated with abnormal behavioral and cognitive features. Hypersomnia associated with mental disorders occurs mainly in subjects with mild bipolar depression or dysthymia, and less frequently in subjects with schizoaffective disorders, personality disorders and somatoform disorders. Delayed sleep phase syndrome is associated with psychiatric features in up to 80% of cases. The management of these conditions relies on various pharmacologic or non-pharmacologic procedures. Subjects with the insufficient sleep syndrome are advised to increase sleep time of one or more hours. Chronic use of hypnotics benefits from a supervised, structured, and time-limited withdrawal program, with or without cognitive-behavioural treatment. Sleep induced respiratory impairment is best treated by continuous positive airway pressure. Narcolepsy treatment relies on stimulants or drugs with awakening properties. There is no satisfactory treatment of the episodes of the Kleine-Levin syndrome; on the other hand mood stabilizers may have prophylactic value. Hypersomnia associated with mental disorders often responds to stimulants or drugs with an awakening property better than to antidepressants. Chronotherapy and light therapy are the treatments of choice for the sleep delayed phase syndrome, but are usually ineffective on the associated psychiatric symptoms. In conclusion, mental disorders may sometimes be a consequence of different types of hypersomnia and only respond to the treatment of these sleep disorders. The degree of alertness of a subject with mental disorder should always be considered.

IS10.3. CURRENT DIAGNOSIS AND MANAGEMENT OF PARASOMNIAS

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Department of Psychiatry, Medical University of Warsaw, Poland

Parasomnias are not abnormalities of the process of sleep itself, but undesirable phenomena that occur during sleep. In this presentation, only parasomnias enumerated in the ICD-10 classification (somnambulism, night terrors, and nightmares) are discussed. Many parasomnias run in families, so genetic factors have been suggested. Gene-environment interactions are most probable. Benign forms of parasomnias occur frequently in childhood, but attenuate in the teen years. Co-occurrence of parasomnias is common. Somnambulism and sleep terrors are considered arousal disorders. They are more likely to manifest during the first episode of slow wave sleep, but may also appear any time during non-rapid eye movement (NREM) sleep. Sleep terrors are the least frequent parasomnias in adults; however, co-occurrence with somnambulism is particularly dangerous. Nightmares are frightening vivid dreams, arising almost exclusively during rapid eye movement (REM) sleep, so they are more likely to occur in the second half of the night when REM episodes prevail. Nightmares in adults are frequently symptoms of post-traumatic stress disorder. Nightmares may also be associated with depression, anxiety disorders, schizophrenia-spectrum pathology or schizotypy. Emerging data indicates that the frequency of nightmares is directly associated with suicide risk. The diagnosis of parasomnias is based upon clinical history, but videopolysomnography is required for differential diagnosis. Treatment of arousal disorders is symptomatic, with strong emphasis on sleep hygiene. Recently, some new pharmacologic and non-pharmacologic treatments of nightmares have been proposed.

IS10.4. SLEEP APNEA SYNDROME: AN UPDATE ON A PREVALENT SLEEP DISORDER

P. Lavie, L. Lavie
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Sleep apnea syndrome is characterized by repeated apneic events during sleep which result in intermittent hypoxia and severe sleep fragmentation. It is a prevalent syndrome affecting 4% of men and 2% of women. Patients suffering from sleep apnea syndrome mostly complain of habitual snoring, excessive daytime sleepiness, chronic fatigue and neuro-cognitive deterioration. It is well established that the syndrome is closely associated with cardiovascular morbidity, particularly with hypertension, and with cardiovascular mortality, as well as with increased rates of work and car related accidents. In recent years our laboratory has focused on investigating the mechanism underlying cardiovascular morbidity in sleep apnea, on mortality of sleep apnea patients and on daytime consequences of the syndrome. The following are highlights of our recent findings. We found that oxidative stress plays a major role in cardiovascular morbidity in sleep apnea syndrome by initiating atherogenic processes. Sleep apnea patients, free of any overt cardiovascular disease, suffer from endothelial dysfunction, which is a sub-clinical state of atherosclero-

sis. Comparing mortality rates of sleep apnea patients to that of the general population revealed that only patients <50 years showed excess mortality and that only moderate to severe syndrome was associated with significantly higher mortality hazards in comparison with people without sleep apnea. Investigating psychiatric symptoms in a large cohort of sleep apnea patients did not show any increase in psychiatric morbidity. These latter results contradict some of the previous studies, all based on small samples, that reported on an association between depression and sleep apnea.

IS11.
THE PRESENT AND FUTURE OF CONSULTATION-LIAISON PSYCHIATRY

IS11.1.
STRATEGIES AND OUTCOME OF A 25-YEAR EXPERIENCE IN A UNIVERSITY PSYCHOSOMATICS AND LIAISON PSYCHIATRY SERVICE IN ZARAGOZA, SPAIN

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A special Unit was organized in 1977 at the University Hospital of Zaragoza, Spain, which is now called Psychosomatics and Liaison Psychiatry Service. The principles of both psychosomatic medicine and liaison psychiatry were the philosophical foundations. Patient care was the main objective from the hospital perspective, but strong emphasis was placed both on teaching and empirical research. Approximately 200 patients were referred in the first year, but the referral has increased systematically and is now approximately 1,200 patients per year, with a referral rate of 4%. Specific liaison programs were soon incorporated, and now include psycho-oncology and infectious diseases-AIDS programmes, as well as a new dementia clinic with a liaison programme with primary care. The clinical impact of this Service in the hospital is apparent in view of the referral rate, but so is the teaching impact, in view of the improved ability of non-psychiatrists to refer and care for medical patients with psychological disturbance. Fellowship-type teaching programmes and programmes for foreign students have also been incorporated. An intense research activity, mainly following epidemiological principles, has been developed following the initial strategic plans, and four "generations" may be identified. In the first one, research instruments were developed, which are now used across the country. "Generations" two and three included epidemiological studies of increasing complexity, and the fourth one incorporated cross-national, European studies. The Service coordinates now the Spanish network of clinical research in liaison psychiatry, with the funding and support of the National Research Institute (Carlos III).

IS11.2.
INTEGRATING PSYCHOSOMATIC CARE IN THE GENERAL HOSPITAL: THE GERMAN EXPERIENCE

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Increasing numbers of complex patients with a need for interdisciplinary treatment and care management stress the need for better integrating consultation-liaison (C-L) services in medical and surgical wards of general hospitals and better networking with outpatient facilities. In the framework of the multi-centre Quality Management Study of the European Consultation-Liaison Workgroup, we conducted quality management (QM) studies in Nuremberg (Germany) and Innsbruck (Austria). We present data of the QM studies conducted at the Nuremberg General Hospital, which is a 2,400 bed tertiary care hospital, and at the Innsbruck University Hospital, a 1,600 bed tertiary care centre. Results of the study show that better integration of psychosomatic medicine may be achieved by: a) increasing liaison activities instead of consultation services; b) implementing instruments for case-finding and care management like the INTERMED; c) establishing interdisciplinary treatment modalities like integrated psychosomatic wards or interdisciplinary day hospitals; and d) establishing training courses for physicians of medical/surgical departments that improve their ability to detect psychiatric disturbances and their communication skills. Based on the results of the German QM studies, practice guidelines for C-L services have been developed by a nation-wide German workgroup.

IS11.3.
THE RELATIONSHIP BETWEEN PSYCHOSOMATIC MEDICINE AND CONSULTATION-LIAISON PSYCHIATRY: AN ONGOING PROBLEM

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The relationship between psychosomatic medicine (PM) and consultation-liaison psychiatry (CLP) is still controversial, both in a theoretical perspective and in its pragmatic implications. CLP was formally designated as a subspecialty by the American Board of Medical Specialties in 2003, but with the name of PM. Many authors have addressed this issue, in past and more recent times. PM has a strong tradition in the research field, that has undoubtedly influenced CLP; contributions of PM to training and education are also out of discussion. But it is in the field of clinical activities and organisation of services that a blank was left: neither the "psychosomatist" nor the departments of psychosomatics exist as clinical entities (German-speaking countries excluded). CLP has been therefore acclaimed as the "arm" of PM: it succeeded in operationalizing the psychosomatic idea by turning it into services, clinical competencies, diagnostic and therapeutic tools, that inevitably nourished further research activities and training responsibilities. In the years, CLP has gradually become more and other than that: "psychosomatic" problems are only a small proportion of the CL psychiatrist's everyday tasks (e.g. medical-psychiatric comorbidity, delirium, self-harm behaviour risk, transplants, etc.). A redefinition of the relationship in a more constructive frame is expected.

IS11.4.
DEPRESSION AND CARDIOVASCULAR DISEASE

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The relationship between depression, stress and cardiovascular disease has long been recognized. Astute clinical observers such as Sir William Osler reported that patients with myocardial disease seemed to carry the burden of their families upon them. Recent data have

confirmed this connection. Stress, whether acute, chronic, or episodic such as affective disorder, is associated with cardiovascular changes, increased rates of myocardial disease and elevated mortality rates in those individuals following myocardial infarction. Stress is difficult to measure, but a variety of surveys demonstrate that both lower socioeconomic strata and social support correlate with cardiovascular disease even when other confounding risk factors are controlled. Epidemiological data reveal that both depressed mood and syndromic depression are risk factors for cardiovascular disease in community surveys, at risk populations in medical settings, and those with documented disease states. The positive association with cardiac disease remains even if confounds such as male gender, history of hypertension, tobacco use, family history and diabetic status are controlled. Such data will be reviewed and new findings discussed. Recent data from Montreal suggest that depression will foster a three fold increase in death following uncomplicated myocardial infarction. This risk is equivalent to significant left ventricular failure. The innate mechanisms for such an association may be reduced heart rate variability, dysfunctional platelet function, or impaired macrophage function. The presentation will conclude with a review of possible interventions for the depressed patient following a myocardial infarction or cerebrovascular accident. Are antidepressants preferred over psychotherapy? What is the mechanism of antidepressant use in the myocardial infarction survivor? A review of the Enhancing Recovery in Coronary Heart Disease (ENRICH-D) study and the Sertraline Antidepressant Heart Attack Randomized Trial (SADHART) will help to answer these questions.

IS12.
COMBINING MEDICATIONS IN PSYCHIATRY: ADVANTAGES AND RISKS

IS12.1. COMBINATION THERAPIES IN THE TREATMENT OF SCHIZOPHRENIA

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Most textbooks of psychiatry and pharmacopsychiatry traditionally suggest a mono-therapeutic regimen. This is of course theoretically meaningful for different reasons and is seen as an indicator of rational psychopharmacotherapy. However, it is well known that clinical practice in psychiatry does not follow this principle. Even in academic institutions, drug combinations seem to be the rule and monotherapy more or less the exception. In the treatment of schizophrenic inpatients, polypharmacy with two, and often three or even more drugs is very common. Combined drug therapy in schizophrenia and other psychiatric disorders is often criticised, especially by psychopharmacologists not working in a hospital. Even if the criticism is not so severe, the potential risks of a combined psychopharmacotherapy in comparison to monotherapy are stressed. However, from a clinical perspective, positive aspects and even a meaningful theoretical justification of combination therapy in schizophrenia, and of course also other psychiatric disorders, can be underlined, without denying that there are also risks with such an approach, for example, pharmacokinetic risks or the risk of potentiation of serious side effects. Of course the potential benefits and risks have to be considered and well balanced in each individual case. A careful approach, for example with measurement of drug levels, can reduce many risks. Examples of a meaningful combination of drugs in the treatment of schizophrenia are as follows: the combination of an antipsychotic and a benzodiazepine to induce better tranquilisation in agitated psychotic patients; the combination, for the same purpose, of a low potency traditional antipsychotic such as levopromazine with a high potency/non-sedating antipsychotic; in the case of drug resistance to a treatment with a low D2-binder, the add-on therapy with a high potency D2-blocker; in the case of schizoaffective psychoses, the combination of an antipsychotic with a mood stabiliser. In the case of negative symptoms refractory to neuroleptic treatment as a monotherapy, the combination of selective serotonin reuptake inhibitors is indicated. Similarly, in depressed schizophrenic patients, a combination with antidepressants might be helpful. There are several good theoretical reasons and a large amount of good clinical evidence indicating that these combination therapies are meaningful.

IS12.2.
COMBINING MEDICATIONS IN MOOD SPECTRUM DISORDERS: ADVANTAGES AND DRAWBACKS

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Clinical evidence suggests that monotherapy is often inadequate and combination drug regimens have become the norm for the treatment of bipolar disorder. This is mostly due to the fact that, so far, no available mood stabilizer has equivalent efficacy in both phases of bipolar disorder, nor is fully effective for the prophylaxis of recurrences. Moreover, comorbid psychiatric disorders such as substance abuse or anxiety disorders should also be considered in designing a treatment regimen. In this regard, a combination therapy is supposed to address more effectively the wide area of phenomenology that characterizes patients with bipolar disorder. However, randomized controlled studies in bipolar populations are needed to further characterize optimal matching of patient and medication. Furthermore, when selecting the most appropriate mood stabilizer for a patient - particularly when polypharmacy is required - the clinician should keep potential side effects and drug interactions in mind. The author argues for a new generation of adequately powered investigations of efficacy, which are necessary before the issue of cost-effectiveness of combination therapies can be properly addressed.

IS12.3.
CO-MEDICATION AND AUGMENTATION STRATEGIES IN UNIPOLAR DEPRESSION

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Response to antidepressants can be achieved in approximately 70% of patients and thereafter the question arises how to combine or augment pharmacological as well as non-pharmacological strategies. Adding a second antidepressant to the ongoing treatment is likely to produce a different response than either medication alone. Ideally a combination should take advantage of complementary mechanisms of action to confer synergic benefits. However, disadvantages of this strategy could include the increased risk of drug-drug interactions, potentiation of side effects and also drug costs. Although often applied in clinical practice, there is little controlled data in support of the utility and efficacy of combination strategies. The addition of tricyclic antidepressants to selective serotonin reuptake inhibitors (SSRIs) or vice versa has been attempted with varying success. The combination of monoamine oxidase inhibitors with SSRIs and other antidepressants acting on the serotonergic system must be strictly avoided due to potentially fatal interactions. Other, non-pharmaco-

logical augmentation strategies include psychotherapy, light therapy, sleep deprivation as well as electroconvulsive therapy. Recently the combination with atypical antipsychotics was introduced with remarkable success. Altogether co-medication as well as augmentation strategies help to address partial non-response or partial remission in a number of patients. However, knowledge on the mechanism of action of these strategies remains incomplete.

IS12.4.
CO-MEDICATION IN PSYCHIATRY: WHAT HAS TO BE CONSIDERED?

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Polypharmacy, the simultaneous prescription of more than one drug, is more the rule than the exception in psychiatry. According to some studies, each patient is treated, on the average, with at least three psychotropic drugs. Additionally, several elderly patients get medicaments for somatic diseases. Reasons for this polypharmacy are comorbidity, resulting from new classification systems, and the availability of new very specific drugs. Many of these drugs show interactions both at the pharmacokinetic and the pharmacodynamic level. Psychotropic drugs, depending on their lipophility, are absorbed and with the help of transporter proteins penetrate into the brain. They are metabolised by various P450 cytochromes (CYP2D6, CYP2C19, $1A_{3,}$ etc.). This activity of the cytochromes is individually different and influenced by genetic factors as well as dietary habits. Drugs can either inhibit or induce this activity. An alteration of this enzyme activity modifies the elimination of the drug and of its metabolites. Increased or reduced blood levels are the consequences and even the pharmacological profile can be changed. At the pharmacodynamic level, synergistic or alternating effects are resulting from drug interactions as well. Such interactions depend on the pharmacological profile of the drugs. Knowing the metabolising enzymes involved in the pharmacokinetics of each drug and the specific receptor profiles gives hints for useful combinations and helps to avoid unuseful interactions. Examples will be given for different psychiatric disorders like schizophrenia, depression and bipolar disorders.

IS13.
THE EVALUATION OF PSYCHIATRIC TREATMENTS

IS13.1.
EVALUATING TREATMENTS FOR THE SEVERELY MENTALLY ILL

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This paper will give an overview of methods appropriate to evaluate treatments and services for people with severe mental disorders. Specifically, the advantages and disadvantages will be described of: a) observational studies; b) quasi-experimental studies; c) randomised controlled trials (efficacy and effectiveness studies). Attention will be drawn to the importance of using rating scales with established psychometric properties, especially in terms of reliability. Examples will be given of the use of key types of study design.

IS13.2.
THE EVALUATION OF PHARMACOTHERAPY IN PSYCHIATRY

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A broad range of study designs are employed to evaluate pharmacotherapy in psychiatry. These range from small exploratory open studies via the gold standard of the randomized placebo-controlled clinical trial to large pragmatic naturalistic studies. Outcome criteria have traditionally focused on improvement of psychopathological symptoms and on the assessment of safety and tolerability issues. More recently additional outcomes, previously considered as "soft criteria", such as quality of life and social adjustment, have gained importance. Various rating scales and assessment instruments are available to reliably quantify changes in the parameters described above. Ideally, the evaluation of psychiatric treatments should be based on studies of different design and scope to minimize the risk of misinterpretation. For instance, while any open clinical trial is subject to an observer bias, randomized controlled trials have been shown to lead to a selection bias, that may hamper the generalizability of the results obtained. An earlier use of non-inferiority trials, which have so far been used exclusively in post-registration studies, is also encouraged. As the focus of safety/tolerability assessment has shifted from a strong emphasis on extrapyramidal motor dysfunctions to non-motor adverse events, such as metabolic and sexual dysfunctions, cardiac safety and others, clinical trial designs need to account for this by including more specific side effect rating scales and laboratory tests. In addition, subjective tolerability and compliance need to be assessed with more vigor. In conclusion, a modern evaluation of pharmacotherapy must go beyond traditional measures of psychopathological symptoms and include real life outcomes such as quality of life, psychosocial reintegration and the subjective perception of a drug's benefit/risk profile.

IS13.3.
ASSESSMENT OF PSYCHOTHERAPEUTIC OUTCOME

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There is increasing evidence on the efficacy of psychotherapy in a number of psychiatric disorders, and particularly in mood and anxiety disorders. Compared to pharmacological approaches, psychotherapy appears to entail a more lasting recovery. However, randomized controlled trails often fail to show significant post-treatment differences between the two approaches. A crucial issue in evaluating outcome appears to be the assessment of the degree of recovery. Psychometric theory has been the basis for development of assessment instruments in psychiatric research. However, the psychometric model appears to be largely inadequate in the clinical setting, because of its lack of sensitivity to change and its quest for homogeneous components. Recently clinimetrics has offered a viable alternative to psychometrics, from both a conceptual and methodological viewpoint. Current diagnostic entities (DSM) are based on clinimetric principles, but their use is still influenced by psychometric models. This is exemplified by the occurrence of comorbidity in affective disorders. Very seldom different diagnoses undergo hierarchical organization, or attention is paid to the longitudinal development of disorders. Since comorbidity may vary from one illness to another and from one

patient to another, there is the need of clinimetric instruments which may allow a clinician to treat syndromes as heterogeneous constructs which may entail different weights. On the contrary, the customary psychometric goal is to achieve a unidimensional construct, in which the relatively homogeneous components all measure essentially the same phenomenon. In this process, components that seem to be different and may be likely to detect change may be discarded. Clinimetric theory offers the conceptual and methodological ground for a substantial revision of assessment parameters and for linking co-occurring syndromes. From a research viewpoint, it may pave the way for inclusion criteria and assessment tools which are more suitable for the purposes of evaluating psychotherapeutic changes.

IS13.4.
EVALUATING MENTAL HEALTH SERVICES

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In most countries mental health services are undergoing substantial changes, a common element of the change being the transition from a system of care predominantly hospital-based to one which is predominantly community-based. Monitoring and evaluation are important aspects of change. Monitoring needs to be carried out in a reliable way and for a relatively long period of time. Psychiatric case registers (PCRs) are useful tools for long-term monitoring and provide the most accurate way of estimating the uptake of psychiatric care by a target population. Service evaluation includes randomised controlled trials (RCTs), conducted in experimental settings to assess efficacy, trials conducted in "real world" to assess effectiveness, and well designed descriptive studies. The aim of this paper is to present evidence of evaluative research conducted in the last 25 years in South-Verona, Italy, where a psychiatric service is operating since 1978. This service is not experimental, avoids restrictive selection procedure for patients and was implemented by national law. Continuity of care, a longitudinal perspective, and a balanced hospital-community care are ensured to all those in need. After presenting data on long-term patterns of care, the results of several naturalistic studies, conducted on various cohorts of patients with schizophrenia and related disorders, followed up for 3-4 or 5 years, will be summarised. The assessment of outcome of psychiatric care was made using well standardised instruments for evaluating quality of life, needs for care, satisfaction with services and costs, as well as psychopathology and disability. Ratings were made both by staff *and* patients.

IS14.
ADVANCES IN THE DIAGNOSIS AND TREATMENT OF BIPOLAR DISORDER

IS14.1.
RECENT DEVELOPMENTS IN THE DIAGNOSIS AND TREATMENT OF BIPOLAR DISORDER

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There has been a revolution in the epidemiology, clinical phenomenology, classification, pharmacological, psychotherapeutic and public health aspects of bipolar disorder. The advances are so enormous that bipolar disorder should be considered a major subspecialty in psychiatry. This is particularly true given the life long nature of the illness, the unpredictable exacerbations, the disruption in social, occupational, and conjugal life, substance use and medical comorbidity, and the high risk of suicide. Such an illness requires a coordination of services involving psychiatrists, nurses, social workers, psychologists and pharmacists. It is no longer possible to think of solo practice in the management of this illness. The spectrum aspects require attention to diagnostic sophistication, not only in the patient, but also in the family. This would achieve early case detection. This would be a model of practice that is necessary to teach training psychiatrists and other mental health professionals. The substantial advances in science are unlikely to make any impact on prevention and public health without such clinical units. It is regrettable that the number of such units has not substantially increased since the 1970s. Most programs deliver research rather than care. It is the latter aspect that now needs to be instituted.

IS14.2.
EPIDEMIOLOGY OF BIPOLAR DISORDERS

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With the introduction of operational criteria for well-defined psychiatric categories (DSM-III, DSM-IV, ICD-10) it became possible to perform large-scale community surveys and studies of patients in nonpsychiatric settings. Until recently, bipolar disorder was equated with classical manic-depressive (i.e. bipolar I) disorder, and it was found that the lifetime prevalence of bipolar disorder was around 1%. However, if the diagnosis of bipolar II disorder was considered, much higher lifetime prevalence rates of the bipolar spectrum disorders (at least up to 5%) were reported. In addition, when considering the subthreshold forms of hypomania (i.e. minor bipolar disorders), the lifetime prevalence rate of the broadly defined bipolar spectrum disorders rose up to 12%. In contrast to unipolar depression, the gender ratio in bipolar disorder (all forms combined) is around 1:1. However, among bipolar II patients and in special subpopulations (winter depression, dysphoric mania, depressive mixed states, bipolar depression with atypical features, rapid cycling bipolar disorder) females are overrepresented. The age of onset of bipolar disorders is substantially (about 10 years) lower than in unipolar depression, being most commonly around 20 years of age. In contrast to unipolar depression and bipolar I disorder, bipolar II patients tend to belong to higher social class, and they are overrepresented among socially active, creative persons. Bipolar patients in general show more frequently substance use and anxiety disorders comorbidity, marital breakdown and suicidal behaviour than unipolar depressives. If bipolar I and bipolar II patients are analyzed separately, anxiety disorders comorbidity and suicidal behaviour are more frequent in the bipolar II, whereas substance abuse comorbidity is more frequent in the bipolar I subgroup.

IS14.3.
EVIDENCE-BASED PHARMACOLOGICAL TREATMENT OF BIPOLAR DISORDER

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Bipolar disorder has been and remains a relatively neglected condition. This has two divergent consequences. First, there is a perception that treatment could and should be improved. Second, because of a relative dearth of high quality research, the confidence with which we can advocate particular treatments is limited. It is an unfortunate truth that where uncertainty abounds, guidelines may proliferate. Evi-

dence-based guidelines are systematically derived statements that are aimed at helping individual patient and clinician decisions. They are intended to improve the quality of care. The recommendations usually apply to the *average* patient. They need to be graded according to the strength of the evidence from appropriate, preferably randomised trials. The British Association for Psychopharmacology guidelines for treating bipolar disorder specify the scope and target of treatment and are based explicitly on the available evidence. They are presented, like previous clinical practice guidelines, as recommendations to aid clinical decision making for practitioners. They may also serve as a source of information for patients and carers. A one day consensus meeting, involving experts in bipolar disorder and its treatment, reviewed key areas and considered the strength of evidence and clinical implications. The guidelines were drawn up after extensive feedback from participants and interested parties. The strength of supporting evidence was rated. The guidelines cover the diagnosis of bipolar disorder, clinical management, strategies for the use of medicines in short term treatment of episodes, relapse prevention and stopping treatment.

IS14.4.
PSYCHOSOCIAL APPROACHES TO BIPOLAR DISORDER

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Although genetic and biological factors are crucial in the pathophysiology of bipolar disorder, the importance of psychosocial factors in triggering or mitigating relapses warrants the implementation of psychotherapeutic interventions. Psychoanalysis, psychoeducation, group therapy, family therapy, cognitive-behavioral therapy, and interpersonal therapy have been used in the long-term treatment of bipolar patients, but very few have established efficacy on their own in controlled clinical trials regarding hospitalization, recurrences or suicidal behavior, as medication alone does. However, psychoeducation and cognitive-behavioral techniques (CBT), either in group or individually, have started to yield the first positive results in high standard, controlled trials of the combination of medication plus psychosocial intervention versus medication alone. These approaches focus primarily on information, treatment compliance, early detection of relapse, and illness management skills. A key issue is to start psychoeducation or CBT when the patient is in remission. CBT does not seem to work too much for cross-sectional symptoms, and its benefits are more likely to be noticed in the long term. For this reason, the main components of CBT in bipolar disorder are the psychoeducational ones, giving further support to the psychoeducational model, that has been supported by two well-designed, positive randomized clinical trials. At the present time, and in face of current evidence, not adjuncting psychoeducation to medication should be considered unethical, unless the patient is still too sick to benefit from this approach.

IS15.
RECENT ADVANCES IN PHARMACOGENOMICS

IS15.1.
ENDOPHENOTYPES ACROSS NEUROPSYCHIATRIC DISEASE - A NOVEL APPROACH TO AN OLD QUESTION: WHAT UNDERLIES GENETIC VARIABILITY IN NEUROPSYCHOPHARMACOLOGICAL RESPONSE AND ADVERSE EFFECTS?

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Genetic data will be presented from a large, multicenter, prospective study sample (n=185) examining the phenotypes of response and side effects to antipsychotics, with a particular focus on clozapine. We assess global clinical response to clozapine, and then dissect out individual genetic components contributing to change in positive and negative symptoms, and neuropsychological functioning after clozapine treatment. Data will also be presented examining pharmacogenetic predictors of typical antipsychotic-induced tardive dyskinesia. We found a significant association between a 5-HT_{2A} receptor gene (HTR2A) polymorphism, which alters the amino acid sequence (His452Tyr), and clinical response to clozapine (allele: p=0.01; genotype: p=0.04). No significant associations with clozapine response were identified for the HTR2C, HTR6, and dopamine D_2 (DRD2) genes. When examining individual endophenotypes, there was no evidence of association between HTR2A, HTR2C, HTR6, and DRD2 and change in positive and negative symptoms after clozapine treatment. Negative findings were also observed between these genes and change in neuropsychological functioning after clozapine treatment. Dopamine D_1 receptors (DRD1) are located in high concentration in the prefrontal cortex and are thought to play an important role in modulating mesocorticolimbic circuitry and thereby neurocognitive functioning in schizophrenia. We observed a significant association between a DRD1 polymorphism and change in scores on the Wisconsin Card Sorting Test, a test of working memory, categorization and attention shifting, all aspects of executive functioning, assessed after treatment with clozapine (p=0.002). We have also found a trend suggesting that this DRD1 polymorphism is associated with modulation of prefrontal cortex metabolic activity, as assessed by 18-fluorodeoxyglucose (18-FDG) positron emission tomography (PET), after clozapine treatment and that this is predictive of measures of clinical response. With respect to adverse effects of antipsychotics, we have demonstrated an association between a Ser9Gly polymorphism in the dopamine D3 receptor gene (DRD3) and typical antipsychotic-induced tardive dyskinesia (p<0.0005). This work has been replicated and a recent collaborative combined analysis confirms the association. Neuropsychopharmacogenetics is an exploding area of research coupling molecular genetic findings with clinical neuropsychopharmacological data. With advancements made in the future, it is hoped that personalized neuropsychopharmacotherapy will eventually be realized making the empiric 'trial and error' approach to prescribing obsolete. This will introduce more objective means to prescribing in schizophrenia and other neuropsychiatric syndromes.

IS15.2.
THE GENETIC DETERMINATION OF RESPONSE TO ANTIDEPRESSANTS AND ANTIPSYCHOTICS UNDER ROUTINE CLINICAL CONDITIONS

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The selection of the most appropriate psychotropic drug and the prediction of response and side effects during treatment are still a matter of "trial and error" in our field. The lack of predictive power of clinical characteristics of patients is probably due to individual determinants for drug response which are to a large extent defined by the sequence variability of the human genome. The search for genetic determinants of drug response is also motivated by the observation of non-random familial resemblance of response to psychotropic agents. In spite of substantial efforts to identify molecular-genetic predictors for antidepressant and antipsychotic treatment, the replicable successful findings remain rare. Reasons might be: a) lack of standardization and control of intervening factors like co-medication, dosage, variability of plasma levels, and b) lack of appropriately designed prospective studies. On the other hand, the practical relevance of predictors requires their transferability to clinical routine. We report from a clinical programme established to explore the relationship of sequence variants in candidate genes with response (therapeutic, side effects) to standardized antidepressant treatment (citalopram, mirtazepine) in patients with unipolar depression, and response to antipsychotic treatment (amisulpride, olanzapine) in patients with schizophrenia. Endocrinological measures and plasma levels of the substances under investigation define another phenotype which might be more closely related to genetic variants than clinical response pattern.

IS15.3.
GENE VARIANTS AND SSRI RESPONSE: A SIX-MONTH FOLLOW-UP

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We previously reported genetic factors associated with short-term antidepressant treatment outcome. In the present study we investigated the same gene variants in a prospective six-month naturalistic follow-up. The sample included 185 inpatients affected by recurrent major depression consecutively admitted to the psychiatric inpatient unit of San Raffaele Hospital from 1998 to 2003 and prospectively followed up after their recovery. All the patients were undertaking maintenance therapy. The functional polymorphism in the upstream regulatory region of the serotonin transporter gene (SERTPR), the tryptophan hydroxylase (TPH) A218C substitution, a variable number of tandem repeats (VNTR) polymorphism located 1.2 kb upstream of the monoamine oxidase-A coding sequences, the CLOCK gene T3111C and the per3 gene T1940G substitutions were analysed using polymerase chain reaction-based techniques. No association was found between clinical variables and relapses; subjects showing TT genotype at CLOCK gene tend to show a relapse within six month after recovery more than TC and CC subjects. A non-significant trend of SERTPR s/s subjects to a lower frequency of relapse was also observed. In conclusion, some remitted subjects after acute treatment relapse within six months, despite undertaking a maintenance treatment. The reasons are heterogeneous, but CLOCK gene variants may influence the outcome in the medium term.

IS15.4.
PROGRESS IN PHARMACOGENOMICS: FOCUS ON ADVERSE EFFECTS

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Current pharmacotherapies for psychiatric disorders are generally incompletely effective, as many patients do not respond well or suffer from adverse reactions to these drugs, which can result in poor patient compliance and poor treatment outcome. Psychotropic drugs of the third and fourth generation have been considered to offer many advantages over conventional ones, as they are effective in treatment and, in many cases, have a markedly lower incidence or different pattern of side effects. Until today most pharmacogenetic studies investigated antipsychotic efficacy and antidepressant response. Only recently it became obvious that also the drug-induced adverse effects are not only complex in nature but also genetically influenced. Although the list of the main common untoward effects of psychotropic medications is long, including weight gain, sedation, hypotension, extrapyramidal symptoms, tardive dyskinesia, anticholinergic effects, long-QT syndrome, blood lipid abnormalities, and diabetes, pharmacogenetic studies have so far been conducted primarily on the adverse effects of tardive dyskinesia and weight gain. Up to now a relatively straightforward additive interaction between *DRD3* and *CYP1A2* in the risk for tardive dyskinesia was identified: patients carrying the glycine/glycine genotype at *DRD3* and the C/C genotype at *CYP1A2* had the most severe tardive dyskinesia. Recently an association between the –759 T/C single nucleotide polymorphism in the upstream putative promoter region of the 5-HT_{2C} receptor gene and antipsychotic-induced weight gain was reported. These findings are an interesting beginning, and more preliminary data will be presented to underline that much more work is necessary to confirm the role of genetic variants in adverse effects.

IS16.
THE PRESENT AND FUTURE OF REHABILITATION IN PSYCHIATRY

IS16.1.
PSYCHIATRY AND REHABILITATION

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Psychiatrists have traditionally been responsible for the delivery of treatment services for individuals with serious mental illnesses. The emergence of psychiatric rehabilitation services, however, has been led in different parts of the world by a variety of disciplines, including psychologists, social workers and occupational therapists. A great deal of confusion has existed concerning the role of psychiatrists in the delivery of psychiatric rehabilitation services. Some systems have chosen to have psychiatrists focus on treatment alone and refer clients to a psychiatric rehabilitation service. Others have chosen to incorporate psychiatrists in the day-to-day practice of psychiatric rehabilitation as 'team leaders", in others psychiatrists deliver psychiatric rehabilitation assessments and collaborate with other disciplines in the delivery of planning and intervention components. This presentation will review the different roles of psychiatrists in psychiatric rehabilitation along with the positive and negative experiences that have been associated with each role in an attempt to answer the question: What *should* the role of psychiatrists be in the delivery of psychiatric rehabilitation services?

IS16.2.
THE DIFFUSION OF THE PSYCHOSOCIAL CLUBHOUSE MODEL

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The psychosocial clubhouse is a socialization and rehabilitation program co-run by people with mental illness and staff. The model was first developed at Fountain House in New York City in the 1940s. A strong diffusion effort began in the 1970s. By 2002 there were 295 clubhouses, certified as adhering to the standards established by the International Center for Clubhouse Development, in 24 countries, including 15 European countries. There were none in Italy, France or Spain. The presenter will describe how a psychosocial clubhouse works, examine reasons for the success of the model, and look for explanations for the observed pattern of worldwide diffusion. Comparisons will be made with the diffusion of the social enterprise model.

IS16.3.
EFFECTIVENESS OF A PSYCHOEDUCATIONAL FAMILY INTERVENTION ON SOCIAL FUNCTIONING OF PATIENTS WITH SCHIZOPHRENIA

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Some of the advantages of community care to patients with severe mental disorders are attributable to everyday family support. However, only few data are available on the effects of family interventions on patients' disability. This study aims to assess the effect of a psychoeducational family intervention provided in routine conditions on social functioning of patients with schizophrenia. In each of the 18 mental heath services which were randomly selected to participate in the study, the following main phases have been conducted: a) the attendance of two professionals to a 8-day training course on a well-known psychoeducational intervention, followed by 5 supervision sessions in the subsequent six months; b) the provision of the intervention by the trained staff to five families of users with schizophrenia, of which three families were randomly selected to receive the intervention immediately, and two 6 months later. Preliminary six-month follow-up results showed a statistically significant improvement in patient's social functioning in the treated group. In particular, self-care and social activities were the areas of patients' disability in which the greatest improvements were observed. On the contrary, no statistically significant difference in patients' disability was detected in the control group. These results suggest that psychoeducational intervention should be considered as an effective resource for the rehabilitation of users with schizophrenia in their natural environment.

IS16.4.
'INTENSIVE' AND 'STANDARD' CASE MANAGEMENT IN COMMUNITY CARE OF INDIVIDUALS WITH SEVERE PSYCHOTIC ILLNESSES

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Highly resourced continuing support services for the severely mentally ill are referred to as assertive community treatment (ACT) in the US and intensive case management (ICM) in Europe to distinguish it from standard case management (SCM). There has been a lively debate about whether or not ICM and ACT are the same thing and this debate has been fuelled by the failure of European studies of ICM to replicate the reductions in bed usage found in US ACT studies. This seemingly parochial spat about names and studies has however helped us understand better what are the essential components of successful community care of the severely mentally ill. Rather than seeing the differences in outcome as a problem to be explained, they were actively explored to get a better understanding of treatment components. 20 components of care were identified by an expert panel and these were sent to the principle investigators of 90 studies of home-based care. From the 60 replies indicating the practices of the experimental services, those features commonly present were identified using correlations. These were then regressed to test for their association with reduction in hospital care. A distinction between ICM and ACT is not supported by examination of practices. Differences in outcome between the early US and more recent European results reflect the distribution of 'effective features' of successful community support services between the control and experimental services in Europe (and latterly in the US). We can with some confidence conclude that outreach (home visiting) and the integration of health and social care at the level of the clinical team are the key features in successful support and rehabilitation of the severely mentally ill and that some of the other high profile (and expensive) features proposed for ACT may not be as vital.

IS17.
MANAGEMENT OF ALCOHOL-RELATED PROBLEMS

IS17.1.
EFFECTIVENESS AND COST-EFFECTIVENESS OF TREATMENT FOR ALCOHOL PROBLEMS: RESULTS OF THE UK ALCOHOL TREATMENT TRIAL

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The UK Alcohol Treatment Trial (UKATT), funded by the Medical Research Council, was a pragmatic, multi-centre, randomised controlled trial with blind assessment and prospective economic evaluation. 742 clients with alcohol problems attending five specialist treatment services around Birmingham, Cardiff and Leeds were randomised to motivational enhancement therapy (MET) or to social behaviour and network therapy (SBNT), a new treatment developed for the trial with strong support from theory and research regarding the most effective treatments for alcohol problems. Of these, 704 (95%) responded at three months and 617 (83%) at one year. The trial was designed to test two main hypotheses expressed in null form: a) less intensive, motivationally-based treatment (MET) is as effective

as more intensive, socially-based treatment (SBNT); and b) more intensive, socially-based treatment (SBNT) is as cost-effective as less intensive, motivationally-based treatment (MET). A number of subsidiary hypotheses regarding client-treatment interactions and therapist effects were also tested.

IS17.2.
STEP BY STEP INTERVENTIONS IN ALCOHOLISM MANAGEMENT

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Alcoholism management must be adapted according to the type of abuse (high risk use, hazardous use or abuse and dependency), severity criteria and the degree of motivation. The following rating scales will be reviewed: clinical evaluation (Car Relax Alone Forget Friends Trouble, CRAFFT; Cut Down Annoyed Guilty Eye-opener, CAGE; Alcohol Use Disorder Identification Test, AUDIT); motivation (Prochaska, other motivation questionnaires). Treatment is then proposed according to two criteria: patient motivation for life style and consumption habit modifications; the least intrusive treatment to obtain a maximum effect. Management methods range, by increasing intensity, from brief interventions (in an emergency setting, by the general practitioner, school physicians, company physicians), out-patient management (more or less intensive) and inpatient management (more or less lengthy; more or less intensive). We will attempt to compare the efficacy and the advantages of these various methods, according to data from the literature. We will also attempt to clarify the indications of these various treatments according to the type of abuse, severity criteria (psychological, psychiatric and social) and patient motivations (some patients change easily their consumption during treatment and others require a very long term management). This implies a network philosophy in order to offer a wide variety of services.

IS17.3.
PHARMACOTHERAPY OF ALCOHOL ABUSE

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Alcoholism represents a major health problem in the world. It is estimated that about 6% of the adult population suffer either from the alcohol dependence syndrome or from harmful alcohol use. Irrespective of the exact diagnosis, these individuals have a reduced physical and mental health as well as problems in social functioning and quality of life. Research in different parts of the world has shown that psychiatrists today have a choice of several validated therapies. In general they follow a stepped care approach with low-dose interventions for people with less severe problems up to intensive programs for people with handicaps and problems in several domains of functioning. Since about ten years we dispose of a new pharmacological approach to treatment. This is rather revolutionary and can only be compared with the era of the introduction of neuroleptics or antidepressants. Modern pharmacotherapy to prevent relapses in alcoholics is currently based on two extensively tested medications: acamprosate and naltrexone. Acamprosate acts by binding to glutamatergic receptors and thus reduces neural hyperexcitability. So far twenty randomized placebo-controlled double-blind trials were done worldwide. A meta-analysis compiled the 16 studies which show a benefit of acamprosate over placebo plus the 4 studies where no difference could be found. Naltrexone acts as an μ-opioid receptor antagonist and thus reduces the rewarding effects of alcohol. It has been studied in 22 double-blind, randomized controlled trials. A majority of studies show a benefit over placebo. In conclusion, on the basis of neurochemical changes, both acamprosate and naltrexone can significantly improve treatment results in alcoholism.

IS17.4.
EFFICACY OF VALPROATE IN BIPOLAR ALCOHOLICS: A DOUBLE BLIND PLACEBO CONTROLLED STUDY

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Over half of individuals with bipolar disorder also have an alcohol or other substance use disorder. Pharmacological treatments specifically targeting this high-risk clinical population are lacking. The aim of this study was to evaluate the efficacy of valproate maintenance in decreasing alcohol use in actively drinking, acutely ill bipolar alcoholics. Fifty-two patients with comorbid bipolar I disorder and alcohol dependence (DSM-IV/SCID) were randomized to two treatment groups: valproate + treatment-as-usual (TAU) (TAU included lithium and psychosocial treatment) versus placebo + TAU. Subjects were assessed biweekly for a 24-week period using the Timeline Follow-back for Drinking, the Hamilton Scale for Depression and the Bech-Rafaelsen Mania Scale. The Mixed Model was used to analyze longitudinal data. The results revealed that valproate had a significant advantage over placebo on having fewer proportion of heavy drinking days ($p<0.03$) and on having fewer drinks per heavy drinking day ($p=0.05$). When compliance was entered in the model, subjects in the valproate group also had significantly fewer drinks per heavy drinking day ($p<0.02$), and fewer drinks per drinking day ($p<0.03$). Valproate and the placebo group did not differ on improvement in manic or depressive symptoms. To our knowledge, this is the first completed double blind, placebo-controlled study in this challenging population. These results indicate that valproate, an effective mood stabilizer, may have an added advantage in decreasing alcohol use among bipolar alcoholics.

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IS18.
NON-PHARMACOLOGICAL SOMATIC THERAPIES IN PSYCHIATRY

IS18.1.
THE EFFICACY OF ECT IN MAJOR DEPRESSION: FINDINGS FROM PHASE I OF THE CORE STUDY

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Electroconvulsive therapy (ECT) remains an important treatment for serious depression. Despite being the oldest biological treatment for depression, its use is increasing worldwide, particularly in the geri-

atric population. Technical improvements have resulted in a more benign side-effect profile; this coupled with its unsurpassed efficacy are responsible for ECT's important place in modern treatment algorithms. We present data from Phase I of the recently completed multisite, National Institute of Mental Health (NIMH)-supported trial comparing continuation ECT versus pharmacotherapy (lithium and nortriptyline). Phase I represents the acute course of ECT given prior to randomization to the two treatment arms in Phase II. In the Consortium for Research in ECT (CORE) study, patients with unipolar major depression, referred for ECT, received a standardized course of bilateral ECT 3X/wk at 1.5X seizure threshold. A Hamilton Rating Scale for Depression (HAMD24) score of ≥ 21 was required for study entry and remission criteria included two consecutive HAMD24 ratings of ≤ 10, with ≥ 60% reduction from baseline. HAMD24 ratings were performed at baseline and 24 hrs after each ECT. We present data from 444 patients entered into the trial. Patient demographics are as follows: age = 55.6±16.8 years, gender (% female) = 68.2 (303/444), psychosis status (% psychotic) = 29.7 (132/444), race (% white) = 91.7 (407/444). Overall remission rate was 68.5% (304/444). Remission rate in those patients with psychotic depression was 75% (99/132). Patients ≥ 65 yrs of age had a remission rate of 71.3% (112/157). Patients responded very rapidly to ECT. After 6 treatments (2 weeks) 34.9% (155/444) of patients had reached remission criteria. ECT resolved suicidality very rapidly. 81% of patients with high baseline suicide ratings were no longer suicidal after 6 treatments. These data, from one of the largest ECT datasets in the modern era, confirm the high and rapid efficacy of ECT in major depression, particularly in the geriatric population and those with psychotic major depression.

IS18.2.
STEREOTACTIC NEUROSURGERY FOR PSYCHIATRIC DISORDERS

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The history of psychosurgery is so befouled as to make virtually any discussion of surgical interventions almost impossible. In the face of chronic psychosis, the response has frequently been zealous. The zeal was not restricted to surgeons but involved a variety of interventions ranging from intrathecal horse serum to pulling teeth in order to remove the focal infections. It is difficult therefore to present a new understanding of what surgical interventions may promise without running into strongly-held and emotionally-charged responses. There are a number of individuals with thalamic nuclei that display low-threshold calcium spike bursts. The bursts are related to a state of membrane hyperpolarization in the thalamic relay neurons. When these bursts are produced rhythmically they occur in the theta-delta frequency (3-6 Hz). These frequencies obviously appear on the cortex and can be seen with electroencephalography and magnetoencephalography. The cortical distribution is a function of the localization of the source of the low-threshold calcium spikes. There is a cortical activation as a result of this stimulation and the whole syndrome is referred to as thalamocortical dysrhythmia. The surgical treatment of the resulting symptoms, which range from neurogenic pain, to tinnitus, to epilepsy, to neuropsychiatric disorders, involves magnetic resonance imaging (MRI) target localization and microelectrode unit recordings. A number of patients suffering from different "psychiatric disorders" who were treatment resistant were sent for stereotactic surgery. Some materials will be presented on the utility of this technique in assisting some otherwise untreatable cases.

IS18.3.
MAGNETIC BRAIN STIMULATION FOR DEPRESSION – NEW METHODS OF BRAIN STIMULATION WITH POTENTIAL IN THE TREATMENT OF MAJOR DEPRESSION

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Transcranial magnetic stimulation is a non-invasive method of brain stimulation, which has been evaluated for the treatment of major depression through the last decade. Only recently clinically useful parameters seem to have been established. A novel form of this treatment, magnetic seizure treatment (MST), in which stimulation parameters are reached that can reliably and reproducibly induce therapeutic seizures in the same setting as the one used for electroconvulsive therapy (ECT), has been developed. Results of a recent randomized, within-subject, double-masked trial comparing ECT and MST in 10 patients indicate that MST appears to have less subjective and objective side effects, is associated with faster recovery of orientation and is superior to ECT on measures of attention, retrograde amnesia and category fluency. Although ECT has an unparalleled and well-documented efficacy in severe depression, it is associated with cognitive side effects. MST is currently under study in several centers with respect to its antidepressant efficacy, while its more benign side effect profile has been established already. We will review in this paper the current data on magnetic therapies in depression and provide an outlook on future developments.

IS18.4.
VAGUS NERVE STIMULATION THERAPY FOR CHRONIC, RESISTANT MAJOR DEPRESSION

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Vagus nerve stimulation (VNS) therapy is a safe adjunctive treatment for pharmacoresistant epilepsy; the device has been implanted in more than 22,000 persons since its approval by the US Food and Drug Administration in 1997. Improvements noted in the mood and alertness of epilepsy patients led to the investigation of VNS therapy for treatment of chronic resistant depression (CRMD). Periodic assessments with the Hamilton Rating Scale for Depression (HRSD), Clinical Global Impression (CGI), Montgomery-Asberg Depression Rating Scale (MADRS), Beck Depression Inventory (BDI), Inventory of Depressive Symptomatology-Self Report (IDS-SR_{30}), and Short Form-36 (SF-36) were conducted at baseline and during acute course and long-term follow-up. Response was defined as ≥ 50% improvement in HRSD scores and remission was HRSD score ≤ 10. Concomitant treatments were permitted, but did not change during the acute phase (first 12 weeks) of the study. Of the 59 subjects in the feasibility study, 18 (31%) responded by the end of the acute (12-week) study. One-year response rate was 44% (last observation carried forward, LOCF), while the remission rate was 27%. At 2 years, response and remission rates were 44% and 22% (LOCF), respectively. In the pivotal trial, 12 month follow-up data with HRSD showed 29% responders and 16% remitters. This improvement was consistent across multiple assessments (IDS-SR_{30}, MADRS, CGI). Of the 295 subjects implanted during both the feasibility and pivotal studies, 270 subjects were still receiving VNS therapy after 12 months. Results of the feasibility and pivotal studies show that, among these very diffi-

cult chronic resistant major depressive subjects, VNS therapy was well tolerated as an adjunctive treatment, with one-third meeting criteria for response, and about one sixth achieving remission.

IS19.
ETHICAL AND LEGAL ASPECTS OF TREATMENTS IN PSYCHIATRY

IS19.1.
IS THERE AN OPTIMAL ETHICAL APPROACH FOR TREATING PATIENTS IN PSYCHIATRY?

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Ethical concerns about the psychiatrist's role and functions have dogged the profession for at least three centuries. Moral harms have emerged from the abuse of the asylum as a custodial "warehouse", misunderstanding of the transference relationship, the gruesome effects of physical treatments like leucotomy and insulin coma, the misuse of psychiatry for political purpose (as occurred in the former Soviet Union) and systems of healthcare that jeopardize the needs of the individual purportedly to benefit the many. Psychiatrists have no choice in the face of these profound ethical difficulties but to respond as moral agents. The task, however, is complicated by the lack of a coherent framework for ethical decision-making, a conclusion buttressed by two observations. Firstly, rationales and methods used to resolve ethical questions differ radically. Indeed, competing ethical theories may so contradict one another as to generate irreconcilable tensions for the clinician. Attempts to compromise may take the form of a checklist approach that filters the details of a case through various algorithms in an attempt to discern the best match. However, this process often leads to conflicting remedies. For example, one psychiatrist may conclude that the features of a case support respect for the patient's autonomy, whereas his or her colleague reasons they justify a paternalistic role. Secondly, in the wake of contradictory ethical theories, a nihilistic or cynical response may be the unfortunate result. Frustrated by conflicting claims, practitioners may dispense with any attempt to bring reasoning to the situation and resort to personal, ill-founded preferences. As a profession, we need to prevent these unsatisfactory outcomes. As a contribution to the process, I shall present an actual case (appropriately disguised) to illustrate the complex ethical decision-making required of the psychiatrist and then offer ideas for an ethical framework that may fulfil the intricate requirements of the psychiatric encounter.

IS19.2.
THE ADEQUACY OF RECENT DEFINITIONS OF DECISION-MAKING CAPACITY

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The concept of capacity is at the heart of current debates about the divide between medical uses and political abuses of compulsory treatment in psychiatry. In this paper I examine the adequacy of recent definitions of decision-making capacity, developed mainly with bodily disorders in mind, for mental disorders. Working within the methodological framework of linguistic-analytic philosophy, I consider the concept of capacity, and some of its mental-disorder cognates (e.g. 'soundness of mind'), from the perspectives of three key disciplines: law, clinical practice, and empirical social science research. This 'triangulation' suggests a negative and a positive conclusion. The negative conclusion is that recent legal definitions of capacity, based on essentially cognitive criteria, are incomplete. Such definitions, while indeed helpful up to a point in cases of mental disorder involving disturbances of cognitive functioning (e.g. dementia and confusional states), fail to capture the elements of capacity relevant in disorders involving other areas of mental functioning, such as emotion, desire, volition, belief, motivation and identity (e.g. the functional psychoses, such as schizophrenia and manic-depressive disorder, the addictions, anorexia nervosa and personality disorder). The positive conclusion from our triangulation is that an understanding of capacity, if it is to be relevant equally to all kinds of mental disorder, must be developed within an agentic rather than merely cognitive model, i.e. a model which recognises that capacity may be impaired through a defect in any part of what J.L. Austin called the "machinery of action", that is, in emotion, desire, volition, belief, motivation and identity, as well as in cognitive functioning. A clear consequence of this broader agentic (rather than narrowly cognitive) model is that assessments of capacity, notwithstanding their supposedly objective basis, necessarily involve value judgements as well as assessments of fact. Value judgements, I argue, while involved in principle in the assessment of capacity in all disorders, bodily as well as mental, are important also in practice in the assessment of capacity in mental disorders involving the non-cognitive elements of emotion, desire, volition, belief, motivation and identity, essentially because the values involved in these areas of mental functioning are particularly diverse, and, hence, contestable. In the final section of the paper I indicate the importance of values-based (as well as evidence-based) assessments of capacity in negotiating the boundary between political abuses and medical uses of compulsory treatment in psychiatry. I also outline recent initiatives in the UK - in policy, training and research - designed to support the development of values-based, alongside evidence-based, mental health services.

IS19.3.
HOW ABSOLUTE IS CONFIDENTIALITY IN PSYCHIATRY?

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The doctor's obligation to suppress information confided to him by his patients is a basic condition of doctor-patient relationship and applies to personnel in every branch of medicine. It is securely guaranteed by every type of medical code and requires the mutual trust of both parties. The principles of medical ethics embrace the obligation of confidentiality, whose purpose is threefold. It improves a patient's welfare; it prevents additional harm to a sick person; it respects a patient's autonomy. Medical confidentiality is intended to protect the patient in his place of employment, to preserve his reputation and to prevent breaches in his personal relationships. The paper will refer to three different approaches to the question of defense for a patient's entitlement to privacy. The "desert island" approach assures him a complete measure of anonymity and privacy. The "big brother" approach favors society with the right to know. The third approach combines the conflict of interests between the other two by creating a compromise between the individual's right of privacy and society's entitlement to be informed. The last part of the paper will present the division of opinions with respect to the period of confidentiality required after the death of a patient.

IS19.4.
MEDICAL RESEARCH ON VULNERABLE POPULATIONS

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Medical research depends substantially on the use of human subjects, either healthy ones, or those afflicted by conditions of interest to particular studies. Often, some research populations are afflicted not only by the condition of interest but, by virtue of demographic factors, effects and impacts of institutionalization, or impacts of the condition on mental competence can be considered vulnerable and in need of further and more specialized ethical safeguards. This presentation will review the nature of these populations, the ethical bases for their vulnerability, and the nature of the ethical safeguards.

IS20.
DIAGNOSIS AND TREATMENT OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

IS20.1.
ADHD: DIAGNOSIS, COMORBIDITY AND CRITICAL THERAPEUTIC TARGETS

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Attention-deficit/hyperactivity disorder (ADHD) is a behavioral disorder affecting a significant proportion of children, adolescent and adults in any community. It is characterized by developmentally inappropriate levels of inattention, hyperactivity and impulsivity. Untreated, this syndrome can seriously impact the adjustment of the individual and be the source of considerable personal suffering and of high social and economical cost. Extensive research has contributed to unveil the nature of the syndrome, its biological concomitants and its pathophysiology. Establishing a firm diagnosis of ADHD requires collecting information from different sources, such as parents, teachers and other caregivers, in addition to the careful assessment of the individual patient itself. In this presentation, the clinical description of ADHD, its differential diagnosis, its most important comorbid conditions, and ways of selecting the critical aspects to be treated in the specific patient presenting for care will be discussed. Evidence from the clinical, as well as from the genetic and neuroscientific (including neuropsychological) fields supporting the existence of this syndrome will be briefly reviewed. The need for a comprehensive evaluation of the patient presenting for treatment, in order to avoid misdiagnosis and mistreatment, will be emphasized.

IS20.2.
NEUROPSYCHOPHARMACOLOGY OF ADHD AND ITS MAIN COMORBID CONDITIONS

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Attention-deficit/hyperactivity disorder (ADHD) is the most common neurobehavioral disorder in children, estimated to affect between 4% and 12% of all school-aged children and 2% to 4% of adults. Any treatment plan of ADHD must include the education of the patient and his/her family, and may encompass special education programs, psychological interventions, and pharmacological management. Stimulant medications, such as methylphenidate, D-amphetamine, D,L-amphetamine and pemoline, are the predominant pharmacological treatment for ADHD at all ages. Approximately 70% of patients respond to the first stimulant agent administered with symptomatic improvement that tends to persist as long as the stimulant medication is taken. Recent advances in the formulation of these compounds have resulted in an increased effectiveness and flexibility of pharmacological treatment as well as the acceptance of such treatment on the part of the patient and his/her family. In this presentation, the neuropsychopharmacological bases of the syndrome as supported by the current scientific evidence will be discussed. Main criteria for selecting specific types of medications, as well as tactics as to medication dosage and schedules, effectiveness assessment, specific drug formulations and the combination of drugs will also be discussed. A brief description of side effects and potential long-term effects of medications will also be presented, as well as ways of preventing and handling them in the everyday clinical work.

IS20.3.
NON-PHARMACOLOGICAL TREATMENT OF ADHD AND ITS MAIN COMORBIDITIES

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Attention-deficit/hyperactivity disorder (ADHD) is a complex behavioral disorder resulting from a combination of neurobehavioral and contextual variables. Although for the short-term improvement of the syndrome the pharmacological treatment has been proposed as predominantly effective, it is clear that, in the long run, the appropriate treatment of this disorder must involve a multimodal approach encompassing such non-pharmacological strategies as education, counseling and training of parents, teachers and other caregivers, self control techniques, the development of social skills and peer relationship training for the affected individual. In this presentation the rationale for the inclusion of psychological components in the treatment of the child, adolescent and adult patient with ADHD and its main comorbidities will be presented. The evidence comparing behavioral/cognitive strategies with psychopharmacological ones will be discussed. The main focus will be the treatment of children and adolescents and the empirical evidence based on studies about the effects of multimodal treatment in these age groups.

IS20.4.
TREATMENT OF ADHD IN THE ADULT PATIENT

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The recognition of attention-deficit/hyperactivity disorder (ADHD) in the adult population is rapidly expanding, even though most research on adult ADHD has been primarily carried out with primary interest in childhood ADHD. Although controversies remain concerning the validity of this disorder in the adult population, a growing body of evidence attests to the enormous importance of ADHD as a source of adult dysfunction and psychological comorbidity. This presentation will focus on the specific strategies concerning the treatment of the adults suffering from the syndrome. A brief review of the scientific evidence supporting the continuity of ADHD to the adult period of life will be presented, as well as the variations in symptoms that become more specific at this age. Special issues such as the risk of

abuse of medications used to treat the syndrome and the treatment of comorbid conditions will also be discussed. The indication for the treatment of the disorder will be discussed in the light of social problems occurring during the course in adult life.

IS21.
THE CURRENT MANAGEMENT OF OBSESSIVE-COMPULSIVE DISORDER

IS21.1.
CURRENT MANAGEMENT OF OBSESSIVE-COMPULSIVE DISORDER

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Less than twenty years ago, obsessive-compulsive disorder (OCD) was considered to be a rare, treatment-resistant disorder of psychological origin. Over the past two decades, several comprehensive epidemiological studies have demonstrated that the prevalence of OCD is about 2% worldwide. Attendant to the realization that OCD is actually a common disorder, it was found that the disorder is unique with regard to treatment response. As opposed to other psychiatric disorders such as depression, panic disorder, post-traumatic stress disorder, etc., in which noradrenergic and serotonergic medications were found to be effective, OCD seems to respond preferentially to serotonergic medications. As per the dose, some fixed-dose studies with fluoxetine and paroxetine found that medium to high doses are required. Other studies, with sertraline and citalopram, suggest that even 50 mg (of sertraline) and 20 mg (of citalopram) are effective. Long-term studies point out that the beneficial effects are maintained and that OCD patients need to remain on anti-obsessive medications for a long period of time. Although serotonin is implicated in OCD, it has become increasingly clear that it is not the only factor and that other neurotransmitters such as dopamine are also implicated in the disorder. Despite the introduction of selective serotonin reuptake inhibitors (SSRIs) has revealed new avenues for OCD treatment, it has become apparent that, in order to further our understanding of the disorder, better phenotypes are needed. Studying OCD subsets, such as early versus late onset, with tic disorder versus without tic disorder, OCD related to autoimmune pathology versus no autoimmune pathology etc., may provide us with finer therapeutic tools in treating this intriguing disorder.

IS21.2.
THE TREATMENT OF OBSESSIVE-COMPULSIVE DISORDER OVER A LONG-TERM PERSPECTIVE

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The efficacy of serotonin reuptake inhibitors (SRIs) in the acute treatment of obsessive-compulsive disorder (OCD) is now well acknowledged. Head-to-head comparative trials seem to indicate an equivalent efficacy of different compounds in the acute phase, while some evidence exists indicating a higher effectiveness of selective serotonin reuptake inhibitors (SSRIs) because of their better side effect profile when compared to that of clomipramine. The choice between different drugs is highly influenced by the consideration that OCD requires in the vast majority of cases a long-term treatment. Data from systematic discontinuation studies after acute treatment indicate an 80-90% relapse rate. There are few studies on the long-term treatment of OCD: they suggest that maintenance treatment is associated with both a significantly greater reduction in relapse rates and a further improvement in symptoms. Relapses due to premature drug discontinuation might be less responsive to the reinstitution of the same drug proven effective in the acute treatment, thus adding evidence to the need of a maintenance therapy. Psychoeducational programs aimed at improving the adherence of patients to treatments are highly warranted and preliminary data will be presented indicating their efficacy. Drug treatment of OCD might be conducted over the long term with doses half of those used in the acute phase, without significant increases in relapse rates. Beyond efficacy, however, few data exist on the long-term tolerability of antiobsessive drugs. Weight gain and sexual side effects appear to exert a significant influence on patients' adherence to treatments, and appear to be highly dependent on the compound used over the long term. A specific effect of female gender on weight gain due to long-term treatment of OCD also emerged from recent studies.

IS21.3.
PSYCHOTHERAPEUTIC TREATMENTS FOR OBSESSIVE-COMPULSIVE DISORDER

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Both pharmacological (i.e. administration of selective serotonin reuptake inhibitors, SSRIs) and psychological treatment (i.e. cognitive and behavioral psychotherapy, CBT) have been proven to be effective in obsessive-compulsive disorder. While treatment with SSRIs alone shows a relapse rate of 40-80% after discontinuation of the drug, CBT long-term outcome studies show success rates between 50 and 80%. A recent study has shown that CBT combined with SSRI treatment is able to prevent relapse when the SSRI is withdrawn. Furthermore, the combination of CBT with SSRI is superior to CBT alone when obsessions dominate and/or patients are suffering from a secondary depression. The literature and the relevant psychotherapeutic intervention strategies for obsessive-compulsive disorder will be discussed.

IS21.4.
TREATMENT OF PEDIATRIC OBSESSIVE-COMPULSIVE DISORDER

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Obsessive-compulsive disorder in children and adolescents affects approximately 1% of the population. The clinical picture is almost identical to that seen in adult populations. Randomised control trials, both with psychotherapy and medication, are still sparse compared to the body of evidence in the literature on adult OCD. However, many of the selective serotonin reuptake inhibitors have proven efficient in randomised control trials. Only a few studies on cognitive behavioural therapy (CBT) have been performed, most of which are non-controlled. However, one new study comparing medication, CBT and a combination of the two showed that a combined treatment is the most efficient. The overall treatment response in the pediatric population is approximately 70%, i.e. there remains a rather large population who does not respond sufficiently to the treatment. Different augmentation strategies can be tried, including the addition of antipsychotics.

IS22.
UNDERSTANDING AND MANAGING "COMORBIDITY" IN PSYCHIATRY

IS22.1.
TRUE AND SPURIOUS COMORBIDITY IN CONTEMPORARY PSYCHIATRY

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The study of comorbidity, defined as the co-occurrence of independent clinical entities, is an important tool of genetic and clinical epidemiology that can provide clues to latent common aetiological factors and pathogenetic interactions. In this sense, the systematic reporting of comorbid syndromes, diseases and marker traits should be encouraged in the clinical setting, as well as in epidemiological research. However, the current versions of internationally used psychiatric classifications tend to breed a spurious kind of comorbidity, which often amounts to a co-registration of facets of the same underlying condition. Part of the problem stems from the ambiguous status of the classificatory unit of 'disorder' in DSM-IV and ICD-10 and the fragmentation of psychopathology into a large number of 'disorders', of which many are merely symptoms. In contrast, syndromes are basic concepts for most clinicians, and much of their clinical knowledge is cognitively stored in this format. These are good reasons for reinstating the syndrome as the basic Axis I unit in future classifications.

IS22.2.
UNDERSTANDING AND MANAGING COMORBIDITY IN BIPOLAR SPECTRUM

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The growing availability of new drugs for treatment of bipolar disorder led to a renewed interest in the field of mood disorders. However, difficulties in defining universally accepted guidelines for treatment of bipolar disorder depend on the variety of phenomenology, evolution and course of mood disorders. Anxiety disorders comorbidity appears to be the rule rather than the exception in bipolar patients but much research is still necessary to shed light on the nature and clinical significance of these syndromal complexities. Comorbidity between bipolar depression and panic disorder, either in its threshold and subthreshold forms, has been found to be associated with greater symptom severity, more suicidal ideation and poorer response to both psychotherapeutic and pharmacological treatments. A recent study performed in Pisa on a cohort of 363 bipolar outpatients shows that only 40% of bipolar patients have no comorbid anxiety disorder: panic disorder was present in 37% of patients, social phobia in 16%, obsessive-compulsive disorder in 27%. Multiple anxiety comorbidity is also frequent, with rates around 18%. Data from a study performed jointly in Pittsburgh and Pisa indicate that unipolar patients present a high rate of comorbidity with anxiety disorders as well. The latent class analysis separated a cluster of unipolars with high rate of hypomanic features and anxiety spectrum comorbidity from a cluster with lower hypomanic and anxiety manifestations. Other clinical variants of bipolar disorder are characterized by the presence of comorbid personality disorders, substance abuse, impulsive and/or aggressive features and medical conditions. In order to maximize the proportion of patients who achieve sustained recovery, a better understanding is needed of the clinical variability within patient populations that carry the same categorical diagnosis. This objective requires a broad conceptualization of mood disorders along with their common threshold or subthreshold comorbidities.

IS22.3.
COMORBID DEPRESSION IN SCHIZOPHRENIA AND ITS INFLUENCE ON TREATMENT

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Depression is a common comorbid syndrome in patients with schizophrenia. Up to 75% of schizophrenia patients suffer from a depressive syndrome at some point of the course of their illness. The lifetime prevalence of this comorbidity has been estimated to be between 60% and 80%. Depression in schizophrenia patients has been associated with a better prognosis of the disorder in very early studies, although it is very likely that there may have been a considerable diagnostic overlap with schizoaffective and affective disorders in these reports. More recently, depressive features in schizophrenia patients were related to more frequent and longer hospitalizations, increased relapse rates, poor response to pharmacologic treatment, poor social functioning, substance abuse and other complications. The pharmacological management of comorbid depression has to be adjusted to the stage of schizophrenia when depressive symptoms occur. While depressive symptoms which accompany acute psychotic symptoms during states of exacerbation usually remit in parallel with psychotic symptoms following antipsychotic monotherapy (most second generation antipsychotics have shown advantages over traditional neuroleptics in this regard), post-psychotic depression usually calls for combination treatments with antipsychotics and antidepressants. Although the evidence base for this approach is still far from being satisfactory, this is common clinical practice. Some of the second generation antipsychotics (for instance zotepine, ziprasidone) also block monoamine reuptake. Whether this leads to an inbuilt antidepressant effect that can also be utilized clinically is still under investigation. The occurrence of a comorbid depressive syndrome in schizophrenia patients calls for careful differential diagnosis and subsequent clinical management. This is especially relevant in the context of the high risk for suicidal behavior in such patients.

IS22.4.
SIMILARITIES AND DIFFERENCES IN THE ANXIETY DISORDERS: EPIDEMIOLOGY, COMORBIDITY AND COURSE

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Since the DSM-III abolished the concept of neurosis, most of the disorders previously called "neurotic" were grouped into the category of anxiety disorders. The earlier aggregations of "anxiety neurosis" and "phobic-(obsessive) neurosis" were lost and split into a variety of more specific disorders. The initial consideration for this division was based on pharmacological dissection, by which panic and panic-like syndromes would respond preferentially to antidepressants. Almost a quarter of a century later, though the pharmacological dissection is no longer true for distinguishing anxiety disorders, the division of anxiety disorders is well-established in present psychiatric classifications. There are, however, several facts that indicate a significant degree of similarity between panic disorder, social phobia, generalised anxiety disorder, simple phobia, and others: an extremely high comorbidity rate (having more than one anxiety disorder is the rule

rather than the exception, both in clinical and in epidemiological samples); b) family concentration; c) response to the same drugs (antidepressants) and hypersensitivity to drugs; d) common psychopathological features (excess of anticipation, dramatisation, overestimation of risk, etc.). In the Sesto Fiorentino study, a representative sample (n = 2363) of the general population was interviewed by psychiatrists. 16.9% of these subjects suffered or had been suffering from anxiety disorders (11.3% excluding anxiety not otherwise classified), with an extremely high degree of comorbidity and a noteworthy overlap of clinical features. On the basis of this naturalistic observation, the following hypotheses can be put forward: a) anxiety disorders are separate entities; b) anxiety disorders represent different stages of the same, progressively changing, phenomenon; c) anxiety disorders represent different expressions of a common liability; d) the concept of neurosis should be retained as the common basis of anxiety disorders, with differentiations due to modulating factors.

IS23.
ECONOMIC ASPECTS OF MENTAL HEALTH CARE

IS23.1.
ECONOMICS AND SYSTEMS OF CARE IN PSYCHIATRY

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As the science and art of psychiatric treatment have improved and more patients can benefit from psychiatric diagnosis and care, the demand for these valued services increases dramatically. The supply of qualified practitioners, how they are organized in systems of care, and the cost of treatment are strategic issues for policy makers in both the private and public sectors. Economics is the science and art of rationing and can have a profound impact on how we are able to meet human needs in the medical marketplace. This paper will examine the supply and demand characteristics of the psychiatric medical marketplace and focus on various strategies to promote access and contain costs. As psychiatric treatment has become more effective and individualized, the stigma associated with seeking such care has decreased, and the demand for care has increased dramatically. How we then organize the provision of such services becomes a matter of vital concern to clinicians, patients and their families, and government. Various efforts at social insurance must consider economics in order to understand the consequences of such financing for access to care, quality, and costs. How these issues are evolving in the United States, at national and local levels, will be the main focus of this paper.

IS23.2.
MENTAL HEALTH POLICY AND ECONOMICS RESEARCH

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Mental health policy and economics research is increasingly demonstrating its importance in providing decision-making with crucially needed information on a wide range of issues, including: a) socio-economic burden of mental and addictive disorders, and the costs they impose on patients, family caregivers, workplace and society; b) impact of clinical, social, and financial interventions on health, quality of life and economic well-being of the affected populations; c) costs of alternative management systems for providing comprehensive clinical and social services, and the socio-economic impact of policies encouraging community-based care; d) analysis of the cost/effectiveness of psychological or pharmacological interventions in speciality and general practice settings; e) evaluation of the consequences of different financing and reimbursement methods on health care provision, efficiency, and health outcomes; f) analysis of special and particularly vulnerable populations (i.e. severely disabling mental illnesses, co-morbidities of mental and addictive disorders) that need complex multilevel co-ordination of clinical, social and financial interventions. Systematic interdisciplinary collaboration among psychiatrists, health services researchers, health economists, and public health researchers is required for obtaining sound scientific information in this field. This integrated approach brings together the strengths of each discipline to provide the best possible information to support the complex policy decisions regarding the provision of effective interventions for prevention, care and rehabilitation, and their adequate proper financing.

IS23.3.
CONTEMPORARY EFFECTS OF MANAGED CARE IN THE USA

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In the late 1980s, as health care costs in the United States rose beyond 11 percent of the gross domestic product, employers turned to managed care in an effort to diminish their expenses. Most employers decided that psychiatric illnesses and their treatments could not be evaluated and managed in same way as other medical illnesses. Managed behavioral health care came into existence to fill this need. At the time, there was inadequate research to document the accuracy of psychiatric diagnosis and the cost-effectiveness of psychiatric treatment. This presentation will provide highlights of recent research documenting the effects of behavioral managed care in the United States. It will focus on costs, quality of care and access to treatment for psychiatric illnesses.

IS23.4.
UNDERSTANDING MENTAL HEALTH SERVICE COST DRIVERS: A NEW ZEALAND CASEMIX DEVELOPMENT STUDY

G.W. Mellsop
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"Casemix" methods of funding health services have been quite extensively developed in parts of the world. Attempts to developing mental health casemix systems have usually been greeted unenthusiastically, because so little variance in the costing could be attributed to diagnosis, and so much variance appeared to be solely dependant on the idiosyncrasies of the provider. A large research project was implemented in New Zealand to develop a pilot casemix classification which could be used for service management purposes, to inform funding, to provide benchmarks and to model the routine use of outcome information. Three major data blocks were captured for the study. These were service financial information, service utilisation data, and consumer characteristics. These were entered into a regression analysis model to explain the cost drivers of "episodes of care". An episode of care was arbitrarily defined as a 91-day period. 19,239 episodes of care were captured over a six-month study period. These were provided to a total of 12,576 individuals. A 42-class, pilot, classificatory system was

developed. The branching tree from "all episodes" proceeded in this analysis 5 steps, which overall explained 78% of the variance. The first split was into inpatient or community. Within each of those, next split was adult versus child and youth. Thereafter the splitters included age, Health of the Nation Outcome Scales (HONOS) items, legal status, ethnicity, and in a few cases, diagnoses.

IS24.
ASSESSMENT AND MANAGEMENT OF SOCIAL ANXIETY DISORDER

IS24.1.
DIAGNOSIS AND ASSESSMENT OF SOCIAL ANXIETY DISORDER

B. Bandelow
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Social anxiety disorder (SAD), also known as social phobia, is a highly prevalent, generally chronic, and very disabling disorder. A core feature of SAD is excessive fear of social or performance situations involving unfamiliar people or scrutiny. The individual fears embarrassment and negative evaluation in social situations, including public speaking, going to party, meeting strangers or initiating a date, talking to people in authority or expressing a disagreement, working while being observed, or taking tests and exams. In the generalized subtype of SAD, fear or avoidance is elicited by most situations involving contact with other people. Blushing, sweating, palpitations, trembling, and abdominal distress are among the most common somatic symptoms. Differential diagnoses include other anxiety disorders, depressive syndromes, body dysmorphic disorder, eating disorders, childhood and developmental disorders, psychotic disorders, and others. SAD also includes a broad range of symptoms that frequently overlap with other diagnostic entities. In the past few decades, numerous rating scales have been developed for the assessment of social anxiety disorder. Many of these are relatively brief and simple to administer and could be easily incorporated into an initial evaluation or treatment session. The choice of which scale or scales to use with a given patient at a given time will depend on the clinical question being addressed, the time demands of the situation, and the style and focus of the clinician.

IS24.2.
PHARMACOTHERAPY OF SOCIAL ANXIETY DISORDER

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There is a growing database of randomized controlled trials for the pharmacotherapy of social anxiety disorder (social phobia). Early trials with the irreversible monoamine oxidase inhibitors were important in showing that this disorder could respond to medication. Trials with the better tolerated reversible inhibitors of monoamine oxidase A were, however, more equivocal. Furthermore, social anxiety disorder differs from depression in that it appears not to respond to tricyclic antidepressants. More recent work with the selective serotonin reuptake inhibitors and the noradrenaline-serotonin reuptake inhibitors have provided a series of pharmacotherapy options that are both effective and well tolerated. This paper reviews existing knowledge, as well as gaps in our knowledge, of the pharmacotherapy of social phobia.

IS24.3.
PREDICTION OF RESPONSE TO PHARMACOTHERAPY IN SOCIAL ANXIETY DISORDER IN RELATIONSHIP TO TAIJIN KYOFUSHO AND SOCIAL WITHDRAWAL

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There are no previous studies focusing on prediction of response to pharmacotherapy in patients with social anxiety disorder in relationship to Taijin Kyofusho (TKS, offensive subtype of social anxiety disorder) or social withdrawal. We studied 71 social anxiety disorder patients who took fluvoxamine (≥100mg/day), paroxetine (≥20mg/day) or milnacipran (≥100mg/day) for more than three months. TKS was diagnosed based on the original diagnostic criteria (Nagata et al. 2003), requiring the presence of "fear of offending or embarrassing". The primary efficacy variable at the endpoint was the proportion of responders, i.e., patients defined as "much improved" (score=2) or "very much improved" (score=1) on the Clinical Global Impression scale (CGI) global improvement item as compared to the baseline (pretreatment) score. Thirty-four (48%) of the patients were responders. There were no significant differences in age, age of onset, and presence of TKS between responders and non-responders. However, significantly more full-time employees (or students) responded than unemployed patients, and the patients with histories of social withdrawal (housebound lifestyle) responded poorly. Thus, TKS patients responded to pharmacotherapy as well as other social anxiety disorder patients do, although such patients may be diagnosed as delusional disorder somatic type in Western countries. However, patients with histories of social withdrawal (housebound) responded poorly to pharmacotherapy.

IS24.4.
PARENTAL REPRESENTATIONS ASSOCIATED WITH SOCIAL ANXIETY DISORDER

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It seems likely that humans need close emotional relationships or bonds with others. According to the attachment theories, early parent-infant relationships represent a fundamental step in the constitution of a secure base, while early bonding abnormalities have been associated with a range of anxiety and depressive disorders in adulthood. However, no specific parental patterns have emerged for each specific disorder. Previous studies using the Parental Bonding Instrument (PBI) have shown a general trend for neurotic subjects to score their parents as less caring and more protective. The present study investigated parental over-protectiveness and its possible linkage to the risk of social anxiety disorder (SAD) in adulthood. Three study groups were recruited: 64 subjects with SAD (diagnosed according to DSM-IV), 62 subjects with "other than SAD" anxiety disorders (30% with obsessive-compulsive disorder, 25% with panic attacks, 20% with agoraphobia, 10% with simple phobia, and 10% with generalized anxiety disorder), and 77 healthy subjects. These three groups have been investigated using the PBI. A significant lower score in the paternal care dimension has been found in the comparison of SAD patients with the healthy subjects ($p<0.002$) but not with patients with other anxiety disorders. Concerning the four types of parental bonding (A= optimal bonding; B= affectionate constraint; C= affectionless control; D= absent or weak bonding), subjects with SAD

have a defiant pattern of type A and a bigger number of type C than the other two groups for the father ($p<0.05$). If we consider only SAD patients compared to healthy subjects, we obtain a significant difference also for the mother: subjects with SAD have a defiant pattern of type A ($p<0.05$) and a significant bigger number of type D ($p<0.05$). No significant differences are found in the comparison between SAD and other anxiety disorder patients. These data suggest that subjects with SAD are distinguished by weak bonding with their parents. The correlation between this parental care pattern and specific clinical features are discussed.

IS25.
THE FUTURE OF PHARMACOTHERAPY FOR SCHIZOPHRENIA

IS25.1.
PHARMACOTHERAPY OF SCHIZOPHRENIA: IS THE D2 RECEPTOR STILL OUR MAIN TARGET?

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The dopamine hypothesis has been the mainstay for the development of drugs to treat patients with schizophrenic disorders for decades. Despite this, a number of alternative targets for antipsychotics have been investigated. These include other neurotransmitter systems like serotonin and glutamate, as well as less explored areas such as phospholipid membranes and neuropeptides. Antagonists of dopamine receptor subtypes (D1, D4) have also been studied in clinical trials. So far, all antipsychotics with a proven effect on positive symptoms still rely on blocking or modulating D2-receptors to a varying degree. All other approaches have either been proven to be without therapeutic benefit or have only been found helpful as add-on treatments to D2-blockers. One must therefore conclude that after half a century of research on antipsychotics, dopamine blockade is still the driving force behind the efficacy of such compounds, especially with regard to treating the positive symptoms of the disorder.

IS25.2.
NEUROSCIENTIFIC STRATEGIES FOR DRUG DEVELOPMENT IN SCHIZOPHRENIA: WHAT DOES THE FUTURE HOLD?

J.A. Lieberman
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The discovery of antipsychotic drugs was one of the great breakthroughs in medical therapeutics of the twentieth century. First-generation antipsychotic drugs, called neuroleptics, alleviated psychotic symptoms of schizophrenia-related disorders and prevented recurrence. However, they do not greatly improve other symptom dimensions and have high rates of neurologic side effects. Second-generation antipsychotic drugs, or atypicals, were a significant therapeutic advancement. These drugs have little or no neurologic side effects and superior efficacy. However, they may have other potentially serious side effects. While significant progress has been made in pharmacotherapy and drug development, much remains to be done. Many patients do not respond to even the best current treatments and most are left with significant residual symptoms. Side effects affect tolerability and patient compliance with treatment. Thus, there is a need for new drug development using novel strategies. New strategies for treatment development have focused on two approaches. The first is the development of adjunctive treatments targeting specific symptom domains of the illness (e.g. cognition, psychosis, negative symptoms). In this context the Measurement and Treatment Research to Improve Cognition in Schizophrenia (MATRICS) and the Treatment Units for Research on Neurocognition and Schizophrenia (TURNS) programs of the National Institute of Mental Health illustrate efforts to develop treatments for cognitive deficits in schizophrenia. The second is the establishment of molecular libraries of neurobiologic targets through the identification of new genes associated with schizophrenia and related psychoses, and the identification of candidate molecules through studies of animal models. Finally, drug development requires the characterization of biological or surrogate markers of the disease and treatment effects to enable more efficient and reliable determination of efficacy of novel compounds. In summary, new drug development in the 21st century for major mental disorders such as schizophrenia must adhere to a rational process of drug discovery and development. This presentation will describe the current state of antipsychotic pharmacotherapy and innovative drug development.

IS25.3.
HOW WE SHOULD REALLY TEST THE EFFICACY OF ANTIPSYCHOTICS

R.S. Kahn
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Schizophrenia is a chronic debilitating disorder affecting approximately 1% of the world population. The illness starts around late adolescence in males and approximately 5 years later in females. Initially described by Kraepelin and Bleuler and thought of as a brain disorder localized in the temporal and frontal lobes, in the middle of the last century schizophrenia was considered to be a disorder of society and not of any individual. Only in the last two decades of the last century has it become clear that the initial appraisal was indeed the right one: schizophrenia is a disorder of the brain, mostly located in gray matter areas. In several studies we have demonstrated that gray matter is decreased in patients with schizophrenia located in very specific areas of the frontal and temporal lobes and in the thalamus. These abnormalities appear progressive but also related to the genetic liability of developing schizophrenia. However, although we now appear to appreciate that schizophrenia may be a progressive brain disorder (although some aspects may be developmental in nature), the treatment of this illness still leaves much to be desired. With the advent of new, atypical, antipsychotics, the treatment of patients with schizophrenia has improved, in that we are now able to treat patients without inducing some of the severe side effects that were linked to the treatment with the classical antipsychotics. However, even the newer drugs still do not really treat the disorder. The course of the illness has not essentially changed since the introduction of antipsychotics, and some of the cognitive and affective symptoms of schizophrenia are not effectively treated, even by the newer drugs. Moreover, the newer drugs still induce side effects which in some cases may be troublesome, such as weight gain, sexual side effects, and cardiac liabilities. Therefore, there still is a need of newer drugs that have a better ratio between efficacy and tolerability, i.e. a higher lever of effectiveness.

IS25.4.
THE TREATMENT OF COMORBID DEPRESSION AND ANXIETY IN SCHIZOPHRENIA

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Descriptive and epidemiological studies have clearly documented that approximately half of schizophrenic patients have at least one comorbid psychiatric or physical illness. Depressive and anxious features can occur as symptoms or combined as comorbid syndromal conditions. In particular, depressive symptoms occur in one-third of patients with schizophrenia but, despite this high prevalence, relatively little is know about their precise pathophysiology and course. Moreover, the emergence of depressive symptoms has been associated with poor outcome, increased medication usage, great morbidity, increased hospital rates, early relapse and higher rates of suicide. On the other hand, anxiety disorders may impair social and vocational functioning, affecting the quality of life and the outcome in schizophrenic patients: there is evidence that anxiety could be considered as a precipitating factor for psychotic exacerbations, relapses and suicidal behavior. Moreover, anxious symptoms appear to be frequently related to substance abuse. Among anxiety disorders, obsessive-compulsive disorder (OCD) occurs with a lifetime prevalence of 29.7%. In recent reports on social phobia, 20-30% of schizophrenic patients met diagnostic criteria for this disorder. From a pharmacological point of view, the co-occurrence of depressive and anxious symptoms often leads to prescription of adjunctive pharmacotherapies, with an increased risk of side effects and reduced compliance. In this perspective atypical antipsychotics may be more effective in patients suffering from comorbid conditions, because of their wider pharmacodynamic spectrum. This presentation will be focused on the results of a naturalistic study in which the association between schizophrenia and other psychiatric disorders (i.e. anxiety disorders and depressive disorders) and its implications for pharmacological treatment have been investigated.

IS26.
FAMILY INTERVENTIONS FOR MENTAL DISORDERS

IS26.1.
FAMILY INTERVENTIONS FOR SCHIZOPHRENIA: RESULTS OF THE OPTIMAL TREATMENT PROJECT

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Family interventions for schizophrenia that are integrated with optimal pharmacotherapy and are continued for at least two years are among the most powerful strategies for preventing recurrent psychotic episodes yet devised. Patients and carers who receive these programmes show trends to full and stable clinical and social recovery and reductions in stress and burden associated with the illness. However, in common with most psychosocial treatment, despite overwhelming scientific evidence, these interventions are considered of secondary importance in routine services, and at best replaced by brief group education for relatives or patients. An international collaborative group, the Optimal Treatment Project (OTP), has been developed to promote the routine use of all evidence-based strategies for major mental disorders. For schizophrenic disorders this consists of optimal pharmacotherapy, assertive case management, psychoeducation for patients and carers together, cognitive behavioural family strategies, including those designed to reduce residual symptoms, and integrating social skills training within the family/carer problem solving sessions. A field trial is in progress to evaluate the benefits of applying these evidence-based strategies over a 5-year period. More than 80 centres have been set up in 18 countries. There has been a very high drop out rate of centres, particularly in North America and Britain. This has been associated with inadequate administrative support. The preliminary outcome after 24 months and 5 years will be presented. The data suggests that OTP appears to have replicated the benefits associated with clinical trials of similar integrated family programmes. After 2 years, half the recent-onset cases had achieved full recovery from clinical and social morbidity. The vulnerability stress hypothesis suggests that integration of evidence-based family treatments with optimal pharmacotherapy will have synergistic effects that may lead to greater benefits than when these approaches are not provided within a single multidisciplinary team.

IS26.2.
FAMILY INTERVENTION FOR SUBSTANCE MISUSE AND PSYCHOSIS

C. Barrowclough
Division of Clinical Psychology, School of Psychological Sciences, University of Manchester, UK

The efficacy of family intervention for people with schizophrenia is now well established. However, despite the high prevalence of substance misuse in psychosis and the additional strains this puts on family relations, there are few reports of interventions which address the particular issues arising in families where a member has a substance misuse problem in addition to the psychosis. This paper will review the limited literature available about family issues with clients experiencing substance misuse and psychosis before describing a treatment approach focusing on drug or alcohol problems in this client group. The integration of motivational interviewing with individual and family cognitive behaviour therapy resulted in improved patient outcomes. This presentation will describe the family component of the treatment and some of the difficulties arising in conducting family work in a "dual diagnosis" group.

IS26.3.
ENGAGING THE FAMILY IN THE COMBINED TREATMENT OF BIPOLAR PATIENTS

F. Colom
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A very important change of paradigm in the treatment of bipolar disorders started some years ago; crucial findings on the usefulness of psychological interventions clearly support switching from an exclusively pharmacological therapeutic approach to a combined, but hierarchical, model in which pharmacotherapy plays a central role but psychological interventions may help covering the gap existing between theoretical efficacy and "real world" effectiveness. Most of the recently published psychotherapy studies report positive results in maintenance as an add-on treatment, and efficacy in the treatment of depressive episodes. The psychoeducation of bipolar patients and their relatives is a crucial intervention specially as a prophylactic tool for euthymic patients. Psychoeducation of relatives should include both compliance enhancement and early identification of prodromal signs, information on the importance of life-style regularity, and the exploration of relatives' beliefs on the illness suffered by the bipolar member of the family. The Barcelona Bipolar Disorders Program has

developed an evidence-based psychoeducational program that has proven to be efficacious in the prophylaxis of relapses and the enhancement of drug adherence in bipolar patients. A second program inspired by the first is being tested to prove the efficacy of relatives' psychoeducation in the prevention of relapses and hospitalizations, with very promising preliminary results. As clinicians, it is our major duty to offer the best treatment available to our patients, which includes a wide arsenal that goes from newer pharmacological agents to evidence-based psychoeducation programs both for the patients and their relatives.

IS26.4.
FAMILY INTERVENTIONS FOR MENTAL DISORDERS: CHALLENGES AND OPPORTUNITIES IN DEVELOPING COUNTRIES

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There is a re-examination of the place of family members in the care of the persons with mental disorders all over the world. In the last four decades, the shift from considering families as 'toxic' to essential partners in mental health care has been a major development, as well as the shifting of mental health care from institutions to the community. In developing countries, institutionalised care for persons with mental disorders has been insignificant, with most of the countries having less than one bed for 10,000 inhabitants as compared to about 6-10 beds in Europe and North America. Families have been the main care providers in developing countries. Families are important in a number of ways, such as early recognition of the symptoms of illness, seeking treatment in the acute phase of illness, ensuring regularity in taking treatment, providing a supportive environment for recovery, facilitating the rehabilitation and reintegration of the recovered individuals and fighting stigma and discrimination at the societal level. In most developing countries families have been partners in the care of the persons with mental disorders. In recent times families have come together to form self-help groups and also to pressure the state to change policies and programmes. The needs of the families to take up this important role are at three levels. Firstly, families need support from the professionals to acquire the skills of care, respite care and crisis support in emergencies, emotional support to meet their own needs and to maintain cohesion. Secondly, the state needs to support families financially to offset their caring responsibility and create opportunities to form self-help groups. Thirdly, professionals have to change their attitudes and practices to develop a true partnership with the families and make the experiences of the family an essential part of the programme and policy development. Up to now the activities in developing countries in Asia, Eastern Mediterranean Region and Africa have focussed on sharing of information and skills with families. There are beginnings of a self-help movement in some of the countries. The representation and advocacy roles and true partnership between families and professionals are not yet a reality. Developing countries have a unique opportunity to build mental health programmes on the strengths of families.

IS27.
MOLECULAR GENETICS AND GENOMICS OF PSYCHIATRIC DISORDERS: IDENTIFICATION OF NOVEL DRUG TARGETS

IS27.1.
MOLECULAR GENETICS AND GENOMICS OF SCHIZOPHRENIA

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Genetic epidemiological studies suggest that individual variation in susceptibility to schizophrenia is substantially genetic. However, like other common disorders, the mode of transmission is complex and probably reflects oligogenic inheritance against a polygenic background. Genomic approaches to schizophrenia are becoming increasingly feasible as data from the genome project accumulate and technology improves. Attempts to identify genes for schizophrenia have been based on several approaches: systematic linkage studies, association studies and studies of chromosomal abnormalities associated with the disorder. Several strongly significant linkages have been found and there is emerging consensus on at least some of the chromosomal regions likely to contain schizophrenia genes. However, moving from linked region to susceptibility gene is still difficult given poor understanding of pathophysiology and population genetics and the complexity of the phenotype. In spite of this, a number of positional candidate genes have been identified and in several instances (neuregulin 1, dysbindin 1, regulator of G-protein signalling 4, G72 and D-amino acid oxidase) support has come from several studies. These findings potentially converge upon abnormalities in glutamatergic neurotransmission in schizophrenia, for which evidence from a number of other sources has already been adduced. Finally, the high rates of schizophrenia seen in individuals with deletions of chromosome 22q11, as well as linkage data, suggest that this chromosomal region might contain a susceptibility locus.

IS27.2.
THE PHARMACOGENOMICS OF COGNITIVE FUNCTION: THE ROLE OF DOPAMINE IN INFORMATION PROCESSING

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Abnormalities of dorsolateral prefrontal cortical (PFC) function have been associated with genetic risk for schizophrenia. A potential susceptibility mechanism involves regulation of prefrontal dopamine (DA). DA stabilizes PFC function and modulates the response of PFC neurons during working memory. We studied the relationship of a functional polymorphism (Val108/158Met) in the catechol-O-methyltransferase (COMT) gene, which accounts for approximately a two-fold variation in enzyme activity and dopamine catabolism, with both PFC cognitive function and PFC physiology. In patients with schizophrenia, their unaffected siblings, and normal volunteers, the COMT genotype was related to performance on the Wisconsin Card Sorting Test. In this context, the Val/Val allele, which encodes the high-activity COMT variant, predicted decreased cognitive performance. The Met/Met genotype, which encodes the low-activity COMT variant, predicted a more efficient cognitive performance. These find-

ings indicate that COMT may play a unique role in regulating DA flux in the PFC. Further, we explored if tolcapone, a COMT inhibitor which penetrates the blood brain barrier, improves efficiency in PFC function. In a double-blinded placebo controlled trial with tolcapone, 15 healthy volunteers underwent two blood-oxygen-level-dependent (BOLD) functional magnetic resonance imaging (fMRI) scans on a GE Signa 3T scanner with a gradient echo EPI sequence while performing the N-back working memory task. Analysis of variance revealed a significant main effect of tolcapone at 2-Back and 3-Back tasks with greater activation in the PFC bilaterally, anterior cingulate and right parietal region on the placebo condition relative to tolcapone ($p<0.025$), consistent with the role of COMT and DA in sharpening the signal to noise of cortical function. These preliminary results add to evidence that COMT modulates DA tone in the PFC and facilitates prefrontal information processing.

IS27.3.
MOLECULAR GENETICS AND GENOMICS OF AFFECTIVE DISORDERS

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Traditional methods used to assess genetic effects, such as twins, adoption and family studies, have demonstrated the role of genetic vulnerability factors in the etiology of major psychiatric diseases such as bipolar affective disorders (BPAD). Using genetics allows better modelling of disease and hopefully earlier and better diagnosis. Decades of research into the genetic aetiology of BPAD provide evidence in favour of a complex mode of inheritance unlikely to be determined by single gene dysfunction. Reviewing two decades of linkage investigations in BPAD, it appears that a significant proportion of positive DNA findings involves several chromosome markers. Regions of interest include chromosomes 4p16, 12q23-q24, 16p13, 18p, 18q, 21q22, 22q12 Xq27 and Xq24-q26. Candidate gene association studies are in progress but no robust positive findings have yet emerged. Several genes related to serotoninergic and monoaminergic pathways have been considered as the main targets for association studies during the last years. Other pathways have recently been investigated, including neuropeptide substance P (SP) related genes. Genetic variability within these genes may play a role in the susceptibility to the disease, even in sporadic cases, while gene mutations, not yet identified, may be involved in hereditary forms of BPAD. Single nucleotide polymorphisms (SNPs) within candidate genes will help us in understanding the effect of frequent gene variants in BPAD but also in sub-phenotypes associated to the disease. In addition to identification of genetic markers, specific hypotheses involving non-Mendelian patterns of inheritance have been implicated in BAPD, such as anticipation and dynamic mutations. The physical mapping of the human genome offers an immense factory providing thousands of genes which will accelerate the identification of genes linked to mood disorders and may contribute to significant advances in the early recognition, pathophysiology and treatment of affective disorders. The complexity and heterogeneity of affective disorders is a major limitation and future genetic studies will also need to explore relevant non-genetic factors. The identification of one or more vulnerability genes for affective disorders will enable us to better understand the interactions between genetic and environmental risk factors. Genetic variability may also exist among individuals in treatment response and tolerability to psychotropic drugs. Pharmacogenetics offers another way to get better insight in the genetic aspects of complex disorders through the identification of possible genetic factors and functional polymorphims that may predict treatment response and tolerance, in particular for antidepressants and mood stabilisers, hopefully leading the way to significant improvement in drug prescription.

IS27.4.
GENOMIC AND PROTEOMIC APPROACH FOR IDENTIFICATION OF NOVEL TARGETS FOR PSYCHOTROPIC DRUGS

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Global analysis of gene expression in pharmacologically treated animals is becoming a powerful approach to understand the molecular mechanisms underlying the action of psychotropic drugs, and to identify novel potential targets for development. An example of this approach in the analysis of the molecular changes triggered by acute or chronic treatment with selective serotonin reuptake inhibitors and with compounds belonging to novel emerging classes of potential antidepressants will be described. The investigation was carried out in specific brain areas of treated animals using Affymetrix DNA-chip platform technology and data were analysed by using different statistical and bioinformatic tools. The results indicate that antidepressant treatment induces only moderate changes in the overall gene expression profile, and that chronic or acute treatments affect different gene sets. However, by pairwise comparison of transcription profiles, it is possible to identify genes similarly regulated by different antidepressants, suggesting the potential for identification of molecular changes specifically induced by chronic treatment that are shared by compounds acting through different primary targets. A complementary approach is represented by functional proteomic analysis, including expression of proteins studied by 2D-gel electrophoresis coupled with mass spectrometry, post-translational modifications and protein-protein interactions. The results of our recent studies suggested selected mechanisms and effectors as potential targets for development of new drugs, such as the molecular machinery regulating glutamate release and protein signalling cascades regulating gene transcription. These studies integrated data from analysis of protein expression, modification and interaction with data regarding synaptic functions, allowing to correlate drug-induced molecular changes with functional changes.

IS28.
PREVENTION AND MANAGEMENT OF SUBSTANCE ABUSE

IS28.1.
A COMPREHENSIVE APPROACH TO THE PREVENTION AND MANAGEMENT OF SUBSTANCE ABUSE

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Alcohol misuse is responsible for many road accidents, injuries, disability and deaths. Its adverse impact on families and society is such that it has been the subject of a number of special reports by the World Health Organization (WHO) as well as national and interna-

tional academic and professional organisations. Drug abuse, in addition to the risk of addiction, is strongly associated with organised crime and the increasing spread of HIV, hepatitis and other infectious diseases. It threatens the social structures and economies of whole countries. There is therefore an urgent need for prevention, made all the more intense because drug abuse has a particular impact on the freedom and development of young people, who represent the most valuable asset of every country. In addition to the effect on particular individuals, drug abuse also has a significant impact on families, friends, and eventually the whole community. Although alcohol is clearly a major component of substance abuse worldwide, this paper focuses on controlled drugs because there is sufficient complexity just within this more limited area. However, there will inevitably be a good deal of common ground with other substances. The prevention of drug abuse is becoming more difficult partly because of the rapid growth of messages in the environment that promote drug abuse. By far the greatest influence on many young people is the general tolerance of, and even the promotion of recreational drug use and abuse in popular culture, and particularly in popular music. In addition, more information on drugs is available to more people than ever before through the internet. There are many different pages on the World Wide Web devoted to the production, manufacture and use of illicit drugs. In this environment, prevention is not easy, not least because the underlying causes of substance abuse are complex and multifactorial. Rather than simple solutions, a comprehensive approach is required which acknowledges the diversity of populations at risk, the complexities of causal and risk factors, the importance of the economic and social environment, and the inability of health measures to rid roughshod over the prevailing customs and attitudes of a community. No form of non-medical drug use is healthy and substance abuse prevention should therefore be seen as one part of general public health measures to ensure a healthy society. While the elimination of all forms of drug experimentation, use and abuse will never be achieved, this should not be used as a reason to give up on prevention, the ultimate aim of which is to achieve a mainly low level of drug abuse. When dealing with substance abuse, the usual distinctions between primary, secondary and tertiary prevention can usefully be replaced by considering supply reduction, demand reduction, and reduction of harms associated with substance abuse. The first two are measures of primary prevention; the third involves secondary and tertiary prevention. Since both demand and supply drive drug abuse, it is necessary not only to control the production and distribution of drugs, but also to try to slow growth of the drug market by reducing consumer demand. Demand reduction programmes for illicit drugs have to take into account a vast range of factors that influence people's tendencies to take drugs and must attempt to change attitudes and behaviour by tackling all environmental variables in a comprehensive manner. The importance of demand reduction was recognised by all governments to be essential to a stepped-up global effort to fight drug abuse and trafficking, and therefore they adopted the Declaration on the Guiding Principles of Drug Demand Reduction at the Special Session of the United Nations General Assembly in 1998. In recent years there has been an increased emphasis on developing evidence-based demand reduction programmes and it is clear that their effectiveness varies according to the cultural context and environment in which they are implemented. Treatment, in all its forms, can be seen as just one part, albeit a very important part, of a comprehensive demand reduction strategy.

IS28.2.
GLOBAL CHALLENGES IN THE PREVENTION AND MANAGEMENT OF SUBSTANCE USE DISORDERS FROM THE WHO PERSPECTIVE

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Psychoactive substance use is associated with substantial mortality and morbidity worldwide. Apart from social costs, alcohol is responsible for 1.8 million deaths and 58.3 million disability adjusted life years (DALYs) globally and illicit drugs for 0.2 million deaths and 11.2 million DALYs. The World Health Organization (WHO) estimated that globally 76.3 million people suffer from alcohol use disorders and at least 15.3 million from drug use disorders. Injecting drug use associated with drug dependence is fuelling HIV epidemics in many parts of the world. The number of injecting drug users (IDUs) worldwide is estimated at 12.6 million and the majority (9.4 million) are in developing and transitional countries. Results of the WHO Drug Injection Study Phase II highlight scope and patterns of injecting drug use and seroprevalence of HIV and hepatitis B and C among IDUs in 13 cities around the world. The WHO Collaborative Research Project on Drug Dependence Treatment and HIV/AIDS focuses on pharmacotherapy of opioid dependence as HIV prevention and treatment strategy, and preliminary results of this project will be presented and discussed. Global burden resulted from substance use is not only associated with substance dependence. Hazardous and harmful use of alcohol is responsible for substantial health and social costs. Results of the WHO Collaborative Research Project on Alcohol and Injuries, implemented in 12 countries of the world, showed that alcohol involvement in injuries varied from 4% in Czech Republic and Canada to 46% in South Africa. There is a substantial evidence of benefits of screening and brief interventions (SBI) in primary care for alcohol problems. For that purpose WHO developed the widely used Alcohol Use Disorders Identification Test (AUDIT). There is a need for effective SBI procedures for other substances, including the illicit ones. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) has been developed and validated in the framework of the WHO ASSIST project. Phase III of the project aims at assessing efficacy of brief interventions for illicit substance use linked to screening with the ASSIST instrument. A WHO survey on available resources for the treatment and prevention of substance use disorders in the world provided important information on uneven distribution of resources and their scarcity in many parts of the world. Concerted efforts of different partners, including governments, professional associations, local communities, consumer groups as well as private sector, are needed to strengthen health care sector response to the challenges associated with substance use disorders.

IS28.3.
IMPLEMENTING INTEGRATED TREATMENTS FOR DUAL DISORDERS

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Integrated dual disorders treatments involve combining and blending the delivery of mental health and substance abuse interventions for persons with co-occurring disorders. These interventions are now widely accepted as a critically important evidence-based practice in community mental health care. The rationale is simple. First, substance abuse has a prevalence of 50% or more among persons with

severe mental illness. Second, co-occurring substance abuse is responsible for a range of negative client outcomes, including rehospitalization, incarceration, homelessness, victimization, and hepatitis C. Comorbidity also produces high costs in the family system, the mental health system, and the criminal justice system. Finally, integrated dual disorders treatments are demonstratably more effective than parallel mental health and substance abuse treatments delivered in separate settings or by separate programs. Nevertheless, integrated dual disorders treatments, like other evidence-based practices, are generally not available in routine mental health settings. Implementation of complex programs includes promoting practice change, which involves focusing efforts on all stages of the change process, from inspiring people to change, to helping them make the change, to reinforcing the change. Motivating efforts educate and engage stakeholders so that they want to work for the change. Enacting the practice involves putting the change in place by learning new behaviors and restructuring the flow of the daily work so that clinicians routinely give care in the new way. Sustaining efforts focus on reinforcing the new practice to ensure that it will persist over time. In a complex system, all stakeholders can play helpful roles in promoting implementation and the more elements of the system of care that can be marshaled to support change (and reduce resistance), the more likely the practice implementation will occur. In other words, intensity of effort appears directly related to success in studies of practice change.

IS28.4.
COMMUNITY MOBILIZATION FOR PRIMARY PREVENTION OF SUBSTANCE ABUSE AMONG YOUNG PEOPLE

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Substance abuse is causing a large and increasing health and social burden in low and middle income countries. Young people are especially vulnerable. The World Health Organization is co-ordinating a global project on primary prevention of substance abuse in 8 low and middle income countries (Belarus, the Russian Federation, South Africa, Tanzania, Thailand, Viet Nam, and Zambia). The core objective is to mobilize communities through non-governmental organizations to develop culturally and socially relevant strategies for primary prevention of substance abuse among young people and to test their effectiveness. Key personnel from non-governmental organizations were trained in basic aspects of substance abuse, before they developed small project proposals to undertake preventive work in their area. The common element of all activities was community mobilization. Systematic baseline assessment of substance abuse problems in the target community was followed by implementation of the prevention programme. A follow-up assessment of the impact was conducted. The process and outcome evaluation clearly demonstrated that target communities improved their knowledge, attitudes and practices related to substance abuse and associated problems. In some communities this also led to decreased substance abuse problems within the target population of young people. The non-governmental organizations, the majority of them without any earlier experience with substance abuse prevention, reported being skilled and empowered to undertake similar work in future. The implications of these results are significant for developing national and local policies for prevention of substance abuse in low and middle income countries.

IS29.
PSYCHOTROPIC DRUGS AND COGNITIVE FUNCTIONS

IS29.1.
ANTIPSYCHOTIC DRUGS AND COGNITION IN SCHIZOPHRENIA: AN OVERVIEW

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Over a decade has passed since the introduction of the second generation of 'atypical' antipsychotic drugs. In many parts of the world these have become standard and first line treatments. One of the advantages claimed for such drugs is the beneficial effect on cognition. Cognitive impairment should be regarded as a core feature of disorders such as schizophrenia and has a major impact on social functioning. Considerable research has been undertaken to examine the effects of second-generation drugs on cognitive functioning. This has been subjected to systematic review and meta-analysis. Methodological problems remain, such as the difficulty in teasing out 'pure' cognitive effects from more general symptom effects. Nevertheless, there is evidence of small to moderate effects on various aspects of cognition, including attention, memory and executive functioning. Functional neuroimaging has also demonstrated changes attributable to second-generation drugs in schizophrenia but in small samples. The impact of this on functional outcome and quality of life is still unclear and requires further scrutiny. There is now the prospect of the use of drugs in psychosis with alternative modes of action including 'anti-dementia drugs' which act primarily on the cholinergic system and early trial data is beginning to be published.

IS29.2.
COGNITIVE DYSFUNCTIONS IN PATIENTS WITH SCHIZOPHRENIA: EFFECTS OF NOVEL ANTIPSYCHOTICS

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Schizophrenia is characterized by a variety of cognitive impairments, involving memory, attention, executive functions and general cognitive abilities. Substantial evidence of relationships between cognitive dysfunctions and poor outcome has stimulated interest for the impact of antipsychotic drugs on cognition. In the present study the effects of atypical antipsychotics on cognitive functioning were investigated in 24 outpatients with schizophrenia treated with either clozapine or risperidone. Relationships between cognitive, psychopathological and extrapyramidal symptoms (EPS) improvement were explored. Neuropsychological assessment was carried out by tests exploring executive functions (Wisconsin Card Sorting Test, WCST; Spatial and Non-Spatial Conditional Associative Learning Task, SCAL and NSCAL; Self-Ordered Pointing Task, SOPT), attention/short term memory (digit and block span) and incidental learning (Hebb's digit recurring sequences and Corsi's block tapping task). Clinical evaluation included the Scales for Positive and Negative Symptoms and the Simpson-Angus scale for EPS. All assessments were carried out after a drug wash-out period of at least two weeks and after six months of treatment. Indices showing significant improvement included the total number of errors and mean time on the SCAL, the mean time on the NSCAL and the perseveration index on the SOPT for drawings. No association was found between cognitive improvement and ameliora-

tion of psychopathological dimensions and of EPS. Only the reduction of the total number of errors on the SCAL was associated with the improvement of disorganization. Our findings suggest that atypical antipsychotics have a favourable effect on cognition, which is not secondary to the amelioration of either psychopathology or EPS.

IS29.3.
IMPACT OF MOOD STABILIZERS ON COGNITIVE FUNCTIONS

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The effect of medication on cognition has been extensively studied in schizophrenia but scarcely investigated in bipolar disorder. One of the main difficulties is that most bipolar patients are not in monotherapy. They are treated with lithium and/or anticonvulsants. Moreover, antipsychotics or antidepressants may be usually added as maintenance treatment in an important subset of patients to prevent (hypo)manic or depressive relapses. Some mood stabilizers such as lithium or valproate have been postulated to have a neuroprotective capacity in preclinical studies, but overall studies of bipolar patients have found little evidence for improved cognitive performance. Some early studies about cognitive effects of lithium showed psychomotor slowness and memory deficits. However, small samples as well as the lack of control of clinical variables were the main limitations. On the other hand, valproate and carbamazepine have been associated with subtle cognitive deficits. Among newer antiepileptic drugs, lamotrigine and gabapentin have shown a better cognitive profile in bipolar patients, whereas topiramate has a more negative cognitive profile compared to other anticonvulsants. Further studies are required to determine whether cognition may be enhanced by lithium and anticonvulsants in bipolar patients. The number of drugs and doses as well as subjective complaints may be also important factors to be controlled. The evaluation of cognitive functioning should be integrated within clinical assessment of these patients as a routine to help the clinicial in medication regimen decision.

IS29.4.
EFFECTS OF HYPNOTICS ON COGNITIVE FUNCTIONS

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Carry-over residual effects of hypnotic drugs are among the important side effects of this class of pharmaceutic agents, usually taking the form of memory deficits and/or reduced psychomotor and cognitive performance. As a result, daytime functioning after a night of hypnotic use might be impaired which could lead to traffic accidents, fall and hip fractures, other accidents as well as feelings of sedation and cognitive difficulties which impair quality of life. The use of the older benzodiazepine hypnotics, which were characterized by long half-lives, was particularly associated with carry-over effects during the day. The shorter acting benzodiazepines which were subsequently developed did not have such a propensity to cause residual effects, but their use was associated with sometimes severe memory deficits and impaired cognitive functioning, particularly for the time period of their high plasma concentration. These side effects seem to be associated to the half-life of the hypnotics, other pharmacokinetic factors such as the time they need to reach their highest concentration, as well as to pharmacodynamic characteristics relating to their binding affinity and binding site on the GABA receptor complex and other receptors. The newer benzodiazepine-like hypnotics, which have been more recently developed, seem to be less prone than the older drugs to cause significant cognitive side effects.

IS30.
"DIFFICULT" CHILDREN AND ADOLESCENTS: UNDERDIAGNOSIS AND OVERDIAGNOSIS OF MENTAL DISORDER AND RELEVANT TREATMENT ISSUES

IS30.1.
THE DIFFICULT CHILD

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The difficult child is not a specific categorical diagnosis but a clinical notion indicating a child who has clear signs of impaired functioning, various types of symptoms, and is difficult to manage in the treatment setting. Among the different types of difficult children that can be discerned are those with multiple psychiatric comorbidities, with somatic comorbidities, with multiple environmental risk factors, with complicated family systems, with a long history of unsuccessful prior treatments, and with a complicated temperament. In line with the notion that a difficult child escapes a one-dimensional definition is the fact that simple and straitforward therapeutic solutions usually do not exist. However, several general principles may be outlined that constitute a framework that is a precondition for ultimate therapeutic progress. The principles are: establish a solid working alliance with the parents and the child; give hope; build on (hidden) strengths, use protective factors, be patient, do not force, press or manipulate, and be consistent.

IS30.2.
AN INTEGRATIVE-DYNAMIC MODEL OF THE DIFFICULT CHILD

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Understanding the phenomenon called the "difficult child" is based on our perception of three major components: integration among personality components, interaction between the child and the environment, the dynamic of these processes. In our view, alongside the integration of the three axes, there is an additional important component: the time continuum. Since development is dynamic, the child progressively changes from one point in time to another. This stems from two reasons: the biological clock and the fact that disorders existing at a certain age are likely to appear totally different at another point in time, again due to changes in the interactions they create between the child and conditions and situations that develop, causing a mechanism of transactional duality. To all intents and purposes, therapy constitutes an additional factor, which creates different interactions, biological, as well as psychological and social.

IS30.3.
PARENTS AND TEACHERS AS TREATMENT PARTNERS: SCHOOL- AND COMMUNITY-BASED PSYCHOEDUCATIONAL INTERVENTIONS FOR DIFFICULT CHILDREN

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Among "difficult" children, those with attention-deficit/hyperactivity disorder (ADHD) accompanied or complicated by a conduct disorder (CD)/oppositional defiant disorder (ODD) or a mood disorder are often unresponsive to pharmachotherapy alone. Helplessness among parents and teachers as well as children themselves is the common experiential feature in these conditions, so that empowering parents and teachers via psychoeducational strategies is a first-step intervention. We also found general public education as a strengthening factor for helping difficult children and their families and teachers. Psychoeducation is based on an understanding of the condition (explanation), the pharmacological rationale (mechanism, limits and targets of treatment), and "what to do". We transformed our experience of utilizing community based approaches with large populations affected by natural disasters into the area of "ADHD plus ...." conditions. These difficult conditions included mainly CD/ODD, traumatic stress and mood disturbance added on ADHD. The intervention proved to be effective in decreasing disruptive and difficult behavior among children with traumatic stress. The structured psychoeducational programs based on the principle of empowering teachers and parents should be an essential complement of psychopharmacotherapy offered to "difficult" children.

IS30.4.
PEDIATRIC MANIA OR ATTENTION-DEFICIT/HYPERACTIVITY DISORDER?

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Despite ongoing controversy, the view that pediatric mania is rare or non-existent has been increasingly challenged not only by case reports but also by systematic research. This research strongly suggests that pediatric mania may not be rare but that it may be difficult to diagnose. Since children with mania are likely to become adults with bipolar disorder, the recognition and characterization of childhood-onset mania may help identify a meaningful developmental subtype of bipolar disorder worthy of further investigation. The major difficulties that complicate the diagnosis of pediatric mania include its complex pattern of comorbidity, that may be unique by adult standards, especially its overlap with attention-deficit/hyperactivity disorder and conduct disorder, and its response to treatment, that is atypical by adult standards.

IS31.
GENDER-RELATED ISSUES IN PSYCHIATRIC TREATMENTS

IS31.1.
ADVERSE EFFECTS OF ELEVATED PROLACTIN LEVELS IN WOMEN RECEIVING PSYCHOTROPIC DRUGS

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Typical and atypical antipsychotics, as well as antidepressants, stimulate the secretion of prolactin from the pituitary. This is not surprising, as dopamine is the main neurotransmitter controlling prolactin secretion, mainly via D2 receptors located on lactotrophs. Female patients are especially sensitive to this effect, since pre-standing hypo-estrogenism has been postulated in schizophrenic women and the mood-dampening effects of prolactin are particularly unwanted in depressive patients, who are mostly female. This presentation will review current literature on hyperprolactinemia and its implications for women receiving psychopharmacological agents. Prolactin elevation is underdiagnosed but can have serious short-term and long-term consequences. These result from the direct effect of prolactin on target tissues or from the indirect effects of decreased gonadal hormones. Short-term problems include menstrual irregularities, sexual dysfunction, and depression. Long-term problems related to prolactin elevation include decreased bone density and osteoporosis, relapse of psychosis because of poor compliance due to sexual dysfunction or depression, and perhaps cancer. Although hyperprolactinemia is present in more than half the population of children and adolescents receiving antipsychotic treatment, its long-term effects in this population, including pubertal maturation and bone density, are unknown. Several authors have found an increased incidence of depression, anxiety and hostility in female patients with hyperprolactinemia. Postpartum patients matched for prolactin levels with hyperprolactinemic women showed about the same levels of hostility.

IS31.2.
GENDER AND PSYCHOTHERAPY

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Gender is an important variable in psychiatric treatment. It can influence the patient's choice of therapist, the 'fit' between therapist and patient, and the sequence and content of the clinical material presented. It also affects the diagnosis, treatment selection, length of treatment, and even the outcome of therapy. These issues will be the focus of our presentation. We will also examine developmental and life experiences, gender differences in personality styles, and the effects of stereotypes and values on psychotherapy.

IS31.3.
IS THERE A ROLE FOR SEX HORMONES IN THE TREATMENT OF PSYCHIATRIC ILLNESS IN WOMEN?

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Although rates of depression and anxiety in girls and boys are equal, they double in women within a year of puberty and begin to decrease only after menopause. This raises interesting questions about the role

of gonadal steroids in the etiology and treatment of psychiatric disorders in women. The published evidence to date shows that estradiol may alleviate postnatal depression in some women. However, evidence for its use as prophylaxis is tenuous. The role of estradiol in treating mood disorders in perimenopause as monotherapy or as an augmentation agent is controversial. Estradiol is also being investigated as treatment for psychosis in perimenopausal and menopausal women. Selective estrogen receptor modulators (SERMs), androgens and dehydroepiandrosterone are also undergoing active investigation as treatments in women with mood disorders. Progestins, in contrast, have a mood dampening effect in some women. This presentation will summarize the evidence for and against the use of sex hormones for the treatment of psychiatric illness in women. The evidence will be evaluated in light of recent large US and UK trials of estrogen for the prevention and treatment of medical conditions and the potentially serious adverse risks described.

IS31.4.
TREATMENT OF LIFECYCLE RELATED DYSPHORIAS IN WOMEN

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The prevalence and 12-month incidence of affective disorders in women is double than that of men. This sex difference starts at adolescence, and is persistent during reproductive age and probably also during menopause. During reproductive age women are more vulnerable to depressions and anxieties during periods of hormonal instability. These periods include the post partum, perimenstrual and perimenopause periods. It is suggested that the hormonal fluctuations during these periods trigger dysregulation of brain processes that may cause symptoms in vulnerable women. Therefore treatment may be aimed at the trigger (the hormonal changes) or the brain processes (mostly neurotransmitters that are putatively involved in regulation of mood, behavior and cognition). Targeted psychosocial interventions have been developed as well. Currently available treatment modalities include a) selective serotonin reuptake inhibitors (SSRIs), which are efficacious for treatment of dysphorias during the three periods in focus; b) suppression of ovulation, for treatment of premenstrual dysphoric disorder and c) continuous estradiol, for perimenopause dysphorias. Several other hormonal interventions are in developmental stages.

IS32.
NEW STRATEGIES FOR THE CARE OF THE MENTALLY RETARDED

IS32.1.
ASSESSMENT, DIAGNOSIS AND TREATMENT OF SCHIZOPHRENIA SPECTRUM DISORDERS IN PEOPLE WITH INTELLECTUAL DISABILITIES

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There has been a transformation in the care of people with intellectual disability over the last 40 years, including different terminology. The most important changes include the movement towards integration, participation and choice for people with intellectual disability as a facet of larger disability, civil, and human rights movements internationally and within nations. Advances in a number of fields and disciplines, including genetics, psychopharmacology, developmental neuropsychiatry, psychology, and education have also shown promises for improving the treatment and lives of people with intellectual disability. Historically, people with intellectual disabilities were seen as being incapable of suffering from a mental illness. More recent epidemiological studies, however, consistently refute this, showing that people with mild intellectual disabilities have a higher frequency of mental health problems than the general population. In particular, people with intellectual disabilities are at higher risk of developing schizophrenia-spectrum psychoses than other disorders. However, there is a paucity of research evidence into clinical presentation of the disorder in comparison with research into schizophrenia spectrum psychoses in people without intellectual disabilities. The results from recent evidence-based research on the risk factors of receiving a diagnosis of schizophrenia spectrum psychosis, symptomatology in people with and without intellectual disabilities and treatment with atypical antipsychotic medication will be presented.

IS32.2.
USEFULNESS OF THE DESCRIPTION AND EVALUATION OF SERVICES FOR DISABILITIES (DESDE) FOR MAPPING AND PLANNING SERVICES FOR INTELLECTUAL DISABILITIES IN SPAIN

L. Salvador-Carulla
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In the recent years considerable efforts have been made to assess regional and national differences in organisation, planning, and availability of services for intellectual disabilities (ID) in Europe. However, there is an urgent need for a tool for the standard description and classification of services that can be used at the international level and allow national and international comparisons on service availability and utilisation. The Description and Evaluation of Services for Disabilities (DESDE) is a service mapping tool based on the European Service Mapping Schedule (ESMS), which is widely used in mental health service research in Europe. This tool has been developed in cooperation with the Spanish Institute of Social Services (IMSERSO), through a focus group process. Feasibility, reliability and descriptive validity have been already tested. ID services of Cadiz (Southern Spain) have been mapped and the information provided has been used for health policy planning. A full understanding of regional differences in treatment patterns cannot probably be attained without standard information on service provision and utilisation at the small health area level.

IS32.3.
PSYCHIATRIC SERVICES FOR PEOPLE WITH MENTAL RETARDATION. THE HONG KONG EXPERIENCE

H. Kwok
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In recent years, a debate has been ongoing on the most appropriate model of mental health care for people with mental retardation. In addressing this issue, local differences in economy, culture, health care system and other social factors need to be taken into account. With the wider promotion and acceptance of the concepts of normalization and anti-discrimination, the mental health needs of people with mental retardation are increasingly being recognized in Hong Kong. Instead of generic psychiatric services, specialized units are established to provide psychiatric care to this group of patients with

complex needs. These units are hospital-based with a significant inpatient component for both acute care and longer term rehabilitation. A few beds are also reserved for respite care as people with challenging behaviours or mental illness often face difficulties in finding a suitable respite in centers run by social services. On the other hand, there is also an equally important community component consisting of outpatient clinics, community partnership clinics (CPC) and outreach services. These units have a multidisciplinary team. All members work closely and meet frequently. Treatment strategies include behavioural therapy, psychotherapy and medications. Occupational therapy and physiotherapy are readily available. In addition, complementary therapies such as sensory stimulation, music therapy and art therapy may be provided according to each individual's care plan. The outcome is an overall improvement in the quality of care. An increasing number of long stay hospital patients are being discharged and patients are better supported in the community setting. However, quality assurance programmes should be implemented for more systematic evaluation of this service model and to address the changing service needs.

IS32.4.
THERAPEUTIC INTERVENTIONS IN THE MANAGEMENT OF MENTAL DISORDERS ASSOCIATED WITH THE AUTISTIC SPECTRUM

G. Holt
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People with autistic spectrum disorders are vulnerable to the development of mental health problems. Reasons for this association will be reviewed together with interventions aimed at maintaining mental health and treating mental illness when it occurs. Current treatment usually is multidisciplinary, involving collaboration between the individual, family, carers and the professionals involved. It may incorporate special education, behavioural management, social and communication skills training psychological interventions and medication when indicated. The evidence-base of these will be considered.

IS33.
EPIDEMIOLOGY AND PREVENTION OF SUICIDE

IS33.1.
SUICIDE PREVENTION: KEY ISSUES FOR NATIONAL STRATEGIES AND PROGRAMMES

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Behind the great lines chosen for suicide prevention programmes, there are a few key issues that not always receive the necessary attention for their evaluation, among which there are: a) the clear identification of specific objectives, target event (i.e. completed or attempted suicide) and target populations, for each intervention; b) the precise and adequate selection of indicators; c) the due consideration of time trends of suicide rates, before the implementation of the programme. The importance of these issues will be discussed and illustrated with concrete examples, in order to both highlight the pitfalls these programmes could face and improve their cost-effectiveness and impact.

IS33.2.
SUICIDE PREVENTIVE STRATEGIES: FROM HEALTHCARE SERVICES TO THE GENERAL POPULATION

D. Wasserman
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Approximately one million people commit suicide each year in the world. According to World Health Organization's estimates, 1,53 million people will die from suicide in the year 2020 and 10-20 times more will attempt suicide worldwide. There is a clear trend of increased suicide rates with age. An average global suicide rate for men is 25 suicides per 100 000 per year; for women the corresponding figure is 7 per 100 000 per year. In suicide prevention, strategies can be directed at the general population or the healthcare services. Since suicide risk is high among psychiatric patients, adequate treatment of psychiatric disorders and improved detection of psychiatric illnesses in the general population are essential. Suicide-preventive effects of treatment with antidepressants, lithium, neuroleptics, dialectical behavioural therapy and cognitive behavioural therapy to date are encouraging. Suicide risk is particularly high among psychiatric patients in the immediate aftermath of their discharge from hospital. Careful follow-up and rehabilitation plans should therefore be provided to help patients adjust to their new life situation. Some patients need long-term treatment - in chronic cases for several years. Moreover, psychiatric patients should be informed and prepared to seek help when new stressful events come to a head and their coping ability once more deteriorates when facing difficulties in new circumstances. In future suicide-preventive work, the emphasis needs to shift to an earlier stage of the suicidal process. A public-health approach, involving a change in attitudes towards the mentally ill, and also programmes aimed at disseminating knowledge of health-promoting measures, are important. Population-oriented suicide prevention focuses on building up supportive networks and strengthening the coping skills that enable people to deal with difficult life circumstances. Perestroika in the former USSR was history's most effective suicide-preventive programme for men. Strict limitations were imposed on the sale of alcohol, and a new discouraging attitude towards alcohol consumption was actively promoted. Some examples of suicide prevention in schools and of population-oriented suicide prevention - including environmental measures, such as restriction of access to dangerous means of committing suicide - will be given. Various psychiatric treatments have had very well-documented effects in suicide prevention. Nonetheless, for maximum overall impact, it is advisable for a public-health approach to go hand in hand with a healthcare approach.

IS33.3.
FATAL AND NON-FATAL REPETITION OF SELF-HARM: LINKS IN THE CHAIN OF EVENTS

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There is clear evidence that around a quarter of suicides are preceded by non-fatal self-harm in the previous year, making self-harm the major risk factor for suicide. Recently, health departments in many countries and the World Health Organization (WHO) have embarked on unprecedented suicide-reduction programmes. There cannot be a

better time to stress the connection between suicide and earlier hospital attendance due to self-harm, so often overlooked. I will report briefly the findings of our recent systematic review of the international literature that quantifies the two most important outcomes after self-harm: establishing the connection between self-harm and suicide, and providing robust estimates of non-fatal repetition rates. These figures are needed for power calculations in the planning of better intervention studies for those who have harmed themselves – where our current evidence is shown, by the Cochrane systematic review of interventions following self-harm, to be very weak. I will also describe the findings from our current 16-year follow-up study of mortality after an attendance at hospital due to non-fatal self-poisoning. I will set out rates of subsequent suicide and our exploration for factors predictive of suicide. Finally, I will describe our recently published retrospective study of completed suicides, which identified many attendances at accident and emergency units due to non-fatal self-harm, shortly before suicide. The findings point to a pressing need for accident and emergency departments, when dealing with non-fatal self-harm, to work more closely with mental health services than they do at present.

IS33.4.
SUICIDE BEHAVIOR IN THE GENERAL POPULATION IN BRAZIL

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Campinas, the Brazilian site of the World Health Organization (WHO) Multisite Intervention Study of Suicide Behavior (SUPREMISS) is located in the most populous and industrialized region of the country, 90 Km far from São Paulo. The city has 1 million inhabitants, 98% of whom are in the urban area. Suicide rates are around 4 per 100,000 per year. There was no data about suicide ideation, plan or attempt in the general population. The sample surveyed 516 randomly selected subjects aged 14 years or more. Questions about sociodemographics, medical history and suicide behavior as well as psychometric instruments were used in the interview. There were just 16 (3.7%) refusals to participate. The life prevalence estimates in the general population were 17.1% (95% CI: 12.9 – 21.2) for suicide ideation, 4.8% (95%CI: 2.8 – 6.8) for suicidal plans and 2.8% (95% CI: 0.09 – 4.6) for suicide attempts. Suicide ideas were more frequent among women (20.6 vs. 13.3, p = 0.02) and young adults (20-39 yrs old) and seemed not to be affected by marital and occupational status, level of education and religion. Suicidal behavior (suicide ideas, plans and attempts) was higher among those who were or had been on psychiatric treatment. Among every 17 inhabitants who had already "seriously thought about committing suicide", 3 "made a serious attempt" and only one required medical attention at an emergency department for it. This was the first national survey about suicide behavior based on general population information. This is essential to collect information on the "submerged part of the iceberg" in the field of suicide.

IS34.
MANAGEMENT OF MENTAL DISORDERS IN OLD AGE

IS34.1.
MULTIDISCIPLINARY, INTERDISCIPLINARY AND TRANSDISCIPLINARY MANAGEMENT STYLES IN OLD AGE PSYCHIATRY

E. Chiu
Academic Unit for Psychiatry of Old Age, University of Melbourne, Australia

The development of old age psychiatry in the past four decades has established this discipline within psychiatry to have some defining characteristics. From the traditional multidisciplinary style within general psychiatry practice, old age psychiatrists have moved to interdisciplinary practice and, in recognition that some countries do not have the many health care disciplines enjoyed by the economically advantaged world, advocated for a transdisciplinary approach. This paper will address the concept and practice of multidisciplinary, interdisciplinary and transdisciplinary styles as applied to a variety of old age psychiatry environments. This discussion will include the concept of personhood and holism in the management of older persons with mental disorders and how it may be integrated into the style of management in old age psychiatry.

IS34.2.
PSYCHOLOGICAL AND PSYCHOSOCIAL MANAGEMENT OF MENTAL DISORDERS IN OLD AGE

V. Camus
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There are several reasons that can explain the increasing interest in the non-pharmacological management of mental disorders in old age. In many cases, the pharmacological treatment alone is not enough to obtain a complete remission of symptoms and, in the elderly, is associated with a higher risk of potentially severe side effects. Consequently, accompanying psychological interventions are needed to obtain a better compliance to the pharmacological management, and to achieve a more complete improvement in perceived well-being and quality of life. Moreover, there is no conceptual reason to believe that psychotherapeutic techniques that have shown some efficacy in adulthood could not be effective in the elderly. In fact, there are some evidence-based data that have demonstrated a good efficacy of cognitive and behavioural therapies, as well as interpersonal therapy, systemic interventions and rehabilitation techniques, in a wide range of mental disorders affecting elderly patients. Finally, according to the great importance of family and relatives in care giving, as well as the major impact of community and social support, psychosocial interventions have been successfully trialled in mentally ill and disabled elderly patients. The presentation will illustrate this improvement in the non-pharmacological approach to mental disorders in old age, by summarizing recent evidence based data on psychological and psychosocial interventions in depression, dementia and late-life psychosis.

IS34.3.
SYSTEMATIC REVIEW OF PSYCHOLOGICAL APPROACHES TO THE MANAGEMENT OF NEUROPSYCHIATRIC SYMPTOMS OF DEMENTIA

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The neuropsychiatric symptoms of dementia are common. Studies have found an average prevalence of 61% in people with dementia in the community, with one third having clinically significant symptoms at any one time. This rises to about 80% of people with dementia living in 24 hour care settings. Neuropsychiatric symptoms are a major factor in caregiver burden and institutionalisation of people with dementia. Psychotropic medications are often given to manage these symptoms, but there are concerns about their safety and efficacy in this group of people who are often particularly frail. Psychological approaches are likely to have fewer side effects and be more acceptable, but there are a large variety of approaches and some may not be efficacious. This systematic review has been completed by the Old Age Taskforce of the World Federation of Societies of Biological Psychiatry. It includes any therapy which was derived from a psychological or psychosocial model. It aims to help clinicians to make evidence-based recommendations for psychological treatment.

IS34.4.
THE PRACTICALITIES OF MANAGEMENT IN CARE HOMES: A UK PERSPECTIVE

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Advances in the prevention and treatment of disease mean that most people will live longer and can expect to be healthy in later life. However, a number of older people do develop physical and mental health problems. The likelihood that this will happen increases as people get older especially as they get into their 80s and 90s. Most older people with these problems remain in their own home, but a small number are always going to need nursing care, either because they have no relatives able to look after them, or because relatives are simply elderly and exhausted themselves. The wish by older people themselves to stay at home as long as possible and the wish by governments to encourage this means that the population in care homes has become very old indeed – average age around 90 years. People now being admitted to care home will have a number of chronic health and social problems. Around 4/5 people will have a dementia, the factor which often finally precipitates admission. This situation is very different to the one that existed more than half a century ago, when people chose to retire and enjoy life in residential homes. Although we do not know what causes dementia or how to cure it, we do know much more about early detection, assessment and diagnosis. We know the factors in the environment that make the management of people with mental health problems a great deal easier, such as good light, safe space to wander around in, a routine to the day, trained caring staff and group activities. Individual care, good nutrition, and attendance to physical health all contribute to the better quality of life both for the person with the problems and for the families and staff who look after them. There is urgent need for a radical change in philosophy of care and staffing structures in homes throughout this country as well as worldwide if we are to deliver an acceptable quality of life to residents in care homes. This presentation will make recommendations on how to make these changes based on experience and research evidence.

IS35.
THE CURRENT MANAGEMENT OF PANIC DISORDER AND GENERALIZED ANXIETY DISORDER

IS35.1.
TREATMENT OF PANIC AND ANXIETY: WHAT OR HOW?

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A variety of treatments have been proven to be effective in panic disorder (PD). These include pharmacological and non-pharmacological interventions. Among psychotropic drugs, monoamine oxidase inhibitors, tricyclic antidepressants, serotonin reuptake inhibitors, other newer antidepressants, benzodiazepines, but also anticonvulsants, beta-blockers, calcium antagonists, inositol, clozapine, olanzapine have given at least some evidence of efficacy. This notwithstanding, the long term outcome of PD remains poor, with high levels of chronicity, impairment and disabling sequelae being commonly reported. This may be explained with the fact that the adherence to treatment on the part of the subjects suffering from PD is one of the worst in all the panorama of psychiatric disorders. Several reasons may account for this: cultural orientations, unrealistic expectations, hypersensitivity to side effects, drug phobia, phobia of being phobic, cinestophobia, and others. It is speculated that the way a treatment is conveyed to the patient is at least as important as the type of drug.

IS35.2.
DRUG TREATMENT FOR PANIC DISORDER AND GENERALIZED ANXIETY DISORDER: AN UPDATE

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Treatment of panic disorder and generalized anxiety disorder with a number of pharmacological agents has been established as efficacious in the short and long term. These include selective serotonin reuptake inhibitors (SSRI), selective noradrenaline reuptake inhibitors (SNRI), tricyclic antidepressants, benzodiazepines, and monoamine oxidase inhibitors. Pregabalin, a novel compound under development for the treatment of anxiety disorders, may also be an option. This drug acts on the alpha2 subunit of the voltage-dependent calcium channels. A substantial number of patients with panic disorder and agoraphobia may remain symptomatic after standard treatment. Non-response to drug treatment could be defined as a failure to achieve a 50% reduction on a standard rating scale after a minimum of 6 weeks of treatment in adequate dose. When initial treatments have failed, the medication should be changed to other standard treatments. In a next step, drugs should be used that have shown promising results in preliminary studies. Combination treatments may be used, such as the combination of an SSRI and a benzodiazepine. A treatment algorithm for unresponsive patients will be provided. Psychological treatments such as cognitive behavior therapy have to be considered in all patients, regardless whether they are nonresponders or not. According to existing studies, a combination of pharmacological treatment with cognitive-behaviour therapy can be recommended.

IS35.3.
FOR HOW LONG SHOULD WE TREAT PANIC DISORDER WITH PHARMACOTHERAPY?

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According to long-term follow-up studies, the course of panic disorder is varied. Around 30% of the patients seem to run a chronic unremitting course, around 20% have single episodes of panic disorder running for several weeks or months with full remission, and every second patient has an intermediate course with episodes not completely remitting or coming again. It is difficult to predict to which group a specific patient belongs and such predictors would be necessary in order to determine the length of pharmacological treatment. Selective serotonin reuptake inhibitors (SSRIs) and some high potency benzodiazepines have proven to be effective in treating panic disorder. Since benzodiazepines are problematic in the long-term treatment – they lead to withdrawal syndromes and possible dependency – the SSRIs are the pharmacological treatment of choice for the long-term treatment of panic disorder. Studies with placebo-controlled continuation of drug treatment in patients who had responded to acute treatment consistently show an advantage of the continuation of the drug for at least one year. However, a small size study found that the rate of relapse after discontinuation of six months of treatment with imipramine was identical to the rate of relapse after 12 to 30 months of treatment. This suggests a prophylactic effect but not a specific curative effect of long-term drug treatment and the problem of relapse prevails even after long-term treatment. Furthermore, about 20% of the patients may not need long-term treatment if acute treatment had resulted in full remission for years. Thus, clinical predictors for early relapse after acute treatment would be helpful in the decision of the need for further treatment. The studies on this issue are equivocal: some could not find any predictors for relapse, and others suggest that more depressive symptoms at baseline and more phobic avoidance are predictive for relapse. In our own study we found that the comorbidity of other anxiety disorders predicts rapid relapse. Another issue is the combination of drug and cognitive-behavioural treatment. The combination of such treatments can reduce the rate of relapse in panic disorder compared to drug treatment alone and thus may reduce the need for long-term treatment with pharmacotherapy. In conclusion, up to date there is no clear evidence from studies on the necessary duration of treatment for panic disorder. In the absence of definite knowledge about the pathophysiology of panic disorder and a treatment founded on that rationale, we can choose only a pragmatic approach founded on research on the course of the disorder and possible predictors for rapid relapse. Based on the limited knowledge on this issue, we suggest that the drug treatment of a first episode of panic disorder should be continued for one year after full remission of symptoms. If relapse occurs rapidly, e.g. within one year after discontinuation of the initial medication, another trial with the previous medication should be started and continued for several years. In the case of a remission for years, treatment limited to the episodes might be sufficient. The addition of cognitive therapy or, in case of agoraphobia, exposure therapy until full remission may reduce relapse and thus the need for long-term medication. Further studies on predictors for relapse and controlled studies with different durations of treatment and subsequent follow-up are needed to give a more accurate estimate on how long to treat panic disorder.

IS35.4.
THE PSYCHOTHERAPEUTIC TREATMENT OF ANXIETY DISORDERS

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Affective Disorders Program, Department of Psychology, University of Bologna, Italy

A large body of evidence suggests that psychotherapeutic approaches are effective in the treatment of anxiety disorders. In most of the cases these approaches could be subsumed under the rubric of cognitive behavioral therapy. There are striking differences between the sustained recovery which can be obtained with cognitive behavioral strategies and the high likelihood of relapse when drug treatment is discontinued. The combination of psychotherapy and pharmacotherapy has been advocated for obtaining a more sustained and complete recovery in anxiety disorders. The data, however, are rather conflicting. Several studies point to the fact that use of psychotropic drugs may result in short term benefits, but may be detrimental in the long term.

IS36.
THE MANAGEMENT OF NON-SCHIZOPHRENIC PSYCHOTIC DISORDERS

IS36.1.
OVERVIEW ON THE DIAGNOSTIC AND TREATMENT SPECTRUM OF NON-SCHIZOPHRENIC PSYCHOTIC DISORDERS

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Psychotic *symptoms* can occur in the course of many mental disorders, but usually not as a defining feature. Psychotic *disorders* are a heterogeneous group of disorders of which schizophrenia is the most important one. The occurrence of psychotic symptoms is nosologically unspecific, but indicates a dysfunction of underlying neuronal circuits being involved in different disorders with varying etiologies and pathogenetic mechanisms. Non-schizophrenic psychotic disorders, which are distinguished from schizophrenia on the basis of the kind and duration of symptomatology, cover conditions such as schizophreniform disorder, schizoaffective disorder, delusional disorder, brief psychotic disorder, shared psychotic disorder, and psychotic disorder not otherwise specified. They have to be differentiated in particular from psychotic disorder due to a medical condition or substance-induced psychotic disorder. DSM-IV provides decision trees for differential diagnosis of the various kinds of psychotic disorders. Treatment recommendations for non-schizophrenic psychotic disorders are generally not at variance with those for schizophrenia, although an empirical evidence base is still lacking for most of these conditions. The present paper will report on available practice guidelines and their respective quality standards.

IS36.2.
MANAGEMENT OF SCHIZOAFFECTIVE AND OTHER NON-SCHIZOPHRENIC PSYCHOSES

S. Kasper
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Schizoaffective and other non-schizophrenic psychoses need to be differentiated from schizophrenia from a treatment viewpoint.

Patients suffering from schizoaffective psychoses have a better outcome than those with schizophrenia when treated with atypical antipsychotics, which could give the hint that monotherapy with an atypical antipsychotic is effective. However, there is a lack of data to justify this in everyday clinical practice, and the addition of a mood stabilizer is often needed. Other non-schizophrenic psychoses include psychotic depression as well as organic brain disorders. For the treatment of psychotic depression, it has been demonstrated in recent trials that the addition of an atypical antipsychotic to a selective serotonin reuptake inhibitor (SSRI) is effective. For the treatment of organic psychoses, it is of utmost importance not to include treatment regimens which have intrinsic anticholinergic properties or are in need of adding anticholinergic medication for the management of extrapyramidal symptoms. Lower doses of atypical antipsychotics have been proposed in pilot studies for the latter indication. Given the better tolerability and specifically the lack of anticholinergic side effects and a dose-dependent lack of extrapyramidal side effects, atypical antipsychotics seem to be specifically beneficial for the management of schizoaffective and other non-schizophrenic psychoses.

IS36.3.
ASSESSMENT AND MANAGEMENT OF SECONDARY SCHIZOPHRENIAS

S. Lewis
University of Manchester, UK

So-called secondary schizophrenias can be divided into schizophrenia-like psychoses secondary to systemic physical disease and psychoses which arise secondary to intracranial lesions. Imaging studies suggest that the prevalence of the latter type is probably about 5% of cases of schizophrenia, although the impact on management is not usually significant. In first episode schizophrenia, full neurological examination is essential. Standardised rating scales such as the Positive and Negative Syndrome Scale will aid clinically the assessment of symptoms which are suggestive in some cases of underlying organic disease, such as visual hallucinations. The exclusion of underlying physical disease is important and routine investigations should include thyroid and liver function, plasma calcium, electroencephalogram and computed tomography or magnetic resonance scan. In addition, baseline assessments such as electrocardiogram and lipids are recommended in the light of known effects of drug treatment.

IS36.4.
MANAGEMENT OF SYMPTOMATIC PSYCHOSES (INCLUDING SUBSTANCE ABUSE) AND PSYCHOSES DUE TO NEUROPSYCHIATRIC SYNDROMES

F. Müller-Spahn
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Organic psychotic disorders have to be distinguished from schizophrenia by means of history, psychopathology, physical examination or laboratory tests of a specific organic factor that is judged to be etiologically related to the disturbance. They cover conditions such as delirium, organic delusional syndrome, organic hallucinosis, and organic personality syndrome, relating to a brain disorder, a medical condition or a substance-induced disorder. DSM-IV provides decision trees for differential diagnosis of the various kinds of organic and non-organic psychotic disorders. Treatment of organic psychotic disorders primarily requires treatment of the underlying organic factor(s). Symptomatic treatment of the psychotic syndrome, although not generally at variance with the antipsychotic treatment of schizophrenia, requires special consideration of the organic condition.

SPECIAL WHO/WPA SYMPOSIA

SPS1. FROM ADVANCES IN NEUROSCIENCE OF SUBSTANCE USE DISORDERS TO NEW TREATMENT APPROACHES

SPS1.1. FROM NEUROSCIENCE OF SUBSTANCE USE AND DEPENDENCE TO PUBLIC HEALTH RESPONSES

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World Health Organization, Geneva, Switzerland

Psychoactive substance use is one of the leading risk factors to health. According to World Health Organization (WHO) estimates, in 2000, tobacco, alcohol and illicit drug use accounted for 12.4% of total global mortality (6.9 million deaths) and 8.9% of the global disease burden expressed in Disability Adjusted Life Years (DALYs) (128.6 million). Rapid advances in neuroscience open up new possibilities for prevention and treatment of substance use disorders and for reducing the burden associated with substance use and dependence. The report "Neuroscience of Psychoactive Substance Use and Dependence" published by the WHO provides an overview of scientific evidence on brain mechanisms of substance use and dependence and implications for public health responses. The report compiles information on neurobiology, neuroanatomy, psychopharmacology, genetics as well as biobehavioural processes underlying substance use and dependence. Special chapters address comorbidity and ethical issues in neuroscience research. The report affirms that substance dependence is a medical disorder and treatment must be accessible to all in need. Effective interventions exist and can be integrated into health systems. Involvement of primary health care in identification and management of substance use disorders is of particular importance for adequate public health responses.

SPS1.2.
THE NEUROSCIENCE OF ADDICTION: IMPLICATIONS FOR TREATMENT

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Neuroscience research has shown that drugs of abuse exert powerful effects on motivational, emotional, and cognitive systems in brain. Prolonged use of drugs of abuse can result in a shift of motivational priorities, Pavlovian conditioning to both internal and external stimuli paired to drug seeking and drug taking, alteration of stress responses, a weakening of frontal lobe inhibitory systems and a shift in cognitive templates towards drug seeking. Thus, appetitive mechanisms are strengthened towards drug seeking, while inhibitory systems are weakened, narrowing the cognitive and behavioral repertoire of the addicted individual. Modulation of appetitive processes and stress responses are implicated as treatment approaches. The neurochemistry underlying these processes is being elucidated, yielding potential medications.

Similarly, the discovery of the chemistry and pharmacology of strengthening of inhibitory processes is also yielding pharmacological targets. Examples of the potential pharmacotherapies that could modulate appetitive processes and strengthen inhibitory processes will be given.

SPS1.3. NEUROSCIENCE MEETS CLINICAL PRACTICE: TOWARDS A RATIONAL TREATMENT OF ALCOHOLISM

K.F. Mann
Central Institute of Mental Health, Mannheim, Germany

Chronic alcohol consumption leads to neuroadaptive changes in the central nervous system (CNS). While GABAergic transmission is reduced, the glutamatergic system is up-regulated. When alcohol is discontinued the imbalance results in a CNS hyperactivity. It is likely that alcohol cues can induce a similar hyper-excitatory state even months after abstinence and thus trigger relapse. Functional magnetic resonance imaging (f-MRI) studies show an activation of cue induced craving in the nucleus accumbens and frontal cortex which correlates with treatment outcome. Modern pharmacotherapy to prevent relapses in alcoholics is currently based on two extensively tested medications: acamprosate and naltrexone. Acamprosate acts by binding to glutamatergic receptors and thus reduces the hyperexcitability described above. So far twenty randomized placebo-controlled double-blind trials were done worldwide. A meta-analysis compiles the 16 studies which show a benefit of acamprosate over placebo plus the 4 studies where no difference could be found. Naltrexone acts as an μ-opioid receptor antagonist and thus reduces the rewarding effects of alcohol. It has been studied in 14 randomized controlled trials in general of only three months duration. The results are somewhat less clear-cut than with acamprosate but a majority of studies shows a benefit over placebo. In conclusion, on the basis of neurochemical changes, both acamprosate and naltrexone can significantly improve treatment results in alcoholics.

SPS1.4. SHORT- AND LONG-TERM STRATEGY TO COMBAT AND MANAGE SUBSTANCE USE PROBLEMS: AN EGYPTIAN PERSPECTIVE

A. Okasha
WHO Collaborating Center for Training and Research, Institute of Psychiatry, Ain Shams University, Cairo, Egypt

A unique short-term and long-term program to combat the use of narcotics in Egypt, in collaboration with all those working in this field, will be outlined, together with its implementation. The rationale for not using replacement therapy in Egypt is discussed and the available programs, taking cultural and religious factors into consideration, are presented. A paradigm of how to combat and manage narcotic problems in a developing country with limited resources, achieving the same results as in developed countries with sufficient resources, will be reviewed.

SPS2. NOSOLOGICAL VALIDITY AND DIAGNOSTIC VALIDITY

SPS2.1. HISTORICAL PERSPECTIVES ON NOSOLOGICAL AND DIAGNOSTIC VALIDITIES

P. Hoff
University of Zurich, Switzerland

This paper outlines three major historical approaches to the concept of mental disorders: mental illness as a real "natural" object (realistic approach), as a predominantly psychopathological convention (nominalistic approach), and as a result of biographical and other individual factors (biographical approach). The significant impact of these different pathways on the function of psychiatric diagnosis and on the conceptualization of psychiatric research will be discussed.

SPS2.2. PHILOSOPHICAL PERSPECTIVES ON NOSOLOGICAL AND DIAGNOSTIC VALIDITIES

K.F. Schaffner
George Washington University, Washington, DC, USA

In addition to the four traditional concepts of face, descriptive, predictive, and construct (external) validity, two more philosophical aspects of nosological validity will be explored in this paper. The first, "clinical" validity, borrows from predictive validity, and also from other components of clinical "utility", but does not accept the sharp distinction recently urged by Kendell between utility and validity. The second, "reductive etiopathogenic" validity, is characterized as strong integration of disorders with etiological and pathophysiological knowledge, anticipated to be based on genetic and neurophysiological mechanisms. It is closely related to a reductionist approach to construct validity, and may be identical with it under some interpretations of "realism". I argue that robust etiopathogenic validity is almost certainly a premature goal for the emerging ICD-11 and DSM-V nosologies for a variety of reasons. Clinical validity can be facilitated by evidence-based methodology, though whether nosologies that are clinically valid will prevail as etiopathogenic valid assessments will only be resolved empirically. The paper concludes with a discussion of diagnostic validity, against the backdrop of the nosological account above. Here the emphasis is on the creative tensions involved in an individualized, empathetic, biopsychosocial approach to a patient in the context of both clinical and etiopathogenic based nosologies.

SPS2.3. CULTURAL PERSPECTIVES ON NOSOLOGICAL AND DIAGNOSTIC VALIDITIES

L.J. Kirmayer
Division of Social and Transcultural Psychiatry, McGill University, Montreal, Canada

Although recent years have seen increased attention to culture in psychiatric nosology and diagnosis, important conceptual and practical problems remain. This presentation will consider the extent to which cultural difference can be meaningfully integrated into psychiatric nosology. Current strategies for incorporating culture into nosology will be reviewed. These include modifications to the textual presentation or clinical application of the diagnostic system (e.g. adding qual-

ifying comments or caveats, modifying diagnostic criteria); changes in basic architecture (e.g. adding new disorders, reorganizing broad categories); and the creation of parallel systems of assessment (e.g. the cultural formulation, relational diagnoses). The merits and drawbacks of each approach will be reviewed along with the sort of evidence needed to establish each type of change. Ultimately, success in integrating culture into nosology depends on taking seriously both the epistemological dilemmas of cultural research and the pragmatic issues that arise in the diverse clinical and social contexts where psychiatric diagnosis is applied.

SPS2.4. DO GENETIC AND FAMILIAL CORRELATES PROVIDE VALIDITY CRITERIA OF DIAGNOSTIC CATEGORIES IN PSYCHIATRY?

A. Jablensky
School of Psychiatry and Clinical Neurosciences, University of Western Australia, Perth, Australia

Advances in molecular biology and genetics have a growing impact on classifications in medicine and neurology, where genetic discoveries are generating new organising principles for the clustering of disorders, such as mitochondrial diseases or disorders due to nucleotide triplet expansion. Although the majority of psychiatric disorders are genetically far more complex than previously assumed, genetic research is likely to play a role in redefining their boundaries and, to a limited extent, in their diagnosis. At present, this is more of a promise than actual performance, except for a small number of disorders with a simpler genetic architecture, including Huntington dementia, familial Alzheimer disease, Rett syndrome, and several of the sleep disorders. However, complementing the current diagnostic categories with carefully selected potential endophenotype markers and traits should further research aiming at a biologically better validated nosology of the complex psychiatric disorders.

SPS2.5. CRITERIA AND MEASUREMENT OF DIAGNOSTIC VALIDITY: EPIDEMIOLOGICAL CORRELATES

R. Kessler
Harvard University, Boston, MA, USA

In the absence of definitive biological data, decisions about criteria and diagnostic validity hinge largely on the analyses of naturalistic patterns in phenotypic data and of information regarding differential treatment response related to variation in these naturalistic patterns. The current report reviews opportunities for the first of these two types of analyses for the development of ICD-11. The presentation is divided into two parts. The first part briefly reviews available strategies for the analysis of naturalistic patterns in phenotypic data. This part of the presentation highlights the importance of establishing a data collection system that allows rapid iteration between analysis and targeted collection of new data. The second part of the presentation outlines a proposal for establishing a data collection system of this type for ICD-11 that features the creation of an internet-based international practice network of clinicians who participate in an iterative series of short targeted surveys designed to refine criteria and measurement of diagnostic validity.

SPS2.6. CRITERIA AND MEASUREMENT OF DIAGNOSTIC VALIDITY: DESCRIPTIVE AND THERAPEUTIC USEFULNESS

G. Mellsop
University of Auckland, New Zealand

This paper will review the difference that perspective can make to an apparently value free concept such as validity, in relation to our psychiatric classificatory systems. The views of pathologists, surgeons and Humpty Dumpty will be discussed. It will then explore the role of therapeutic usefulness as a determinant of diagnostic validity. The paper will also consider and appraise specific criteria and measures of nosological and diagnostic validity as they have been proposed in the past and will offer suggestions for the future.

SPS2.7. VALIDITY OF DIAGNOSTIC STRUCTURES: HIERARCHICAL NOSOLOGY

C.E. Berganza
San Carlos University, Guatemala, Guatemala

The hierarchical organization of the ICD-11 mental health component is a critical theoretical and clinical challenge, because it concerns the internal consistency of the classification of mental disorders, and its nosological validity and clinical usefulness. For example, the adequacy of the number of major classes in ICD-10 must be reviewed. The current grouping of 10 two-character major classes to be divided by 10 three-character categories and so on has shown more difficulties than the ones it intended to resolve. Human mental morbid conditions nowadays included in this classification do not happen in groupings of 10. An illustration of this dilemma is F1, Mental and behavioral disorders due to psychoactive substance use. Here, trying to accommodate the number of potential drugs acting as etiological factors and the number of syndromes that they may cause in groupings of 10 results an impossible task. A review should be included of the current types of major classes composing the current system and their internal organization. In this presentation, we discuss the major caveats of the current hierarchical organization of ICD-10 and propose alternatives to increase the internal consistency of the system as well as to promote the research needed to resolve questions of nosological groupings.

SPS2.8. NOSOLOGICAL DEFINITIONS: CATEGORICAL, DIMENSIONAL, AND HYBRID MODELS

C. Pouncey
Department of Psychiatry, Presbyterian Hospital, New York, NY, USA

The choice between a categorical and a dimensional nosology is often viewed as a fundamental decision that precedes psychiatric classification, and this decision has been named as a research priority by groups such as the Nomenclature Work Group for DSM-V. However, categorical classification and dimensional diagnostic considerations are not mutually exclusive. While a tension does exist between the two approaches, they can be – and often are – used together. If we recall what philosophers call the "theory-ladenness of observation", we can see that the statistical methods used to investigate mental disorders presuppose either a categorical or a dimensional approach to classification. We use these methods to clarify or challenge aspects of

a classification that already exist. We then modify that classification in whole or in part according to ongoing research. By looking to the statistical methods used for classification we will see that a) a nosology need not be uniformly categorical or dimensional, and b) the decision to use a categorical or dimensional nosology need not precede classification but can modify an existing one.

SPS2.9.
NOSOLOGICAL AND DIAGNOSTIC VALIDITIES UNDER COMPREHENSIVE DIAGNOSTIC SCHEMAS

J.E. Mezzich
Mount Sinai School of Medicine, New York University, New York, NY, USA

As preparations are starting to develop a new generation of international classification and diagnostic systems, such as ICD-11, the concept of diagnosis and its validity are receiving pointed attention. This includes an analysis of alternative notions of diagnosis, from a conventional classification of mental disorders to a full description of health status. The latter notion involves an appraisal of the complexity of mind and health from various perspectives. One refers to the domains to be assessed, from mental disorders to a full panel of existing illnesses and health-related problems to a consideration of both ill and positive health aspects. Another refers to the descriptive tools to be employed, including standardized typologies and dimensional approaches as well as idiographic narratives. A third perspective is concerned with the evaluators involved, including clinicians, the consulting person (patient), and the family and significant others. Furthermore, one should consider whether the concept of diagnosis is fundamentally a formulation or an interactive process. The concept of diagnostic validity is also being re-examined. Competing notions include attempts at and results from "carving nature at its joints" to the fulfillment of the expected purposes of diagnosis for clinical care and public health actions.

SPS2.10.
NOSOLOGICAL AND DIAGNOSTIC VALIDITY IN CHALLENGING CLINICAL CONDITIONS: COMORBIDITY IN MENTAL AND GENERAL MEDICAL DISORDERS

I.M. Salloum
Western Psychiatric Institute and Clinic, University of Pittsburgh, PA, USA

Comorbidity, or the co-existence of more than one morbid condition, is the rule and not the exception in regular clinical practice. The presence of comorbidity poses significant challenges to diagnostic ascertainment and treatment choices, and has significant impact on treatment response and outcome. The prognostic significance of comorbid conditions has been recognized for general medical disorders. Comorbidity in mental disorders presents additional hurdles due to the lack of fully validated psychiatric disorders. The challenge of comorbidity is yet to be adequately addressed by modern classification systems. This presentation will review evidence on the prognostic significance of comorbidity and its relevance for enhancing the clinical utility or usefulness of current diagnostic systems.

SPS2.11.
CLASSIFICATION OF POSTNATAL MOOD DISORDERS: TOWARDS ICD-11 AND DSM-V

J. Cox
University of Keele, UK

Contemporary classifications of mental disorders, to be useful, should reflect not only scientific advances in knowledge but also public health and user perspectives. They should also facilitate a whole person approach to psychiatry, as encouraged by the International Guidelines for Diagnostic Assessment proposed by the WPA. These principles are illustrated with reference to the well-known deficiencies in ICD-10 and DSM-IV with regard to the classification of postnatal mood disorders. The recommendations of an international workshop held in Sweden, which included a mandatory 3 month post-partum onset specifier for psychosis (one year for non-psychotic mood disorder) and the reinstatement of the diagnostic categories of puerperal psychosis and postnatal depression, are reviewed.

SPS2.12.
NOSOLOGICAL AND DIAGNOSTIC VALIDITY AND THE INTERPERSONAL MATRIX: FROM PERSONALITY TO RELATIONAL DISORDERS

L. Küey
Bilgi University, Istanbul, Turkey

Why does the description of the ill and healthy aspects of "the interpersonal" constitute a challenging clinical condition in terms of validity? On which bases can the concepts of nosological validity and diagnostic validity be discussed and utilized in the context of human interpersonal relations? How can a scientific psychiatric classification system and a comprehensive clinical description attain the power of validity in defining distress, disability or deviance in interpersonal relations? How much may the scientific evidence accumulated in this field help us to differentiate between the patterns of normality and abnormality in interpersonal relations? Do we need new empirical data or do we need new epistemological and methodological means? In an effort to provide a framework for the discussion of these questions, basic conceptual approaches and relevant research data on the classification and description of "the interpersonal and relational issues and disorders" will be reviewed in this presentation.

SECTION SYMPOSIA

SS1.
CURRENT QUESTIONS IN THE TREATMENT OF BIPOLAR DISORDERS (Organized by the WPA Section on Pharmacopsychiatry)

SS1.1.
IS THERE AN IDEAL MONOTHERAPY FOR ACUTE MANIA?

G.M. Goodwin
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There is now a range of effective treatments available to control episodes of mania. Whether any of these options could be described as ideal depends upon their speed of antimanic action, tolerability,

liability to provoke a switch to depression and potential for use in the long term. However, there is little independent comparative data to merit the selection of any one medicine for all circumstances. Indeed, there is current uncertainty, evident in recommendations in clinical guidelines, whether monotherapy should be preferred to a combination of two medications. Atypical antipsychotics are the most studied antimanic agents either as monotherapy or in combination with lithium or valproate. Their effects as monotherapy and in combination are convincingly demonstrated in placebo controlled trials. However, these trials contained variable numbers of patients who were at least partially refractory to lithium or valproate. Moreover, their design is dictated by the needs of licensing companies to convince regulators of their products' safety and efficacy. The data this produces does not necessarily generalize to ordinary clinical situations.

SS1.2. IS A MOOD STABILIZER SUFFICIENT TO TREAT ACUTE BIPOLAR DEPRESSION?

H.-J. Möller
Psychiatric Department, University of Munich, Germany

This paper gives a critical review of recommendations concerning the drug treatment of acute bipolar depression. The suggestions of different guidelines and consensus papers, especially in US and Canadian psychiatry, have a strong tendency against antidepressants in bipolar depression; they suggest the use of monotherapy with mood stabilizers and, in the case of co-medication with mood stabilizers and antidepressants in severe depression, suggest to withdraw the antidepressant as early as possible. The intention of this restrictive use is to avoid the risk of mania and of rapid cycling induced by antidepressants. However, apparently the risk of suicidal acts, which is prominent in bipolar depression as in unipolar depression, has been totally neglected. Furthermore, the fact that none of the mood stabilizers has a proven antidepressive efficacy leads not only to the risk of depression-related suicidal behavior but also to the risk of chronicity of depressive symptoms due to undertreatment. Altogether the view expressed in some guidelines and consensus papers appears not well balanced. Furthermore, the fact that apparently selective serotonin reuptake inhibitors and possibly some other modern antidepressants have only a low risk of inducing a switch to mania should stimulate a rewriting of the guidelines on drug treatment in acute bipolar depression in a less restrictive way concerning the use of antidepressants. Lamotrigine, which was approved a few years ago for relapse prevention in bipolar disorders, has also undergone quite intensive evaluation in the acute treatment of both bipolar and unipolar depression. However, only one study in acute bipolar depression showed efficacy, and on a secondary efficacy parameter.

SS1.3. IS POLARITY A NEW DIMENSION FOR DECISION-MAKING IN THE LONG-TERM TREATMENT OF BIPOLAR DISORDERS?

E. Vieta
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For many decades lithium was not only the mainstay, but actually almost the only treatment that had proven efficacy for both the short- and long-term treatment of bipolar disorder. There was little evidence of the efficacy of drugs such as antidepressants or neuroleptics, that were used for the treatment of acute episodes and sometimes beyond. Carbamazepine and valproate were alternatives to lithium but data were more convincing about their antimanic efficacy rather than antidepressant or prophylactic effectiveness. Within the last 5 years, an impressing and continuously growing number of trials is supporting the use of second generation antipsychotics and one of the third generation anticonvulsants for the short- and long-term treatment of bipolar disorder. Most trials have studied patients starting from a manic index episode. Only the lamotrigine trials enrolled patients from both poles of the illness. It would make sense to start with lithium, valproate, carbamazepine or atypical antipsychotics on patients with manic index episodes, whereas for index depressive episodes it would look more meaningful to start with lamotrigine or lithium. However, things are more complex than they seem, as the best data for lamotrigine comes from preventing depression after a manic episode, and there is emerging data with atypicals (olanzapine, and especially quetiapine) showing that they may also work well for bipolar depression and beyond.

SS1.4. IS ANTIDEPRESSANT TREATMENT NECESSARY IN THE LONG-TERM TREATMENT OF A SUBGROUP OF BIPOLAR PATIENTS?

H. Grunze
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The use of antidepressants in depressed bipolar patients has been a matter of controversy during the recent decade. Even more than for short-term treatment, the usefulness of antidepressants has been disputed for maintenance treatment of bipolar patients. The reasons are obvious: at least some groups of antidepressants, namely tricyclic antidepressants, are associated with a higher switch risk into (hypo)mania and, by this, may also accelerate cycling in bipolar patients. However, there are also good arguments that most of these switches are not clinically meaningful, and combination treatment of antidepressants with a mood stabiliser appears safe and more efficacious than mood stabiliser treatment alone. Due to the lack of evidence from large, double-blind controlled trials, the effectiveness of antidepressant long-term treatment can only be deducted from naturalistic, prospective studies. The so far largest study of the Stanley Foundation Bipolar Network studied 84 depressed bipolar patients who had been successfully treated with antidepressants (mainly antidepressants of the newer generation, e.g., selective serotonin reuptake inhibitors and bupropion) for their long-term outcome. After remission, 43 patients stopped antidepressant treatment whereas 41 continued antidepressants for more than 6 months. Both groups received at the same time at least one mood stabiliser. Comparing the outcome at endpoint (after one year or dropout from the network), 71% of patients who discontinued antidepressants had a depressive relapse compared to 41% of those who continued antidepressants ($p=0.04$). Surprisingly, the rate of manic relapses was even higher in the group who discontinued antidepressants (29%) compared to those who continued antidepressants (13%), although this difference was not statistically significant. Limitations of this study are its naturalistic nature and the limited generalizability due to selection of acute responders to antidepressant treatment. Nevertheless, the result of the study appears not only in line with a previous similar pilot study, but also with clinical practice, where a significant number of bipolar patients receive antidepressants as part of long-term maintenance treatment.

SS2.
DIAGNOSING PERSONALITY DISORDERS: DOES IT MATTER FOR TREATMENT? (Organized by the WPA Section on Personality Disorders)

SS2.1.
BORDERLINE PERSONALITY DISORDER: DIAGNOSTIC VALIDITY AND PSYCHOPATHOLOGICAL CORE DIMENSIONS

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The diagnostic validity of personality disorders is still suffering from unresolved problems: some of them concern the knowledge of specific biological, psychological and psychopathological mechanisms underlying diagnostic criteria. The largest amount of research data available concerns borderline personality disorder (BPD). Now it seems possible to deal with questions such as: a) Is BPD a categorical or a dimensional diagnostic entity? b) Is BPD a unifactorial or a multifactorial disorder? c) What are its core psychopathological dimensions? The practical importance of these questions regards the possibility to identify homogeneous groups of subjects and to differentiate specific pathological features, in order to establish specific treatment. In other words, rational treatment should derive from the identification of subjects really suffering from personality disorder, the identification of possible subgroups, and the differentiation of specific and stable pathological features from aspecific or unstable ones. Available research data gives some answers: a) the categorical model seems to be plausible; b) factor analytic studies seem to support multifactorial models, even if there is some evidence supporting a unifactorial model and suggesting a hierarchy in discriminatory power of criteria; c) results on core psychopathological dimensions are controversial, even if there is general agreement on the central role of impulsivity. The importance of this dimension is also consistent with findings from temporal stability of criteria. Impulsivity, in turn, has been considered as a unitary concept, whereas it should be better considered as a multi-level entity, deserving accurate investigation.

SS2.2.
FIVE YEAR OUTCOME OF OUTPATIENT PSYCHOTHERAPY WITH BORDERLINE PATIENTS

J. Stevenson, R. Meares, R. D'Angelo
Department of Psychological Medicine, Westmead Hospital, Westmead, Australia

Borderline personality disorder (BPD) is a serious mental illness. Due to the skepticism about the effectiveness of its treatment, the care of these patients is neglected. In this study we evaluated the effect of treatment in patients with BPD five years after its ending. 30 subjects were treated twice-weekly for one year by psychotherapy based on the "conversational model". Outcome measures included time in hospital, number of episodes of violence and self-harm, number of medical appointments, drug use and work history. A "morbidity budget" made up of these items was collated for the year before treatment, the year following treatment, and the year preceding the five year follow up. Additional measures included DSM-III criteria and a self report of symptoms. These outcomes were compared to a hypothetical natural history of BPD constructed from the DSM scores of 150 borderline patients aged between 18 and 51. Except for one measure, the improvements evident at one year following treatment were maintained four years later. This improvement was not predicted by the hypothetical natural history. These data suggest that a particular form of treatment of BPD has relatively long-lasting, beneficial effects.

SS2.3.
PREMORBID FUNCTIONING AND PERSONALITY IN FIRST EPISODE, NON-AFFECTIVE PSYCHOSIS

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Premorbid personality has always been considered a risk factor for development of psychosis. However, it is hard to conceptualize the kind of link of personality and psychosis. Etiologically, personality characteristics may reflect an underlying common core defect, may be a separate risk factor among others or may reflect deterioration due to psychosis itself. Thirty-two first episode, non-affective psychotic patients participating in the Scandinavian Early Treatment and Intervention in Psychosis Study (TIPS) were examined for premorbid functioning, personality traits and personality disorders two years after their inclusion in the study. The instruments were the Premorbid Assessment Scale (PAS), the Semi-structured Clinical Interview for DSM-IV, Axis II Disorders (SCID-II), the NEO Personality Inventory-Revised (NEO PI-R), and the Millon Clinical Multiaxial Inventory (MCMI-I and MCMI-II). SCID interviews suggest that about half of the patients had personality disorders belonging to cluster A (schizoid, paranoid, schizotypal), about one fourth had other personality disorders and one fourth none. The mean dimensional scores of NEO-PI were high on neuroticism and low at extraversion compared to a normal control group. High scorings were found at subscales on angry-hostility, self-consciousness, vulnerability, low at activity and self-discipline. MCMI personality disorders scores were high on severe personality pathology (schizotypal, borderline, paranoid). There was a general high correlation of the SCID-II and MCMI-II personality scales, except for dependent, antisocial, passive-aggressive and borderline. In general premorbid depressive features on the MCMI-II were common. The MCMI schizotypal and schizoid scales correlated highly to low school performance, lack of adaptation to school, problems with sexuality in late adolescence and low social contact and friendship in adulthood. This study suggests that most first-episode psychotic patients prior to their psychotic breakdown belong to the cluster A spectrum personality disorder. There is a high correlation between lack of social contact and competence in childhood and adolescence and later schizoid and schizotypal personality disorder.

SS2.4.
IMPULSIVITY, CLUSTER B PERSONALITY DISORDERS AND DRUG ABUSE

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The incidence of drug abuse is increased in antisocial and borderline personality disorders. Likewise, impulsivity is increased in these disorders. Recent research on brain function in individuals who are at risk for development of drug abuse or who have already developed drug abuse points to a common underlying neurobiology related to impaired impulse control. These changes in brain function may be both a risk factor for the development of drug abuse and a conse-

quence of drug abuse. Data will be presented from our group and others on the neurobiology of drug abuse and cluster B personality disorders which points to a common underlying change in brain function related to impulsivity. P300 auditory evoked potentials and functional magnetic resonance imaging data showing changes in brain function in drug abusing individuals will be discussed in light of impulsivity and personality disorders symptoms. These changes in brain function lead to impaired impulse control, increase risk for development of substance abuse and complicate treatment of patients with cluster B personality disorders in general. This data will be discussed in light of categorical versus dimensional approaches to cluster B personality disorders, and how treatments targeted at impulsivity could improve substance abuse and other behavioral problems in individuals with cluster B personality disorders.

SS2.5.
THE CURRENT STATUS OF THE GENERAL NEUROTIC SYNDROME IN PSYCHIATRY

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The general neurotic syndrome was a name proposed in 1985 for a co-axial diagnosis of mixed anxiety and depression (cothymia) and a personality disorder within the cluster C group (dependent, avoidant and anankastic). It was suggested as an alternative to the multiple diagnostic grouping of conditions that seemed to be part of the same syndrome (i.e., were consanguid rather than comorbid). It was also postulated that the general neurotic syndrome had a worse outcome than other disorders within the anxiety-depression group and would be more difficult to treat. The concept has received support from a number of quarters. There is evidence that anxiety and depression are best viewed as a one factor model, that the blurring of anxiety and depressive disorders is too great to justify separation, that personality disorder has a significant effect on the presentation and subsequent relapse of anxiety and depressive disorders and supports a unitary syndrome, and that the condition has a poorer outcome than simple anxiety and depressive diagnoses. Nevertheless, the fragmentary splitting of this group of disorders continues apace and we now have 5 more diagnoses than 18 years ago. The possible reasons for this will be discussed, and include hidden factors influencing diagnostic practice as well as a reluctance to embrace co-axial diagnoses.

SS3.
THE EDUCATIONAL CHALLENGE OF IMPROVING THE QUALITY OF PSYCHIATRIC TREATMENT (Organized by the WPA Section on Education in Psychiatry)

SS3.1.1
CHALLENGES IN INTEGRATING CORE COMPETENCIES IN PSYCHIATRIC EDUCATION

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Graduate psychiatry training programs in many countries of the Western hemisphere as well as developed nations worldwide have experienced in recent years major changes and challenges in the way that core competencies have been integrated and initiated. Nowadays, it is expected that core competencies be used as the foundation for graduate training in all specialties and subspecialties in those countries, particularly in the United States. These core competencies are a) medical knowledge, b) patient care, c) practice-based learning and improvement, d) interpersonal and communication skills, e) professionalism and f) system-based practice. While the enthusiasm and interest in the integration of these core competencies is widespread, there are also a series of challenges in the ongoing implementation of these core competencies at the training program level. Some of these challenges relate to limited funding sources; others pertain to lack of knowledge and skills on the part of the faculty with respect to some of the core competencies; still others have to do with resistances and fears vis-à-vis the necessary structural changes that are required for the successful implementation of these new educational and training models. In this presentation, a review of the core competencies will be done, the challenges related to their implementation will be examined, and potential solutions will be sought and discussed.

SS3.2.
THE CHALLENGES IN EDUCATING PRIMARY CARE PHYSICIANS IN BASIC PSYCHIATRY IN DEVELOPING COUNTRIES

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Psychiatry has been a recent entrant into the field of medical education in many countries of the world. In countries that have languished under one form of colonial rule or the other, the lack of medical educational institutions until recent times and the lack of economic resources have often meant that the quality of education in medicine has often been left behind. In this process psychiatry has as often recognized been a common casualty. Often the psychiatry that is taught is based on concepts of psychoses as seen in the mental hospitals or asylums, where the most severe illnesses were thought mistakenly to be the only illnesses of the mind that there were to be taught to students. The result has been a colossal lack of recognition of the vast majority of mental illnesses seen in general practice settings in which most doctors practice. To turn this entrenched belief that psychoses are all that there are in psychiatry is a challenge in the re-education or re-orientation of doctors in primary care in developing countries. This needs to be met not by condensing psychiatry and repeating it to non-psychiatrists, but by innovating methods of training based on the psychiatry in primary care case mix. The methods of teaching have to be based on facts in primary care settings as well as examples of cases seen in primary care. Another innovation is to tailor the training to the needs of the busy primary care practices and their socio-economic environment that varies widely. In many if not most developing countries there is no national health system nor any insurance system that allows the luxury of time off for training. The fee for service means used widely ensures a general practitioner (GP) works from 8 am or earlier to 11 at night or later 6 days a week with a good number working out of 24-hour clinics. Training has to based on good packaging, attractive and simple modules rather than extensive and complicated texts that no GP will follow in practice after the training. The challenges extend to follow up and continued links with the primary care providers. All this requires commitment and resources not easily found in developing countries, where funding by pharmaceutical firms, so vital in training in more affluent countries, is seldom available as medicines are often limited to low cost generics. The lack of professional organizations and networks for continuing medical education in service training also poses challenges. Despite these obstacles, gains have been made using rough and ready methods of training in a number of developing countries that use whatever resources

available to improve mental health awareness and delivery to the primary care doctor.

SS3.3
MENTAL HEALTH EDUCATION FOR THE GENERAL PUBLIC IN A DEPRIVED INNER CITY POPULATION IN THE UNITED STATES

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Unfortunately, the stigma associated with mental illness continues to be a worldwide problem. Many cultures do not view psychiatric diseases as having a biological component and see them as distinct from other "real" illnesses. This situation has resulted in a lack of parity for the treatment of psychopathology, and patients with less than severe symptoms not seeking professional care. An effective and important strategy to consider in addressing this problem is establishing a grassroots education program for the general public. In the United States, this problem is particularly acute in poverty stricken inner-city regions. With the assistance of the pharmaceutical industry, we were able to offer a series of evening educational programs for the community. The format of the presentations was an initial overview of the topic followed by an interactive question and answer/discussion period. The sessions were advertised in the local media as community education and not solely for patients and their families. Topics were selected based on timeliness (i.e. holiday blues around Christmas time and stress management around the anniversary of September 11) and overall appeal to a general adult audience. The overarching goal of the program was to increase awareness of the importance of mental health issues, destigmatize mental illness, and educate the public about available treatment options in their community. Topics, presentation style and format could be adapted to the individual needs of each community. The key to success is keeping the programs interesting, engaging and relevant.

SS3.4.
THE REPRODUCTIVE MENTAL HEALTH PROGRAMME OF BRITISH COLUMBIA: AN EDUCATIONAL PERSPECTIVE

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The Reproductive Mental Health Programme is a tertiary referral clinic located in the metropolitan area of Vancouver, in the province of British Columbia, the third largest province in the dominion of Canada. The mandate of the clinic is to promote the best possible mental health for the women of the province and their families during their reproductive years. The goals of the programme include the provision of care and treatment for women with mental health problems connected to reproduction and the promotion of education in reproductive mental health in the province. The programme has developed innovative educational strategies to help meet the goal of educating both mental health professionals as well as the general public in reproductive mental health issues. Members of the programme are available to provide educational seminars in various remote locations throughout the province several times every year. These educational events take place over one to two days and comprise various educational events. These include seminars for community mental health workers, hospital grand rounds for generalist and specialist physicians and evening forums for the general public. The events are well received by members of the general public as well as public health professionals and are an efficient way of disseminating information to remote areas of our province.

SS4.
SPIRITUALITY, TREATMENT AND HEALTH (Organized by the WPA Section on Religion, Spirituality and Psychiatry)

SS4.1.
SPIRITUALITY AND OUTCOME OF MEDICAL TREATMENTS

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For many years there has been a research focus on the importance of psychological factors in predicting a variety of symptoms accompanying progressive disease, especially associated with advanced cancer. For example, the experience of pain, the development of depressive symptoms and anxiety states. Recently, spiritual belief has emerged as a factor that should be taken account of more. This echoes the series of studies by King, Speck and Thomas in which they concluded that spiritual belief was more predictive of clinical outcome than the usual psychological measures. This trend is to be seen in a growing number of peer reviewed papers from the USA, UK and Europe, which show that belief is of importance to a large proportion of people who enter health care (in the region of 70-80%) but is not always assessed and addressed adequately. A key problem in such studies has been a failure to recognise the distinctiveness, but inter-relatedness, of expressions of belief. A person who has a spiritual belief may or may not be religious, especially if they choose not to express their belief within a religious framework. However, the majority of religious people will have a spiritual belief. Others may choose to express their belief in terms of a philosophical stance. This paper will discuss the importance of these distinctions and review some of the recent studies which appear to indicate that there is a correlation between having a spiritual and/or religious belief and a variety of clinical outcomes, with reference to orthopoedic patients, cardiology patients, bereavement studies and end-of-life care.

SS4.2.
ASKING ABOUT RELIGION AND SPIRITUALITY IN PATIENTS RECEIVING PALLIATIVE CARE TREATMENTS

S. Dein
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The spiritual care of patients is an essential part of palliative care. In this study 105 case notes of hospice patients with cancer were reviewed to assess the information documented by nurses relating to religion and spirituality. Although religious affiliation was recorded in 87% of the case notes, only 40% of the notes contained any information about awareness of dying and the use of religion or spirituality in relation to the dying process. The reasons for the nurses' reluctance to discuss spiritual issues are discussed. A teaching programme enabling palliative care professionals to ask about spiritual issues in physical illness is outlined.

SS4.3.
SPIRITUAL QUESTIONING AND MENTAL HEALTH IN LATER LIFE

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Erik Erikson's discussion of the last psychosocial task of life – 'integrity vs. despair' – raises three fundamental issues relating to acceptance. The first, acceptance of the past without bitterness, has received the most attention. The second, acceptance of one's own death, and especially the third task, acceptance of the society that will continue after one's own death, have received much less attention. "Questioning" appears to be central to these processes. However, struggle including questioning is not what society normally expects of older people. The expectation of stability and serenity extends also to ministers of religion, who often appear unprepared for the emergence of doubt in the wake of the losses and crises of later life, despite the fact that struggle with despair is a common theme in the lives of saints and spiritual role models. In studies with older people living in congregate housing we have identified a large minority of persons who appear to remain in a chronic state of questioning, unable in particular to integrate their perception of present and past standards of behaviour and their former and present spiritual beliefs. Bereavement appears to be a major trigger of spiritual doubt and questioning. In a recent study following up a sample of bereaved spouses from the first to second anniversary of the death, we found depressive symptoms to be concentrated among those of moderate to weak spiritual belief. Those with strong or no belief were more likely to be free of depression. Our case study format has allowed us to explore these issues at the level of the individual person, to tease out relationships between faith, doubt, personal loss, and contact with religious ministers, and to raise further questions for enquiry. In current studies we have gone on to examine older persons' own expectations of ministers of religion in situations of loss. They illustrate the need for much closer liaison between them and general mental health practitioners.

SS4.4.
THE ROLE OF RELIGIOUS LEADERS IN PATHWAYS TO TREATMENT FOR PEOPLE WITH SERIOUS MENTAL ILLNESS

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In Western societies, medicine and healthcare, of which psychiatry is a branch, had much of their evolution within religion-based institutions. However, the growth of the modern liberal state and the dominance of the scientific paradigm have largely eclipsed, and may have removed any real role for religion in the medical treatment of patients. Thus, the view that Western societies are becoming increasingly secularist in nature is fairly persuasive. Nevertheless, to suggest a 'clean break' heralding the unrivalled supremacy of scientific medicine would be to underestimate the importance of spiritual and religious beliefs in the consideration of health and illness held by many people. Within some faith communities, health and spirituality are considered as inseparable. Studies in the UK and in the USA indicate that a large proportion of people with psychiatric problems obtain advice and support from people other than psychiatric professionals. Moreover, prior to coming into contact with psychiatry, many psychiatric patients will first seek help from religious leaders. In part this may stem from the highly religious content of some psychotic illness, or from the patient's religion-based explanatory models of mental illness. Patients and families may simply feel that they have no one else to turn to. Whatever the reason, religious leaders are importantly situated on the pathway to psychiatric treatment for many people and may continue to play an influential role in the course of that treatment. Surprisingly, however, we know very little about how religious leaders from different faith communities conceptualise mental illness and what their role is in the help-seeking process. Are they a helpful resource or a hindrance to appropriate psychiatric care? This paper will outline the findings of a qualitative, London-based study of the beliefs and attitudes of religious leaders on a range of issues relating to mental illness and psychiatry.

SS4.5.
ARE RELIGIOUS AND SPIRITUAL BELIEFS ASSOCIATED WITH BETTER MENTAL HEALTH? EVIDENCE FROM A NATIONAL SURVEY IN BRITAIN

M. King
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This study aimed: a) to compare the prevalence and characteristics of religious and spiritual beliefs in representative samples of the principal ethnic populations in England and b) to examine associations between religious and spiritual beliefs and common mental disorder. The study involved face-to-face interviews with a probabilistic sample of 4281 adults from six ethnic populations living in private households in England. Common mental disorders (CMD) were assessed using the revised Clinical Interview Schedule (CIS-R). Religious and spiritual beliefs were assessed using a brief questionnaire version of the Royal Free Interview for Religious and Spiritual Beliefs. Data were also collected on quality of life, social function and support and psychotic symptoms. 40.3% of people held a religious view of life, 17.9% held a spiritual view but with no religious participation and 41.8% held neither religious nor spiritual beliefs. South Asian people were more likely to regard themselves as 'religious', and less likely as 'spiritual' than white, Irish or Black Caribbean people. There was no difference in prevalence of CMD between people who were religious and those who were not. However, people who were not religious but who expressed spiritual beliefs were 1.78 (CI 1.08, 2.94) times more likely to have CMD than people who held religious beliefs. This association remained statistically significant after adjustment for potential confounders, including physical health status and social support. Thus, lack of religious belief was associated with a higher prevalence of CMD, but only in people who reported having a spiritual life view. This phenomenon may only occur in cultures where religious practice has sharply declined in recent decades.

SS5.
ART AND THERAPEUTIC COMMUNICATION (Organized by the WPA Section on Art and Psychiatry)

SS5.1.
FROM THE ART OF THE MENTALLY ILL TO ART THERAPY

J. Garrabé
L'Evolution Psychiatrique, Paris, France

At the beginning of the 20th century, several psychiatrists became interested in what was called at the time "mad people´s Art". Auguste Marie organised before the First World War some exhibitions of pictures by mentally ill patients in Saint-Anne´s Hospital in Paris. The

book of Hans Prinzhorn "Bildenerei der Geisterkranken" (1922) was discovered by the painters themselves, especially the surrealists. From the exhibition organized by Volmat during the First World Congress of Psychiatry in Paris (1950) these works became known as Psychopathological Art. This approach was in opposition to that of "Art Brut". The use of Art as an activity in psychiatric institutions brings out the problem of Art Therapy as well as that of the relationship with other psychotherapies and the training of Art-therapists.

SS5.2.
ART THERAPY AND EATING DISORDERS

A.-M. Dubois
Centre Hospitalier Sainte-Anne, Paris, France

Patients with eating disorders often have a very good quality level of verbal expression. However the speech is often stereotyped and structured around the internal necessity to deny disorders. Mental rationalisation is a frequent mechanism. Very frequently the use of the word is not for them a way of communication, neither with themselves nor with others. The use of verbal communication is essentially defensive. That is why, in most of the cases, psychodynamic psychotherapies are difficult to put in place. Psychotherapies with an artistic mediation have in the case of patients with eating disorders specific advantages. It is these techniques and results (clinical and artistic) that we will present with the different artistic mediations that take place in our center.

SS5.3.
HAIKU: A STRUCTURING THOUGHT

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Centre d'Etude de l'Expression, Clinique des Maladies Mentales et de l'Encéphale, Université Paris V, Paris, France

Following a brief history of haiku and the structure of this poetic means of expression, we will present the writing workshop that takes place at the Clinique des Maladies Mentales et de l'Encéphale, at the Centre Hospitalier Sainte-Anne in Paris. Different modalities and forms of writing are proposed in these workshops. The goals are: a) to provide group structure as a "container" or structuring element; b) to encourage thought and creativity; c) to enhance pleasure. The articulation between writing and thought will be presented. The poetic form of haiku takes a predominant place for many patients. We will see that, paradoxically, the limits imposed by this form of poetry (brevity, concentration, structure) open up a world of possibilities to explore thoughts and feelings. Finally, a few examples of haikus and poems created by some of the patients will be presented for illustrative purposes.

SS5.4.
THERAPEUTIC CREATIVITY

C. Carbonell
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Several psychiatrists have used the artistic expression of mental patients as a way of communication. The determination to communicate, the ability to listen and try to make sense in the confused but original images, can be one of the goals of the art therapy. Art provides a space in which thinking and emotional experience can be liberated from the limits of reality and can be a bridge between those who suffer from mental illness and those that are engaged in artistic work and professionally active in the artistic world. Art can be an invaluable ally to improve patients' creativity. The capacity to establish relations unknown up to this moment, in other words, invent new acquaintances, corresponds to creativity.

SS6.
DEVELOPING AND IMPLEMENTING TRAINING IN OLD AGE PSYCHIATRY (Organized by the WPA Section on Old Age Psychiatry)

SS6.1.
THE CORE CURRICULUM OF TRAINING IN OLD AGE PSYCHIATRY

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During the years 2000-2001, the WPA Section on Old Age Psychiatry has conducted a survey among the 116 WPA Member Societies, in order to identify local needs in teaching and training in the discipline. The development of post-graduate training in old age psychiatry has been reported to represent the most pressing need by most of the Member Societies. At the same time, a joint initiative including the European Association of Geriatric Psychiatry, the WPA Section on Old Age Psychiatry and the World Health Organization (WHO) collaborative centre for old age psychiatry has proposed some skill based objectives for training in old age psychiatry. With specific knowledge and learning objectives, they constitute what could be considered as a core curriculum in old age psychiatry. The main topics of this curriculum will be presented, as well as the way of implementing such a curriculum in France, a country where a formal recognition of old age psychiatry as a new sub-specialisation of psychiatry is now in an advanced stage.

SS6.2.
OLD AGE PSYCHIATRY: PERSPECTIVE OF THE WORLD HEALTH ORGANIZATION AND TRAINING EXPERIENCES IN THE UK

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In 1996 the late Jean Wertheimer, old age psychiatrist in Lausanne, organised the first consensus statement on Psychiatry of the Elderly. This seminar and those that followed in subsequent years were jointly produced by the World Health Organization (WHO) and the Geriatric Psychiatry Section of the WPA, together with a number of international non-governmental organizations representing some of the disciplines involved with care of mentally ill elderly people. These seminars arose because of the growing recognition that people are ageing fast in all countries, developing and developed, and mental illness in older people requires special knowledge and skills as well as multi-disciplinary collaboration. The document concluded that there was ample justification to support the development of psychiatry of the elderly with its own training programmes, career structure and multi-professional support network. This is a need throughout the world. The UK was the first country to produce formal criteria for old age psychiatry training in 1989 and to formally accept it as a specialty in psychiatry. There are now about 500 consultants in old age psychiatry in the UK, more than anywhere else in the world. This talk will give an overview of the consensus statements followed by a brief history of old age psychiatry in the UK, and describe how training in old age psychiatry is organised, together with a description of outcome measures for trainees.

SS6.3.
TOWARDS TRAINING FOR OLD AGE PSYCHIATRY IN EASTERN EUROPE

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Old age psychiatry is recognized as a specialty only in a few Eastern European countries: Czech Republic, Romania and Turkey. In this part of the world, geriatric psychiatry is still not enough represented. The number of professionals working in the field is still very low to satisfy the needs of care of elderly with mental disorders. In some countries there are national geriatric psychiatry associations, which try to improve this situation organizing the training post-graduate courses for young doctors. The third Lausanne consensus statement of 1998 was followed up by several meetings organised by the European Association of Geriatric Psychiatry, the WPA and the World Health Organization (WHO) collaborating centre for old age psychiatry. The resulting document is a core curriculum based on knowledge and skills to define the subspecialty of old age psychiatry. This curriculum is intended mainly to guide the training of psychiatrists and should help each country to have a number of specialists who can provide high level care in clinical service development, training and research. It has to be adapted to ensure local relevance and feasibility; thus, the local curriculum has to be externally validated. Specialist education and training in old age psychiatry should also help to develop the competencies of professionals in Europe to promote mental health in old age, prevent mental disorders, care for older people with mental health problems, reduce stigma and discrimination. The training and teaching program comprises courses for health and social care professionals' undergraduate, post-graduate and continuing education (general practitioners, young psychiatrists, geriatricians and other doctors, nurses, occupational therapists, social workers), courses for obtaining the old age psychiatry certificate, education, and information offered to carers, users and voluntary workers. A training post-graduate one-year course is being organized in Bucharest, Romania for a diploma in psychogeriatrics for psychiatrists, geriatricians and medical residents. The majority of European countries have not yet accredited training programs in old age psychiatry. It is recommended that all European countries should set up national systems to accredit such supraspecialists. Only a few psychogeriatric services and even less special care services for dementia patients currently exist. In all former communist countries there are economical problems and we need national fund raising to support national psychogeriatric organizations and services.

SS7.
HORMONES AS TREATMENTS OF AFFECTIVE DISORDERS (Organized by the WPA Sections on Interdisciplinary Collaboration and on Affective Disorders)

SS7.1.
TREATMENT OF DEPRESSION: PRESENT AND FUTURE

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Effective antidepressant treatments have been available for almost half a century. Antidepressant drugs, mood stabilizers, electroconvulsive therapy and psychotherapies are, however, symptomatic treatments that may have to be administered for sustained periods to prevent relapse and recurrence. Moreover, individual patients vary widely in their response to different antidepressant drugs, and it is still necessary to have at hand a range of medications offering multiple mechanisms of action – tricyclics, monoamine oxidase inhibitors, selective serotonin reuptake inhibitors (SSRIs), serotonin-noradrenaline reuptake inhibitors (SNRIs), noradrenergic and specific serotonergic antidepressants (NaSSAs) and others. Many of the newer agents lack the side effect burden and the lethality in overdosage of the older drugs, but they have not in general offered anything in the way of improved efficacy. However, they are not all born equal and substantial evidence is emerging that dual action SNRIs and NaSSAs, and in particular venlafaxine and mirtazapine, may offer advantages over their modern counterparts (the SSRIs) in terms of faster onset of action and greater rates of response and remission. The development of new concepts for treating depressive illness has embraced targets other than monoamines, including neurokinin receptors, glutamate systems especially N-methyl-D-aspartate (NMDA) receptors, sigma receptors and various hormones. Drugs capable of combating hypothalamic pituitary adrenal (HPA) axis hyperactivity by blocking glucorticoid or vasopressin receptors may be peculiarly effective in rapidly alleviating psychotic and melancholic depression, while corticotropin releasing factor (CRF) antagonists may be more effective in anxiety-related disorders. Brain derived neurotrophic factor (BDNF) may play a vital role in maintaining neural plasticity, is lowered in depressive illness and during stress, and can be manipulated by drug treatment including current antidepressants. New antidepressants are needed and they are on their way.

SS7.2.
NEUROSTEROIDS AND MOOD: AN OVERVIEW

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Brain and plasma concentrations of neurosteroids have been observed to modulate in animals behavioral and biochemical responses to acute and chronic stress, anxiety, depression, aggressivity, convulsivity, anesthesia, sleep, memory, pain and feeding behavior. These observations have suggested that fluctuations of neurosteroids might be involved in the development, course and prognosis of some mental disorders. This has been hypothesized in depressive disorders, in premenstrual dysphoria, in anorexia and bulimia nervosa, in Alzheimer's disease, where increased, decreased or dysregulated secretion of the main neurosteroids and their metabolites has been observed, the impairments correlating with some of the psychopathological aspects of the mental disorders. In particular, decreased concentrations of allopregnanolone have been found in depressed patients, and selective serotonin reuptake inhibitors normalize these levels. On the contrary, allopregnanolone levels are high in patients with panic disorder, reflecting a counterregulative mechanism against the occurrence of spontaneous panic attacks associated with an hypothalamus-pituitary-adrenal axis hyperactivity. The alterations in mood occurring during reproductive events are associated with changes in neurosteroids levels. Women suffering from pre-menstrual syndrome have low basal and stimulated levels of allopregnanolone in the luteal phase and high dehydroepiandrosterone levels, indicating that the onset of premenstrual anxiety may depend on the interplay of neurosteroids with different $GABA_A$-receptor activity within the central nervous system. The modifications in allopregnanolone levels throughout gestation and delivery seem to be related to the alterations of mood and behaviour observed during pregnancy and postpartum period. In conclusion, neurosteroids seem to be involved in

the central mechanisms controlling mood and reproductive function, and possibly mediate some steroid-dependent behavioral changes.

SS7.3.
PSYCHOTROPIC EFFECTS OF SELECTIVE ESTROGEN RECEPTOR MODULATORS AND ESTROGENS

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Estrogens effects multiple central nervous system (CNS) pathways that are putatively involved in regulation of mood and behavior. Their effects suggest potent antidepressant and neuroprotective actions. However, preliminary data suggest antidepressant efficacy only during periods of hormonal instability: the postpartum, perimenstrual and perimenopausal periods. Current data do not support an antidepressant effect of estrogens during other periods. Recent reports also did not confirm the suggested neuroprotective effects of conjugated estrogen in postmenopausal women. Several lines of recent research promise to improve previous disappointing results: a) the discovery of at least two estrogen receptors (ERs) and their differential distribution in the CNS; b) varied affinities of various estrogens to the different ERs; c) the development of selective ER modulators (SERMs) with targeted tissues and ER antagonism and agonism; d) the beginning of a diagnostic shift as well as conceptualization of estrogens' activity in the context of a broader multidimensional field.

SS7.4.
ANTIDEPRESSANT INTERVENTIONS ON THE HPA SYSTEM: USE OF GLUCOCORTICOID ANTAGONISTS

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In recent years increased attention has been paid to the use of glucocorticoid receptor antagonists in the treatment of various depressive states. This report reviews data from a series of studies on acute mifepristone therapy in patients with delusional depression. Data are first presented on a National Institute of Mental Health (NIMH)-funded study of 30 psychotic major depressives (PMD), 30 nonpsychotic major depressives (NPMD) and 30 healthy controls (HC) who were assessed on cortisol and adrenocorticotropin hormone (ACTH) levels from 6.00 pm to 9.00 am, neuropsychological testing, and brain imaging. PMD patients demonstrated significantly elevated cortisol from 6.00 pm to 4.00 am compared to the other two groups. Neuropsychological testing points to deficits in PMD patients in functions mediated by prefrontal cortical, anterior cingulate, and mediotemporal regions. Then, we present recent data on 30 psychotic depressives in whom 8 days of mifepristone therapy was significantly more effective than placebo in reducing psychotic symptoms. Data indicate that changes in cortisol slope from 1.00 am to 9.00 am from baseline to day 8 appear to predict continuation of antipsychotic response to day 28. Recent data from studies by others on bipolar nondelusional depression sponsored by the Stanley Foundation as well as industry sponsored trials in PMD are also presented.

SS7.5.
THYROID HORMONE AUGMENTATION OF ANTIDEPRESSANTS

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An effect of triiodothyronine (T3) to accelerate the action of tricyclic antidepressants (TCAs) and to potentiate their therapeutic effects is supported by meta-analyses. Little is known of the mechanism of these effects and it is not clear whether they are demonstrable with selective serotonin reuptake inhibitors (SSRIs). Studies from our laboratory employing in vivo microdialysis indicated that T3 administered to rats increases the availability of serotonin at central synapses and alters the sensitivity of 5-HT1A and 5-HT1B autoreceptors and alpha-2 adrenergic heteroceptors located on presynaptic serotonergic terminals, which control serotonin release. A prospective, algorithm-based clinical study by our group supported an augmenting effect of T3 in patients with unipolar depression who had not responded to SSRIs. The effect was most striking in women. We are conducting a double blind, controlled trial in which patients with unipolar major depression are randomized to treatment with sertraline (50 mg/day for 1 week and 100 mg/day thereafter if tolerated) plus T3 (20 mcg/day for 1 week, 40 mcg/day thereafter if tolerated) or sertraline plus placebo, for 8 weeks. The primary outcome criteria for augmentation will be the proportion of responders (Hamilton Depression Scale, HAM-D improvement >50%) or remitters (final HAM-D <7) in the two treatment groups based on intent to treat analysis. Several other clinical and endocrine variables are being examined. An interim analysis of data from this trial will be presented.

SS8.
THE EFFECT OF DISABILITY PENSION POLICY ON OUTCOME FROM MENTAL ILLNESS (Organized by the WPA Section on Public Policy and Psychiatry)

SS8.1.
THE EMPLOYMENT OF PEOPLE WITH PSYCHOTIC DISORDERS IN A TIGHT LABOR MARKET

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The purpose of this study was to assess the impact of improved employment opportunities on the work and income of people with psychotic illness and to evaluate the effect of work disincentives in different governmental pension plans. The study surveyed the work and income of two samples of outpatients with psychosis in Boulder County, Colorado, at points in time 3 years apart, 1996/1997 and 1999/2000, during which period the local unemployment rate halved and the earnings disregard under Social Security Disability Income (SSDI) increased. The proportion of subjects in stable employment was 30% in 1996/1997 and 47% in 1999/2000. SSDI recipients demonstrated a larger increase in employment than those receiving no pension, while supplemental security income (SSI) recipients did not. The increased employment raises optimism for the rehabilitation of people with mental illness and focuses attention on disincentives

to employment. The improvement in employment for SSDI recipients may have been partly related to the relaxation in the SSDI earnings limitation in 1999.

SS8.2
DISABILITY PAYMENTS AND RESPONSE TO AN INDIVIDUAL PLACEMENT AND SUPPORT INITIATIVE: USA

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Past studies have shown that the individual placement and support (IPS) model of vocational rehabilitation is effective at helping people with serious mental illness return to competitive employment. Other studies have shown that receipt of public support benefits impedes employment outcomes. Homeless veterans with mental illness (psychiatric diagnoses, substance abuse and dually diagnosed) were recruited in two sequential cohorts of 250 each at 10 sites. The first group received standard case management and residential treatment services. The second group also received IPS. Mixed models will be used to examine the interaction of time, receipt of public support payments and exposure to IPS. It is hypothesized that IPS will have an especially strong impact on veterans who receive disability payments because the employment specialist will be able to address apprehensions about loss of benefits. Both cohorts have been recruited and preliminary analyses show superior employment outcomes for the second cohort which receives IPS. Final outcome data are being collected and will allow timely completion of all proposed analyses. IPS has been shown in this sample to be an effective approach to rehabilitation of mental health consumers. Interactions with disability payments will be analyzed.

SS8.3.
DISINCENTIVES TO WORK WITHIN THE UK WELFARE SYSTEM (AND HOW TO OVERCOME THEM)

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People who are disabled or who experience mental health problems increasingly assert their right to participate in the labour market, free from discrimination. At the same time it is recognised that people who cannot work because of ill health or disability need financial support to maintain a reasonable standard of living. However, welfare systems can be abused and it is the duty of Government to maintain a balance between the interests of disabled people and its responsibility to prevent fraud. Governments in the UK and elsewhere struggle to reconcile these different needs of disabled people with their responsibility to police the welfare system. This study explores the relationship between the welfare system that provides support for those who need it and the employment services that help them achieve their ambitions. The paper calls into question the underlying policy assumption that those who need support are a different group of people to those who would like some kind of employment. It also raises questions about the relative extent of fraud compared with the waste of talent, resources and lives created by keeping people out of the labour market unnecessarily. Finally, it proposes ways of smoothing the path to employment while maintaining a reasonable level of financial security within the constraints of the UK welfare system.

SS8.4.
DISINCENTIVES TO WORK WITHIN THE ITALIAN DISABILITY PENSION SYSTEM

A. Fioritti
Local Health Unit, Rimini, Italy

The Italian welfare system developed during the 1970s and the 1980s is considered one of the most comprehensive in the industrialized world. The nation health system provides health care to all citizens and in most areas of the country provides integrated social care to severely disabled citizens under allowance schemes from the municipalities. Disability benefits are partly delivered by national agencies and partly managed directly by health and social agencies locally. A permanent income from disability benefits is rarely obtainable before many years of illness, and mentally ill patients usually live with their families indefinitely. Work is the most frequently perceived need both by patients and caregivers, often for very practical economical reasons. Health and social agencies developed two main strategies to ensure patients' involvement in work activities: type B cooperatives and train-and-place schemes. The author examines advantages and pitfalls of each system and describes how the experimental introduction of a third kind of intervention (individual placement and support – a technique developed in the USA) has modified the views of users and professionals.

SS9.
MANAGEMENT OF FIRST EPISODE SCHIZOPHRENIA (Organized by the WPA Section on Schizophrenia)

SS9.1.
TREATMENT GUIDELINES FOR FIRST-EPISODE SCHIZOPHRENIA

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Course and outcome in schizophrenia are still unsatisfactory. First break and relapse develop and resolve in stages and may be preceded by prodromal symptoms. According to the vulnerability-stress-coping model, the probability of occurence of a first episode or a future relapse depend on the degree of imbalance between vulnerability factors, stressors, protectors, and coping abilities. Contemporary treatment strategies refer to this model in first-episode schizophrenia both from a preventive and a curative perspective. Illness and treatment concepts are usually not very well developed at these early stages, and illness insight may be temporarily lacking. As a consequence, treatment acceptance and compliance are unsatisfactory at these early stages, contributing to early treatment drop-out and consecutively poor illness course. Longer duration of untreated psychosis seems to have an unfavorable influence on course and outcome, and with recurring episodes response to antipsychotic treatment seems to decrease for yet unknown neurobiological reasons. It is against this background that treatment guidelines need to be developed exclusively for this population being at risk for chronic illness course. Guideline recommendations, optimally to be based on empirical evidence, should cover the whole field of clinical situations, ranging from early recognition and prevention to acute and long-term treatment, including biological and psychosocial interventions. The present paper explores - from an international perspective and within the respective activities of the WPA Section on Schizophrenia - the avail-

ability of those recommendations in current treatment guidelines on schizophrenia and contrasts them with empirical findings especially on long-term drug treatment. It also focusses on the need, structure and function of special services for first-episode schizophrenia.

SS9.2. DURATION OF UNTREATED PSYCHOSIS AND FIRST EPISODE PSYCHOSIS: A STERILE DEBATE?

P. McGorry
Department of Psychiatry, University of Melbourne, Australia

The demonstration that lengthy delays in initiating effective treatment for young people with first episode psychosis were common across the developed world initially surprised and shocked many clinicians and researchers. This sentiment gave way to a detached critique in academic circles as to whether these delays really mattered. Most clinicians saw this debate as somewhat strange, yet it has slowed the momentum of reform in service provision for young people with early psychosis in some settings and undermined progress in others. The debate also distracted attention from the equally important issue of quality and content of care in early psychosis. The evidence is now much more clearcut. Duration of untreated psychosis (DUP) is modestly but robustly correlated with a range of outcome measures in early psychosis both in the short and medium term. It can be reduced through better community mental health literacy and improved service access. It is suggestive but not definitively proven that reducing DUP improves outcome and quality of care. Recent progress will be reviewed and the findings discussed in the context of the early psychosis reform paradigm.

SS9.3. COMPLIANCE AND THE COURSE OF FIRST EPISODE OF SCHIZOPHRENIA

A.G. Awad
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Compliance behaviour during the course of management of first episode schizophrenia is recognized as a significant issue that impacts on the subsequent course of the illness and its outcomes. Yet, such an important issue has not been adequately nor systematically examined. Surveying the literature, as in the case of compliance behaviour during the chronic course of schizophrenia, there is no consistency in reported factors considered as reliable predictors of non-compliance. Among the factors that have been identified are: younger age, more positive symptoms, poor insight, cognitive deficits, frequent relapses, social isolation, side effects, attitudes and subjective responses to medications. On the other hand, there is more consistency about the negative impact of comorbid drug abuse on compliance behaviour. It is my view that compliance behaviour in the early phases of schizophrenia is not very different from that during the chronic phase of the illness and the incidence of non-compliance is almost similar, over 50%. However, what is significant is the serious impact of non-compliance, in such an early phase of the illness, on the long-term course. This requires diligent early recognition and employment of appropriate strategies. I wonder, in view of the frequency and the serious impact, whether compliance therapy needs to be instituted as an important component in the early management approaches.

SS9.4. STRATEGIES OF ACUTE DRUG TREATMENT IN FIRST-EPISODE SCHIZOPHRENIA

R. Emsley
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The second generation antipsychotic (SGA) drugs have had a major impact upon our approach to treating patients with schizophrenia. There is accumulating evidence that these drugs hold significant advantages over their predecessors in terms of both efficacy and tolerability. The clinical advantages of these drugs appear to have most impact close to the onset of the illness, and they are rapidly taking over as first-line agents. Reduced relapse rate and improved long-term outcome with SGAs has recently been empirically demonstrated in randomised controlled trials. Patients suffering from a first episode of schizophrenia are exquisitely sensitive to the effects of antipsychotic agents, particularly extrapyramidal side effects (EPS) and weight gain. The SGAs differ in their pharmacological, efficacy and side effect profiles, and the choice of an agent should be tailored to individual patient profiles. Low-dosing strategies in first-episode patients are best for risperidone and possibly amisulpride, but not necessarily for olanzapine and quetiapine. In countries where access to the SGAs is restricted, considerable use still has to be made of the conventional antipsychotics. Strategies to reduce the EPS burden with these agents include the use of very low doses, prophylactic anticholinergic agents or low-potency conventional antipsychotics. However, these approaches do not appear to reduce the risk of tardive dyskinesia.

SS9.5. LONG-TERM DRUG TREATMENT IN FIRST EPISODE SCHIZOPHRENIA

W.W. Fleischhacker
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Patients suffering from a first episode of schizophrenia generally show higher response rates than patients with a more chronic course of the disorder. Despite this, relapse rates are comparable for these two groups of schizophrenia patients. This underscores the importance of providing prophylactic antipsychotic treatment, which has been unequivocally shown to prevent relapse in a high percentage of patients with both first episode and chronic schizophrenia. Although long-term treatment with first generation antipsychotics has been proven effective in many clinical trials, its acceptance both by patients and clinicians left a lot to be desired. Potentially irreversible side effects such as tardive dyskinesia made some psychiatrists reluctant to prescribe these medications on a long-term basis, while other side effects of the drugs were not acceptable for patients. With the advent of second generation antipsychotics the expectation was that these drugs, generally showing a better efficacy/safety ratio than their older counterparts, would also help to increase the acceptance of antipsychotic relapse prevention, thereby improving outcomes. Two independent large scale clinical trials, comparing olanzapine and risperidone to haloperidol, have demonstrated first encouraging results in this direction. These findings are corroborated by a number of smaller uncontrolled clinical trials that confirm this impression.

SS10.
STRESS, DEPRESSION AND CARDIAC EVENTS (Organized by the WPA Sections on Conflict Management and Resolution; on Women's Mental Health; on Psychiatry, Medicine and Primary Care; and on Occupational Psychiatry)

SS10.1.
BROKEN HEARTS: WOMEN, DEPRESSION AND ISCHEMIC HEART DISEASE

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University Health Network, University of Toronto, Canada

Cardiovascular disease is the leading cause of death for both men and women throughout the Western world. Critical gender differences exist for risk factors, symptom onset, time to treatment, and outcomes for acute ischemic heart disease. This presentation will focus on gender differences in anxiety and depression in ischemic heart disease and the impact on treatment and outcomes using data from our Canadian studies. Among other findings we found that women have more symptoms before and during an acute event, and receive later and less treatment with thrombolytic drugs. Depression and anxiety were common in both sexes, but more common among women heart patients and significantly worsened prognosis. We also discovered that women prefer more information and treatment decision making about their heart disease than men, but feel they receive less. For both sexes, the perception that information needs were met and treatment decisional preferences respected was associated with better self-efficacy, more treatment satisfaction, less depression and improved health behaviors. Recent depression treatment trials with cognitive behavioural psychotherapy and selective serotonin reuptake inhibitors in cardiovascular patients will also be reviewed.

SS10.2.
CRITICAL LIFE EVENTS, JOB STRESS AND RISK OF MYOCARDIAL INFARCTION

T. Theorell
Institute for Psychosocial Medicine, Stockholm, Sweden

Long lasting stress (energy mobilisation) could be an important target in the prevention of cardiovascular disease. The combination of high psychological demands and low decision latitude at work (the 25% with the worst exposure in the working population) - mostly labelled job strain - has been associated with increased risk of developing myocardial infarction in several epidemiological studies (even after adjustment for biological cardiovascular risk factors), and the etiological fraction (the proportion of cases that could be prevented if the working conditions for the exposed subjects could be improved to the level of the rest of the working population) has been calculated to be in the order of 7-13%. A recent study of our own group showed that improved decision latitude could be obtained after a one-year low-intensity course in psychosocial factors for managers in a large insurance company. Lowered morning serum cortisol levels were observed after this effort among employees in the experimental department but not in the control department of the company. Our studies of life events have shown that critical negative work events could increase myocardial infarction risk substantially and that positive events could improve the risk factor patterns.

SS10.3.
DEPRESSION AND CARDIOVASCULAR DISEASE IN THE UNITED STATES

E. Sorel
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Cardiovascular disease and depression are among the ten leading causes of the global burden of disease. It has been anticipated that depression would be the second leading cause of the burden of disease by the year 2020. In fact, in the United States, depression is now the most prevalent medical condition among working Americans. Individuals who are prone to cardiovascular conditions and have an untreated co-morbid depression are more likely to experience a myocardial infarct than those that do not have a co-morbid depression. The author presents current epidemiologic evidence regarding depression and cardiovascular comorbidity, diagnostic, treatments, research challenges and opportunities, and their implications for education, training, and health care policy in the American and global contexts.

SS11.
SEXUAL HEALTH EDUCATIONAL PROGRAMME: AN UPDATE (Organized by the WPA Section on Psychiatry and Human Sexuality)

SS11.1.
INTRODUCTION TO THE WPA SEXUAL HEALTH EDUCATIONAL PROGRAM

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The development of the WPA Sexual Health Educational Program (SHEP) was stimulated by the results of an International Survey on Psychiatry and Sexual Health conducted on a large international sample of leading psychiatrists and sexologists. It documented the minimal and superficial manner in which sexuality and its problems tend to be handled in psychiatric (and even sexological) practice. The SHEP has been developed by an international team composed of experts from the WPA Sections on Psychiatry and Sexuality, Classification and Diagnostic Assessment, and Women's Mental Health. The main task has been the preparation of a knowledge base volume organized into three parts. The first part is devoted to the conceptual bases of sexual health. Of note, a definition of sexual health has been worked out, using World Health Organization (WHO)'s definition of health as a reference. The second part of the knowledge volume deals with comprehensive diagnosis of persons experiencing sexual problems. A comprehensive diagnostic formulation is proposed, based on WPA's International Guidelines for Diagnostic Assessment (IGDA). Additionally, a systematic review is presented of the classification of sexual disorders organized by the phases of the sexual cycle, as well as of their comorbidity with other psychiatric disorders and general medical conditions. The third part of the volume involves comprehensive care of people experiencing sexual disorders. Biological and psychosocial approaches pertinent to men and women are presented. Also reviewed are sets of therapeutic techniques relevant to specific sexual disorders. The volume ends with an illustrative clinical vignette for which a comprehensive diagnostic formulation and treatment plan are presented, as well as with the latest versions of pertinent declarations of the World Association for Sexology.

SS11.2
THE WPA SEXUAL HEALTH EDUCATIONAL PROGRAM (SHEP): DIAGNOSTIC ISSUES AND COMORBIDITIES

C.E. Berganza
Department of Child Psychiatry, Guatemala, Guatemala

Sexual disorders, as most disorders in medicine in general and psychiatry in particular, are multifactorial in their etiology and phenomenology. Physical, genetic, developmental, cultural, individual psychological and interactional factors all operate in their causality and clinical course. Besides, a good number of difficulties in the sexual functioning of the individual are frequently associated with either physical or other emotional conditions that require careful clinical attention. Therefore, the assessment and diagnostic formulation of the clinical condition of the patient who presents for care with sexual difficulties must be careful and comprehensive. In line with these concepts, the Educational Program on Sexual Health of the World Psychiatric Association has developed a body of principles for the assessment as well as appropriate schemas for the diagnostic formulation and classification of the sexual disorders seen in the everyday clinical work and their comorbidities. These principles and schemas, which will be discussed in detail during this presentation, are based on an integrative view of the person of the patient, his/her partner, and his/her family, as well as on the most recent advances in the field of diagnosis proposed by the World Psychiatric Association.

SS11.3.
SEXUAL DYSFUNCTIONS IN A SAMPLE OF EGYPTIAN FEMALE PSYCHIATRIC PATIENTS

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120 female psychiatric patients attending the outpatient psychiatry clinic of Cairo University Hospitals were screened for sexual dysfunction. They were compared with a matched control group from a gynecological clinic. Screening was done in both clinics using the Screening Sexual Functioning Questionnaire. Marital adjustment was evaluated using the global version of the Marital Satisfaction Inventory; personality assessment was made by the Personality Assessment Schedule. Results proved that psychiatric patients had a high rate of sexual dysfunctions, including desire disorder 98.3%, orgasmic dysfunction 95%, arousal dysfunction 83%, dyspareunia 48%, vaginismus 23.3%. In patients seen at the Gynecology Department there were 80% desire disorder, 82.2% orgasmic dysfunction, 60% dyspareunia, 50% arousal dysfunction and 26% vaginismus. Psychiatric disorders in patients with sexual dysfunction were mood disorder 33%, anxiety disorders 25%, somatoform disorders 18.3%, others 3.3%. Circumcision rate was 98.89%. In conclusion, female psychiatric patients have more sexual dysfunctions than female gynecological patients. This result has significant implications for clinical assessment and management.

SS11.4.
PATIENTS' SEXUAL SATISFACTION AND DOCTORS' ATTITUDES

A. Pacheco Palha, M. Mota, C. Coelho
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This study aimed to compare sexual life and doctors' attitudes in a patient group of a psychiatric out-patient clinic with a community health centre group, matched for socio-demographic data. Five adult clients of each group under 65 years old were selected and compiled a schedule covering socio-demographic data, the opportunity to discuss sexual life with doctors, and the Sexual History Form (SHF). Psychiatrists and general practitioners (GPs) filled in a schedule covering diagnosis, medications, kind of approach to sexual life. The mean SHF scores were 0.57 for the psychiatric patients group and 0.39 for the primary care group (better functioning in the latter, $p< 0.001$). In both groups we found a highly significant correlation ($p< 0.001$) between sexual satisfaction evaluated by the patient and SHF score. There was no significant difference in tobacco and alcohol use between the two groups. In both groups, smokers ($p=0.001$) and alcohol consumers ($p=0.005$) had significant better SHF scores than non-smokers and abstinent. Psychiatric patients are used to talk significantly more about their sexual lives than primary care patients ($p=0.05$) and psychiatrists question significantly more their patients than GPs ($p< 0.001$).

SS12.
CONCEPTUAL AND ETHICAL ISSUES IN EARLY DIAGNOSIS AND TREATMENT (Organized by the WPA Sections on Humanities in Psychiatry and on Classification, Diagnostic Assessment and Nomenclature)

SS12.1.
THE PROS AND CONS OF ASSESSING INFORMED CONSENT IN EARLY PSYCHOSIS: THE MacCAT-CR OPTION

K.F. Schaffner
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Research in early detection and intervention in psychosis can raise ethical issues regarding safety, efficacy, informed consent, and stigma. One way to progress is to insure that adequate informed consent from subjects is obtained. A specific, well-tested, easy-to-administer, and reliable instrument (the MacCAT-CR) that empirically assesses informed consent is available to use in such programs. Three versions of the instrument have very recently been produced for use at three sites (Melbourne, Yale, Amsterdam) and exploratory discussions have been held with site leaders. So far, however, no trials of the MacCAT-CR have yet been conducted. It has turned out that there are trade-offs in such research, including concerns about the possible need to change original consent forms, and inappropriately alarming patients by using the MacCAT-CR. A deeper but closely related issue is differing conceptions of psychosis and prognosis at different sites. One MacCAT-CR trial at the University of Amsterdam is nearing approval, which will be described in detail, and which may suggest ways of resolving these concerns. The hope is that only one reasonably uniform instrument may be employed internationally so as to increase the power, significance, and utility of this research.

SS12.2.
EVALUATIVE CONSIDERATIONS IN THE EARLY DIAGNOSIS AND TREATMENT OF SCHIZOPHRENIA

C. Pouncey
Department of Psychiatry, Presbyterian Hospital, New York, NY, USA

Although ethics and epistemology are often treated separately in philosophy, the prospect of early diagnosis and treatment of schizophre-

nia makes apparent the intimate relationship between them. In this presentation, I review how moral concerns about socially stigmatizing diagnoses – especially schizophrenia – influenced early epistemological discussions about psychiatric classification. I provide my own account of how nosologic changes are made and diagnostic criteria modified. This account emphasizes a common confusion in philosophy of psychiatry between methodology and epistemology. Finally, I consider where ethical and epistemic values may direct decisions about whether to include new diagnostic techniques in the diagnostic criteria for schizophrenia. I conclude that considering ethical and epistemological questions together provides a richer understanding of how social expectations might influence psychiatric science.

SS12.3.
SPIRITUAL EXPERIENCE AND PSYCHOSIS: A TEST CASE FOR EARLY DIAGNOSIS OF SCHIZOPHRENIA

K.W.M. Fulford[1], J.Z. Sadler[2]
[1]University of Warwick and Oxford, UK; [2]Department of Psychiatry, UT Southwestern, Dallas, TX, USA

The distinction between spiritual experience and psychotic illness remains controversial. In the DSM, criterion B (of 'social/occupational dysfunction') is helpful in distinguishing adaptive from maladaptive forms of psychotic experience. Assessment under this criterion may also be helpful as the basis of cognitive-behavioural approaches to management. However, current scales for operationalising criterion B are unsatisfactory. Combined with the ambiguity of other key concepts in psychiatric diagnosis (for example the concept of 'clinically significant' as used in DSM), this raises particular difficulties for differential diagnosis at the early stages of a possible psychotic illness. A possible contribution to improved diagnostic methods in this context will be described arising from recent international work on the role of value judgements in psychiatric diagnosis.

SS12.4.
CONCEPTUAL ISSUES IN THE PRODROME OF PSYCHOSIS

M.R. Broome
Institute of Psychiatry, London, UK

The phase prior to transition to first episode of psychosis is increasingly becoming of interest to schizophrenia researchers and clinicians. This talk will review historical conceptions of the prodrome before discussing current conceptualisations and methods of assessment. Transition rates based upon these various measures will be reviewed and our own clinical cohort in South London described. In particular, the nature of their psychopathology and the prominent comorbidity. The talk will conclude with how studying the prodromal phase of psychosis helps us, if at all, to understand schizophrenia and the ethical concerns that have been raised regarding intervention in this group.

SS13.
FAMILY FUNCTIONING AND FAMILY INTERVENTIONS IN AXIS I AND AXIS III DISORDERS (Organized by the WPA Section on Family Research and Intervention)

SS13.1.
PSYCHOEDUCATIONAL MULTIFAMILY GROUPS IN FIRST EPISODE AND PRODROMAL PSYCHOSIS

W. McFarlane
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In nearly every case of first episode or prodromal psychosis, family members are intensely involved. For that reason alone, family intervention at this early stage of illness is essential. Moreover, twenty years of research have demonstrated conclusively that family intervention has powerful effects on the short and intermediate term course of schizophrenia and other psychotic disorders, while more recent research has documented remarkable effects on functioning, negative symptoms and even reductions of medical illness in relatives who participate as partners in treatment and rehabilitation. Psychoeducational multifamily group treatment is an elaboration of the models developed by Carol Anderson, Ian Falloon, and Michael Goldstein. We have developed specific ways of working with families in a long-term treatment model to help them develop increasingly sophisticated coping skills for handling the many difficult problems posed by mental illness in a family member. These problems include such common issues as participation in aftercare programs, medication compliance, the use of illicit drugs, alcohol abuse, violence, and the range of positive and negative symptoms presented by the patient. Using our model of family psychoeducation, we have been able to reduce the rate of relapse of these patients to under 50% of what would have been expected had they received more traditional forms of treatment. This presentation will review the scientific and clinical theory and rationale for family psychoeducation and multifamily groups and describe the treatment model in some detail. It will feature an approach that incorporates the key elements of several earlier models and extends them by adapting them to prodromal and early first episode states. We will review the process of onset of psychosis, especially the interaction of biological and social processes, and the role that families can play in preventing or ameliorating onset, symptoms and eventual disability. Results will be presented from an ongoing study of effects on conversion to psychosis among 47 12-35 year olds in the prodromal phase of psychotic disorders. During the first year, conversion has occurred in less than 25% of those at risk, and schizophrenia has occurred in less than 5%.

SS13.2.
FAMILY THERAPY AND FAMILY FUNCTIONING IN PATIENTS WITH MOOD DISORDERS

G. Keitner, C. Ryan, D. Solomon, I. Miller
Brown University, Providence, RI, USA

We examined the impact of adjunctive family therapy on the functioning of families of patients with major depression and with bipolar disorders. Data are presented from two treatment studies: a) 92 patients with bipolar disorder were randomly assigned to three treatment conditions: pharmacotherapy alone (PT), PT + family therapy (FT); PT + multifamily psychoeducational group therapy; b) 121 depressed inpatients were randomly assigned to follow-up care in four treatment conditions: medication + clinical management

(MCM); cognitive therapy (CT) + MCM; FT + MCM; and CT + FT + MCM. FT and subjective and objective measures of family functioning were based on the McMaster Model of Family Functioning. Bipolar patients with poor family functioning at index episode significantly improved their family functioning in all but one dimension by month 28. Even patients with good family functioning at index episode significantly improved their family functioning in three dimensions. Improvement in family functioning was not related to symptom reduction, whether measured by a priori (Bech-Rafaelsen and Hamilton Depression Rating) or post hoc (median split) definitions. Improvement was related to receiving family treatment. Depressed patients with poor family functioning significantly improved their family functioning by 6 months and were able to sustain the improvement through 18 months. Patients with good family functioning also improved by 6 months but then lost some of the gains. Improvement in family functioning was not related to improvement in symptoms based on a 50% reduction in Hamilton Depression Rating scores. Improvement in family functioning (by number of family dimensions that improved significantly and by level of significance) was related to receiving family treatment. In conclusion, despite improvement in mood symptoms, pharmacotherapy alone does not lead to improvement in family functioning in patients with mood disorders. Adjunctive psychosocial (especially family) interventions were related to significant improvement in family functioning, particularly in families experiencing the greatest distress.

SS13.3.
RELATIONSHIP BETWEEN SELF-PERCEIVED FAMILY FUNCTIONING AND PSYCHOLOGICAL DISTRESS AMONG FAMILY MEMBERS OF JAPANESE BREAST CANCER PATIENTS

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Very little research in Japan has focused on how cancer affects families. The present study aimed to investigate the relationship between physical-psychological-social factors, including family functioning, and psychological distress, such as depression or anxiety, among family members of breast cancer patients in Japan. The subjects consisted of 115 family members of 74 early-stage breast cancer patients after mastectomy. Documented informed consent for the study was obtained from each patient. The subjects completed the Family Assessment Device (FAD), the Zung Self-Rating Depression Scale, and the Zung Self-Rating Anxiety Scale. Multiple regression analysis showed that family-perceived general functioning assessed by the FAD, lower education, present physical illness, past psychiatric treatment, and anxiety of survivor correlated with anxiety among family members, and that lower education and unemployment of patient correlated with depression among family members. These findings suggest that psychosocial interventions that could reduce patient's anxiety and improve overall functioning of families might contribute to reducing family's anxiety as well as promoting quality of life among breast cancer patients and their families.

SS13.4.
ALCOHOLIC FAMILIES: FUNCTIONAL TYPOLOGY REVISITED

T. Kurimay
Psychiatric Department, Saint John Hospital, Budapest, Hungary

We report on a study of an urban population including 64 alcoholic members and 36 control healthy index persons and their families. One of the hypotheses was that the relatives of alcoholics perceive their family functioning as dysfunctional comparing to the relatives of healthy controls. Semi-structured multigenerational interviews, the Miinchen Alcoholism Screening Test (MAST), a socio-economic status questionnaire and the McMaster Family Assessment Device (FAD) were used to evaluate the sample. The FAD is a 60-item questionnaire based on the McMaster model of family functioning. The model describes structural and organizational properties of the family group and the patterns of transactions among family members that have been found to distinguish between healthy and unhealthy families. The Hungarian version of the FAD was implemented by Keitner at al. during the 1980s for major depression. In our sample, the FAD differentiates between families with alcoholic members and healthy families. There were statistically significant differences in the dimensions of problem solving, communication, affective responsiveness and affective involvement between the alcoholic sample and the controls, indicating more dysfunctional patterns in the alcoholic group. The general functioning score also differentiated significantly between the two groups.

SS14.
PREDICTORS OF RESPONSE TO THERAPIES FOR EATING DISORDERS (Organized by the WPA Section on Eating Disorders)

SS14.1
PREDICTORS OF SHORT- AND LONG-TERM TREATMENT OUTCOME IN ANOREXIC AND BULIMIC EATING DISORDERS

M.M. Fichter
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Three large samples of consecutively admitted female patients treated for a major eating disorder (103 with anorexia nervosa, AN, 196 with bulimia nervosa, BN, 68 with binge eating disorder, BED) were studied longitudinally over a period of 12 years. They were assessed at 5 cross-sections (admission, end of inpatient treatment, 2-3 year follow-up (FU), 6-year FU, 12-year FU) using expert rating (Structured Interview for Anorexic and Bulimic Disorders, SIAB; Psychiatric Status Rating Scale; International Diagnostic Checklist) as well as self-ratings (SIAB, Self Rating Version, SIAB-S; Eating Disorder Inventory; Anorexia Nervosa Inventory for Self-Rating, ANIS; Beck Depression Inventory; Symptom Checklist-90; Freiburg Personality Inventory). In addition we assessed a second independent BN sample four weeks before treatment, at the beginning of treatment, at the end of treatment and several times over an 18-months follow-up period. Results of this study showed that no change occurred pre-treatment, statistically and clinically significant and substantial change was induced by therapy and much of this was maintained over the follow-up period. Generally, the 6-year and 12-year course was less favourable for AN, compared to BN and BED. For BN and BED the general pattern of results showed substantial improvement during

therapy, a slight decline during the first 2-3 years after treatment and further improvement and stabilisation from year 3 to year 12 post treatment. 41.3% of the AN group, 17.1% of the BN group and 21.4% of the BED group had poor outcome at 12 year follow-up. 6.8% of the AN group, 2.0% of the BN group and 2.9% of the BED group had died in the 12-year follow-up period. Causal models were calculated based on the longitudinal data testing a-priori postulated hypotheses. In a first step the postulated latent constructs were identified using confirmatory factor analysis. In a second step, the relationships between constructs were tested using path analytic procedures. Results of this and further models based on multiple regression analysis are presented for the short- and long term-outcome of anorexic and bulimic eating disorders.

SS14.2.
DO CENTRAL IMPAIRMENTS OF DOPAMINE SECRETION PREDICT THE RESPONSE TO OLANZAPINE THERAPY IN ANOREXIA NERVOSA?

F. Brambilla[1], S. Fassino[2], C. Ramacciotti[3], P. Santonastaso[4], C. Segura-Garcia[5]
[1]Department of Mental Health, Sacco Hospital, Milan; [2]Department of Psychiatry, University of Turin; [3]Department of Psychiatry, University of Pisa; [4]Department of Psychiatry, University of Padua; [5]Chair of Psychiatry, University of Catanzaro, Italy

It has been maintained that psychopharmacotherapies are less effective than cognitive-behavioral therapy (CBT) in anorexia nervosa (AN). However, psychopharmacotherapies have been usually administered to correct the nutritional approach of anorexics, without considering the mental pathology which is the background of the disorder. Moreover, the drugs have never been selected to correct brain biological impairments, in particular serotonin and dopamine alterations which occur during the course and persist after recovery of AN. The aim of our investigation was to explore whether the administration of olanzapine (OLA), an atypical antipsychotic which might inhibit the AN hyperactive central dopamine function, could be effective in anorexics. Ten anorexics received OLA (2.5 mg/day for 1 month and 5 mg/day for 2 months per os) together with CBT, while 10 received CBT plus placebo, the protocol being double-blind. We tested plasma concentrations of homovanillic acid (HVA), which have been consistently reported to mirror central dopamine function, and administered the Eating Disorder Inventory-2 (EDI-2), the Bulimia Investigation Test Edinburgh, the Symptom Checklist-90 (SCL-90), the Hamilton scale for depression, the Temperament and Character Inventory, the Buss-Durkee Hostility Inventory, the Barratt Impulsiveness Scale, and the Yale-Brown-Cornell Eating Disorder Scale before and after 1, 2 and 3 months of therapy. The association CBT-OLA induced significantly higher responses in the EDI-2, in particular for perfectionism, body dissatisfaction, inefficiency, interpersonal relationships, impulsivity, ascetism, and in the SCL-90 for obsessivity, depression, aggressiveness and vulnerability. These results suggest that OLA plus CBT can be more effective that CBT alone to improve specific psychopathological subgroups of AN.

SS14.3.
SEROTONIN TRANSPORTER POLYMORPHISMS AND SSRI RESPONSE IN BULIMIA NERVOSA

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Department of Psychiatry, University of Naples SUN, Naples, Italy

The serotonin transporter (5-HTT) is the primary target of selective serotonin reuptake inhibitors (SSRIs). A long (l) and a short (s) variant of the promoter region of the 5-HTT gene, with different transcriptional efficiencies, have been identified. It has been suggested that the "s" allele of the 5-HTT gene-linked polymorphic region (5-HTTLPR) is associated with poorer SSRI response in major depression. We investigated whether 5-HTTLPR was associated to SSRI response in patients with bulimia nervosa (BN). Forty-two bulimic women, aged 18-32 years, underwent a naturalistic treatment with SSRIs plus nutritional counselling. After 12 weeks, those patients presenting a reduction in the binge/purging frequency greater than 50% of the pretreatment value were defined as responder. Allelic variation in each subject was determined by using a PCR-based method. At the end of the observation period, 28 women were responder. Homozygotes for the "l" variant of the 5-HTTLPR were significantly more numerous in responder than in nonresponder subjects ($p = 0.0002$), whereas homozygotes for the "s" variant were significantly more frequent in the nonresponder group ($p = 0.005$). The number of heterozygotes (l/s) did not significantly differ between the two groups ($p = 0.1$). Although these data must be considered cautiously because of the naturalistic nature of the study, they suggest that the "l" homozygous condition for the 5-HTTLPR in BN is associated to a higher chance of response to a combined treatment with SSRIs and nutritional counselling.

SS14.4.
ADIPONECTIN AND INSULIN SENSITIVITY IN ANOREXIA NERVOSA PATIENTS: EFFECT OF WEIGHT RECOVERY

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Northside Clinic, University of Sydney and Garvan Institute of Medical Research, St. Vincents Hospital, University of North South Wales, Greenwich, Australia

Adiponectin is a protein produced by fat cells. Studies in patients with obesity and non-insulin-dependent diabetes mellitus have shown that its levels are inversely related to fat mass, insulin resistance and inactivity. In anorexia nervosa patients, adiponectin levels have been shown to be elevated and to decrease with weight gain, although interpretation of data concerning insulin action and sensitivity has been less straightforward. Our study sought to examine these parameters during weight recovery. Adiponectin, glucose, insulin and C-peptide levels were measured after an overnight fast in 8 female anorexia nervosa patients at baseline, during an oral 75 gm glucose tolerance test, 5 days later during 30 minutes of exercise on the stationary bike at 50 rpm, at two weekly intervals during nutritional rehabilitation and 6 weeks after the initial assessment. Insulin sensitivity was also assessed at each of these occasions using the HOMA method of extrapolation from insulin and glucose levels. Indirect calorimetry was performed before and after the glucose tolerance tests and exercise. Total and central fat mass was measured at the initial visit using DEXA. Glucose tolerance and exercise testing along with indirect calorimetry and measurements of fat mass were also performed in 6 healthy lean controls (mean body mass index, BMI=19) as an improved match for the

patient subjects who had already regained 2-10 kgs and whose BMI was close to the diagnostic threshold of 17. Adiponectin levels fell with weight gain and central fat was relatively increased in weight recovering anorexia nervosa patients. Metabolic parameters differed at baseline, with increased carbohydrate oxidation in the anorexia nervosa group, but there were no significant differences after a glucose load or after exercise. Adiponectin in anorexia nervosa is of particular clinical relevance, as increased levels might be expected to protect against the diabetogenic effects of novel antipsychotic agents such as olanzapine, but caution might be warranted in their use during the latter phase of weight recovery.

SS15.
PSYCHIATRIC ISSUES IN PSYCHO-ONCOLOGY: A CHALLENGE FOR THE NEW MILLENNIUM (Organized by the WPA Section on Psycho-Oncology)

SS15.1.
DO DEPRESSION, SCHIZOPHRENIA AND PSYCHOSES INCREASE THE RISK FOR CANCER?

C. Johansen
Institute of Cancer Epidemiology, Danish Cancer Society, København, Denmark

This presentation covers two studies which investigated the cancer risk of patients hospitalized for depression and schizophrenia in two nation-wide cohort studies. In the study of depression, all 89,491 adults admitted to hospital with depression as defined in ICD-8 in Denmark between 1969 and 1993 were identified, for a total of 1,117,006 person-years of follow-up. The incidence of all and site-specific cancers were compared with the national incidence rates for first primary cancer adjusted for sex, age and calendar time. A total of 9,922 cases of cancer were diagnosed in the cohort, with 9,434.6 expected, yielding a standardized incidence rate ratio (SIR) of 1.05. The increase was attributable mainly to an increase in risk for tobacco-related cancers. In the second study we investigated the cancer risk in patients hospitalised with schizophrenia in a nationwide cohort study. All 22,766 adults admitted with schizophrenia, ICD-8 295, in Denmark between 1969 and 1993 were followed up for cancer through 1995. A reduction in risk for all tobacco-associated cancers, prostate and rectal cancer was observed in male schizophrenics. The SIR of lung cancer risk was marginally reduced (0.86; 95% CI: 0.65,1.02) in male schizophrenics, due, however, to a reduction in the risk of older patients. Breast cancer risk was increased in female schizophrenics (1.20; 95% CI: 1.05,1.38). The data provide no support for the hypothesis that psychiatric disorders, independently, influence the risk for cancer, but emphasize the unfortunate effect that these disorders can have on lifestyle factors.

SS15.2.
PSYCHIATRIC COMORBIDITY IN CANCER PATIENTS AND NEED FOR PSYCHOSOCIAL CARE

U. Koch, A. Mehnert
Institute of Medical Psychology, Hamburg-Eppendorf University, Hamburg, Germany

The diagnosis and treatment of cancer results in various sequelae such as emotional destabilization, an alteration of the physical integrity and self perception, insecurity with regard to social roles and responsibilities, and a modified relationship with the environment. The relevance of psychological comorbidity is indicated by data suggesting that patients with additional psychological disorders have a higher risk of morbidity and mortality, a higher risk of chronicization, a poorer quality of life, longer hospital stays and lower compliance. A review of comorbidity studies from psycho-oncological research and the results from a questionnaire-based study performed at the Institute for Medical Psychology of the Hamburg-Eppendorf University Clinic are presented. Among different cancer groups, a considerable risk of comorbidity for psychological disorders was found, with an incidence ranging from 10% to 30%. The frequency of psychological disorders requiring treatment appears to be dependent on numerous factors, including socio-demographic variables, illness-related variables (e.g. stage and prognosis of the illness, severity of physical impairment), and psycho-social variables (e.g. available coping resources and social support). A qualified treatment (psychotherapeutic, psychopharmacological, or combined) by trained and experienced specialists (e.g. medical or clinical psychologists or psychiatrists) is thus necessary. Psychological comorbidity in cancer patients, however, is frequently unrecognized by those responsible for primary treatment for several reasons (e.g. diversity of the psychopathology, overlap of somatic and psychological symptoms, underestimation of psychological disorders, lack of knowledge about psychological disorders and treatment). Oncologists responsible for the primary care of cancer patients must be better educated in the diagnosis of psychological comorbidity during their training.

SS15.3.
CREATING A SUPPORTIVE CARE DEPARTMENT FOR CANCER PATIENTS: HOW TO DETECT AND SELECT PATIENTS IN NEED

S. Dolbeault
Psycho-Oncology Unit, Institut Curie, Paris, France

The Interdisciplinary Supportive Care Department for the Oncology Patient (DISSPO) has been implemented to improve care of patients facing complex and multiple physical or psycho-social problems as a result of their disease. DISSPO is composed of 5 care units: mobile unit of support and continuous care, psycho-oncology unit, social service, functional rehabilitation unit, nutrition unit. Patients referred to the DISSPO are supposed to require intervention of 3 of them. In need for screening instruments to detect and select the complex patients, a list of clinical criteria was selected and applied. Sensitization programs with doctors and nurses were organised, helping them to realise this screening step by themselves. Clinical guidelines are on work in order to organise a structured way of giving care to the concerned patients, and to orientate them in an appropriate manner. Finally, we started a clinical study in order to assess the DISSPO effect on patient satisfaction with the care received. 100 consecutive patients referred to the DISSPO will be prospectively compared with 100 control patients matched on age, gender and care setting attendance. Information will be collected on the quality of life and perceptions of care quality of DISSPO patients.

SS15.4.
HOSPITAL AND COMMUNITY PROGRAMS IN PSYCHO-ONCOLOGY: THE ITALIAN EXPERIENCE

L. Grassi[1], P. Gritti[2], M. Biondi[3], R. Torta[4]
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[4]Psycho-Oncology Unit, S. Giovanni Battista Hospital, Turin, Italy

Psychiatrists are only in part aware of the significant consequences of cancer on the patients' mental status. Although a number of Italian studies have been carried out in the field, it is the exception rather than the rule that the departments of mental health (DMH) are involved in the care of cancer patients. While several studies have shown that referral to psycho-oncology services from oncologists is low, the referral to oncologists from psychiatrists is also low. However, many similarities exist between mental health services and cancer services, as far as the integration of care in a multidisciplinary team is concerned. Recent organizational models have been developed within the community and hospital settings with the aim of fostering the liaison between cancer health services, DMH and community medicine. An integrated approach to cancer should in fact involve all the different health professionals (oncologists, general practitioners, palliative care physicians, clinical psychologists and psychiatrists) caring for the patients and their family along the process of the disease (from the diagnostic phase to treatment, from recovery to recurrence and death). Results from recent studies carried out in Italy show the efficacy of involving mental health services in the different areas of psycho-oncology (e.g. child psychiatry with regard to children growing in families where one of the members is a cancer patient or died of cancer, adult psychiatry with regard to the psychiatric complications of cancer or the most recent theme of euthanasia and physician-assisted suicide).

SS16.
TREATMENT OF EATING DISORDERS IN PSYCHOANALYTICALLY INFORMED PSYCHIATRY (Organized by the WPA Section on Psychoanalysis in Psychiatry)

SS16.1.
THERAPEUTIC ALLIANCE IN ANOREXIA NERVOSA

J.A. Barriguete
Rio San Angel 63-1, Guadalupe, Mexico

The treatment of anorexia nervosa can only result from a therapeutic alliance. This emphasizes the importance of the very first interview, whose setting can benefit from a psychoanalytic elaboration. This allows us to grasp the current symptomatology according to its transgenerational dimension. This approach's aims are to allow the patient to make choices about her present and future reality, and to help her to implement her re-constructive capacity (self-awareness and self-effectiveness).

SS16.2.
A NETWORK TREATMENT FOR ANOREXIA NERVOSA

M. Botbol
Clinique Dupré, Sceaux, France

This communication is based on the understanding of anorexia nervosa through the adolescence separation processes. In these processes the adolescent faces a paradox that attacks his/her autoerotic capacities. When these capacities are overflowed, the adolescent is driven to use the external world to cope with the conflicts he/she cannot contain in his/her inner world. Anorexia nervosa may appear as a solution to find a way out from this paradox. Through a clinical example, we shall discuss what consequences these theoretical observations should have on community treatment projects.

SS16.3.
PSYCHOANALYTIC AND PSYCHODYNAMIC APPROACHES TO EATING DISORDERS

M. Corcos
IMM, Paris, France

Our personal experience is based on a population of severe anorexics and bulimics with major symptoms, usually evolving over several years. This practice, which combines a large number of cases and long-term, personalised individual treatments, has enabled the emergence of a certain amount of data from which a number of questions have arisen concerning the mental functioning of these patients. These observations have led us to believe that the essential difficulty of these adolescents lies within their personalities and their capacity to deal with conflict, and particularly to feel and to contain a depressive affect. These characteristics find a common ground in the concept of dependency. In all these personalities there is a predisposition towards an exaggerated dependency on certain people in the outside world: parents, brothers and sisters, etc... with a lack of autonomy and areas of confusion between one's self and these people. In a psychodynamic approach we understand the defensive meaning of the anorectic and bulimic conduct, and its value, as a reorganizing of object relations: difficulties in investing, antagonism between the objectal inclination of these patients and the need to protect their narcissistic balance. The psychopathological significance of these conducts and its therapeutical consequences are discussed.

SS16.4.
APPLYING A TRANSCULTURAL APPROACH IN A CASE OF BULIMIA

I. Atger
Clinique Dupré, Sceaux, France

Does a transcultural approach to eating disorders make sense in clinical practice, and to what extent, depending on whom and on what? We discuss the case of a bulimic patient whose father is Algerian and whose mother is Kabyle, treated in a therapeutic community at the clinique Dupré of Sceaux. A detailed analysis shows that transgenerational interactions and parental projections are to be taken into account, as well as the young girl's dependency and oedipal conflicts. Culture may either favour or obstacle treatment.

SS17.
BIOLOGICAL CORRELATES OF DISTURBED SLEEP (Organized by the WPA Section on Psychiatry and Sleep Wakefulness Disorders)

SS17.1.
NEUROPHYSIOLOGIC FINDINGS IN INSOMNIA

D.G. Dikeos
Institute of Psychiatry, London, UK

Insomnia is characterized by difficulty in initiating and maintaining sleep or complaining about nonrestorative sleep upon awakening, while it is often associated with impaired daytime performance. The symptom of insomnia may be secondary to various medical psychiatric conditions or sleep-wake schedule disturbances, such as those due to work shift or jet lag, while primary insomnia occurs in the absence of such factors. The presence of high beta activity before and during sleep and intrusions of alpha activity into sleep stages is the most prevalent electroencephalographic change in primary insomnia. The 24-hour levels of adrenocorticotropin hormone (ACTH) and cortisol are higher in insomniac patients than in normal controls. Finally, patients with primary insomnia demonstrate an increased 24-hour whole body metabolic rate, increased core body temperature, and longer Multiple Sleep Latency Test (MSLT) times (indicating higher arousal) than sleep deprived controls, whose day following bad sleep is characterized by decreased metabolic rate, lower body temperature, and short MSLT times. All these findings suggest that primary insomnia is a disorder of hyperarousal which is manifested continuously (throughout the 24-hour cycle of the day) and not only during sleep.

SS17.2.
THE NEUROBIOLOGICAL SUBSTRATE OF HYPERSOMNIAS

W. Szelenberger
Department of Psychiatry, Medical University of Warsaw, Poland

Sleepiness is a physiological phenomenon after prolonged wakefulness, but it is defined as hypersomnia or excessive daytime sleepiness (EDS) if it occurs at inappropriate or undesirable times and is not relieved by an adequate amount of sleep at night. In the majority of epidemiological studies, the prevalence of EDS is in the range of 5% to 15%. The neurobiological substrates of EDS are incompletely understood. Numerous brain areas, including brainstem reticular activating system, locus coeruleus, dorsal raphe, hypothalamic loci, basal forebrain, thalamus, and cortex, and many neurotransmitters and peptides are involved in the expression of alertness and sleep. The recently discovered deficient hypocretin neurotransmission in the hypothalamus appears to have a crucial role in narcolepsy. Relatively less is known about mechanisms by which EDS is produced in other disorders. EDS is a sign of sleep disorders, such as narcolepsy, idiopathic hypersomnia, Kleine-Levin syndrome, sleep-related breathing disorder. It is also a symptom of atypical depression. Down-regulation of hypothalamic-pituitary-adrenal axis and corticotropin releasing hormone deficiency are proposed as an explanation for lethargy and hypersomnia in atypical depression. Further, there are a variety of causes leading to EDS, including neurodegenerative conditions, neuromuscular disorders, head trauma, metabolic disorders, substance use. Multiple tools have been proposed for assessing sleepiness, e.g. Stanford Sleepiness Scale, Epworth Sleepiness Scale, Multiple Sleep Latency Test, Maintenance of Wakefulness Test, pupillography, and event related potentials. Various treatment options are also identified. Current treatments for hypersomnia typically enhance dopaminergic transmission; however, it has been suggested that modafinil may act on hypocretin neurons in hypothalamus.

SS17.3.
NEUROBIOLOGICAL CORRELATES OF NIGHTMARES

I.M. Zervas
Department of Psychiatry, University of Athens, Greece

Nightmares have always been an exception and a puzzlement in dream research. As a psychological phenomenon they have not fitted neatly into psychoanalytic dream theory and their role in psychic equilibrium, if they have any, has never been clarified. Even a clear relationship to general anxiety has not been established, contrary to lay thinking. On the other hand, post-traumatic stress disorder has given us more insights about nightmares than any other clinical condition. In this presentation we shall try to bring together findings from the biological, pharmacological, and psychological literature on nightmares in an attempt to organize our current knowledge on the subject as groundwork for further investigation.

SS17.4.
REM SLEEP BEHAVIOR DISORDER

T. Paparrigopoulos
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Rapid eye movement sleep (REM) behavior disorder (RBD) is a REM sleep parasomnia, which is characterized by abnormal behaviors, i.e. vigorous body movements, prominent limb or truncal jerking, vocalizations, and sometimes injurious behavior occurring during vivid dreams. During the episodes, polysomnographic recordings are characterized by the abnormal abolition of muscle atonia that occurs during REM sleep in the absence of epileptic activity. RBD reportedly is rather infrequent and mostly affects older male individuals. It can be either idiopathic or associated with neurodegenerative diseases of multiple etiology, narcolepsy, and medication use or withdrawal; quite often it is a prodromal manifestation of a parkinsonian disorder. The animal model of RBD implicates the area of the brain stem, especially the pontine tegmentum, in the pathogenesis of the disorder; in humans, the exact nature of the underlying neuroanatomic lesions and neurophysiologic mechanisms remains to be clarified. Clonazepam (0.5 –1.0 mg) at bedtime is the treatment of choice for RBD. Patients fully respond to its administration and immediate relief is provided, although relapse following discontinuation of medication is frequent. Adjunctive or alternative treatments for RBD include tricyclic antidepressants, anticonvulsants (e.g. carbamazepine, gabapentin), clonidine, and carbidopa/L-dopa. Protective measures during sleep are also warranted.

SS18.
TREATMENT RESEARCH ON EATING DISORDERS (Organized by the WPA Section on Eating Disorders)

SS18.1.
A RANDOMIZED TRIAL COMPARING TELEMEDICINE VS. IN-PERSON COGNITIVE BEHAVIORAL THERAPY FOR PATIENTS WITH BULIMIA NERVOSA

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This research group has been conducting a randomized treatment study comparing the effectiveness and acceptability of cognitive behavioral therapy delivered via telemedicine vs. cognitive behavioral therapy delivered as per routine practice in a face-to-face interview setting. The purpose of this study is to evaluate the efficacy and acceptability of a treatment via telemedicine, given the fact that studies have shown that manual based psychotherapies for eating disorder patients, and for many psychiatric patients in general, are frequently not available to patients in rural and underserved areas. Subjects for this trial are recruited in various rural settings in eastern North Dakota and Northwestern Minnesota, and the upper Midwest of the United States. These are areas where the population density is quite low. Subjects then are randomly assigned to be treated by a psychologist who travels to their area or to be treated via telemedicine. Thus far 125 subjects have been randomized in the study. To our knowledge this is the first large scale study to examine the effectiveness and acceptability of a manual based form of psychotherapy for adult psychiatric patients. The results of the study will have implications for possible new ways of disseminating psychotherapy to rural and underserved areas.

SS18.2.
FAMILY-BASED OUTPATIENT TREATMENT FOR ADOLESCENT ANOREXIA NERVOSA: A CLINICAL CASE SERIES

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The first controlled studies of family-based treatment for anorexia nervosa (AN) were conducted at the Maudsley Hospital in the UK. These studies have demonstrated that this unique outpatient intervention holds promise for adolescents with AN. There are, however, no published data on this treatment's effectiveness or ease of dissemination in the US. The purpose of this study was to provide a description of a clinical case series of adolescents with AN undergoing this treatment in the US. Participants were recruited from two sites and comprised of 50 adolescents with AN (mean age 14.91 years, and mean duration of illness 14.7 months) and their family members. Therapists adhered to the manualized Maudsley approach. The primary outcome measure was weight expressed as body mass index (BMI) and percent increase of body weight (IBW). Height and weight were obtained at baseline and termination while weight was also measured at every treatment session. Analyses were intent-to-treat. The mean number of treatment sessions was 14.9±10.79, while the mean entry BMI was 17.2±2.18. At last visit or termination, the mean BMI was 19.3±2.71 (p=0.0001). Percent IBW also significantly increased over the course of treatment (83.0±9.12 vs. 93.7±11.87, p=0.0001). Of the 35 female patients who were amenorrheic at the start of treatment, 24 (69%) experienced a resumption of menses at the time of their last visit. Findings from this clinical series in the US are similar to results from the UK, suggesting that the Maudsley family-based approach is an effective and viable outpatient intervention for adolescents with AN, and that this treatment can be disseminated beyond its place of origin.

SS18.3.
THE CONCEPTUALIZATION AND EFFECTIVENESS OF A STEPPED CARE APPROACH TO THE TREATMENT OF EATING DISORDERS

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The Eating Disorder Program at the Toronto General Hospital provides a continuum of care to patients with anorexia nervosa (AN) and bulimia nervosa (BN) utilizing a stepped care approach. This model provides treatment in a group therapy format, with the least intensive, least expensive interventions given to the largest number of patients, reserving the most expensive, most intensive interventions for the most ill patients. The outpatient component of care consists of psychoeducation, followed by motivational enhancement therapy and then cognitive behavioral symptom focused group therapy. The intensive components of treatment consist of day hospital and inpatient programs, followed by outpatient relapse prevention. In terms of effectiveness, psychoeducation, delivered in 6 weekly 1.5 hour group sessions, proved to be ineffective for the treatment of AN, but is a useful first step in reducing binge eating and vomiting for BN, with 11% of patients with full syndrome BN at pretreatment becoming abstinent at post-treatment. A five day a week day hospital was effective for AN, with a mean weight gain of 8 kg and with close to 80% of patients reaching a body mass index (BMI) of 18.5 or above at discharge. For BN, close to 50% of patients left treatment completely abstinent from binge eating and vomiting. Inpatient treatment was effective in normalizing weight for those AN patients who received more than 4 weeks of treatment; mean weight gain for AN, restricting type was 14 kg and for AN, binge/purge type 9.5 kg. Close to 75% of such AN patients left treatment with a BMI at or above 18.5. In conclusion, a stepped care approach to the treatment of eating disorders is both conceptually sound and therapeutically effective.

SS18.4.
COST EFFECTIVENESS MODELING OF ANOREXIA NERVOSA TREATMENT

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Anorexia nervosa (AN) is an expensive-to-treat illness with high mortality. Some health care systems have limited the amount or intensity of treatment provided for AN despite the lack of clearly documented efficacy for these low-intensity approaches. One method that can inform decisions about anorexia nervosa treatment is cost effectiveness analysis. Cost-modeling analysis was used to estimate the incremental cost effectiveness of AN treatment; modeling was chosen given the lack of primary data on costs and outcomes in AN treatment. Data for age of onset, life expectancy, and disease-associated mortality were taken from the literature. The costs of treatment used in the analysis were those at the authors' institution. A variety of treatment scenarios and assumptions were examined using sensitivity analyses. Assuming an approach consisting of inpatient weight restoration followed by treatment of gradually diminishing intensity

(partial hospitalization, then outpatient psychotherapy plus medication management), the costs of treatment were modeled. Incremental cost-effectiveness ratios were calculated comparing to the limited intensity, "usual care" model. These assumptions yielded a cost per year of life saved of $30,180. Relative to many other types of medical interventions, the comprehensive treatment of anorexia nervosa appears quite cost effective in terms of cost per year of life saved. Such data may have an impact on payor decisions in health care systems which severely restrict treatment for anorexia nervosa, and also serves to underscore the serious nature of AN.

SS18.5.
SELF-HELP INTERVENTIONS FOR BULIMIA NERVOSA

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The best established interventions for bulimia nervosa are cognitive behavioral therapy (CBT) and the use of antidepressant medication. The time and expense required to deliver CBT and the relative unavailability of well-trained and experienced CBT therapists has prompted the development of self-help manuals based on the principles of CBT. This presentation will examine the published information on the efficacy of self-help programs in the treatment of bulimia nervosa and review data from a recently concluded controlled study of a self-help program and antidepressant medication in a primary care setting. Ninety-one women with bulimia were randomly assigned to receive either fluoxetine or placebo and either guided self-help combined with medical management or medical management alone. Fluoxetine was superior to placebo in reducing symptoms of bulimia, but there was no evidence of benefit from guided self-help. Controlled studies of self-help programs for bulimia have generally employed a waiting list control group, and found evidence of utility from self-help. However, studies utilizing more active control groups have not been as positive. This presentation will provide a critical review of the data regarding the utility of self-help programs for bulimia nervosa.

SS19.
PSYCHOPATHOLOGY AND TREATMENT (Organized by the WPA Section on Clinical Psychopathology, in collaboration with the Section on Psychopathology of the European Psychiatric Association, AEP)

SS19.1.
NEW PHENOTYPES AS A BASIS FOR TREATMENT

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Modern classificatory systems (ICD-10, DSM-IV) based on a categorical approach are relatively reliable, but they have shortcomings as regards validity. Many clinical characteristics are similar or overlapping, making it difficult to define boundaries between the different diagnostic categories, and the nosological entities do not have pathognomonic features. The purpose of this overview is to point out new directions for etiology and treatment of severe psychiatric disorders. As to cause, the major psychiatric disorders, i.e. schizophrenia and bipolar disorder, are now regarded as multifactorial, but with an important genetic contribution. Search for genetic vulnerability factors has resulted in worldwide interest for new phenotypes that may be easily quantifiable, with enduring traits rather than being state dependent, and with clear neurobiology (intermediate phenotypes). The inherited phenotype may be subtle abnormalities of cortical function resulting in neurocognitive dysfunctioning, or reduced/enhanced neurotransmission. Moreover, for a long while psychotic symptoms have been divided into positive (delusions, hallucinations), negative (poverty of speech, affective flattening, lack of initiative), and disorganized (formal thought disorder, inadequate affect, bizarre behaviour). Recently there has been a renewed interest in catatonia as a separate clinical entity based on genetic and clinical studies. New endophenotypes in psychotic disorders, as mentioned here, are important to define. They can be used in the search for genetic susceptibility for the development of psychosis. This is crucial in the study of pathophysiology, but has also clinical implications. Subsequently more targeted treatment might be available for homogeneous patient groups.

SS19.2.
CATEGORICAL VERSUS DIMENSIONAL DIAGNOSTIC APPROACHES AND TREATMENT

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The main requirement of diagnostics is the improvement of communication in daily practice on the one hand and the clinical relevance of diagnoses with respect to treatment and prognosis on the other hand. As classical classification systems, e.g. ICD-10 or DSM-IV, are not satisfying with regard to the second demand, it is necessary to change the paradigm in diagnostics in order to develop more effective pathogenesis-oriented treatment strategies. A possible alternative to the classical categorical approaches might be dimensional approaches. According to empirical studies carried out in the past decades, the pathogenesis of mental disorders has to be considered as a multidimensional process in which various mental, physical and social variables act as predisposing, triggering and disorder-maintaining factors. Dimensional diagnostics, therefore, has to be phenomenon-, process- and pathogenesis-oriented, taking into account all the multiple mental, physical and social processes underlying the psychopathological phenomena. Such dimensional differential-diagnostic procedures may help to improve the foundations for the development of more effective treatment strategies for our patients.

SS19.3.
UNDERSTANDING AND CARE

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Understanding aspires at collecting a range of phenomena that point to multiple facets of a potentially significant construct, forcing tacit, implicit and opaque phenomena and their meanings to the surface of awareness. In this epistemological context, phenomena can only be gathered by interactive (emotional) involvement, not by dispassionate observation; concepts should not be used as labels of experience, but as expressions which function in an interpersonal, indexical context; the goal of inquiry should preferably be understanding, not hypothesis testing; meaningfulness, and not simply agreement with observation, should validate psychological expression; and, finally, understanding should require a holistic approach which expands rather than constricts the realm of relevant phenomena. The final aim of this meaning-oriented and contextually sensitive approach is care.

SS19.4.
LIFE THEMES IN PSYCHOPATHOLOGICAL CONDITIONS

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Life themes have been a topic of research in psychiatry and psychology since Karl Jaspers. His formal descriptions of life themes as first experience, crisis or constituting world have been followed by the description of life themes by C. Bühler in the 1920s, which focused on the content of experiences: tentative disposition of life themes in adolescence, restriction and working out themes in early adulthood, "work over person" in late adulthood, and conclusion in late life. The renaissance of life theme research in the 1960s with H. Thomae still kept the hermeneutic definition of life themes. The subsequent change of paradigm to objective research stimulated screening studies on representative population samples to extract life themes from narratives, necessarily on a very high abstraction level. For psychotherapy, the content oriented research on narratives was more helpful. Grande et al. could demonstrate that the patient's understanding of the conflictual impact of central life themes and taking responsibility for handling them was the most powerful predictor for the success of psychotherapy. Psychological research on life themes showed that coherence of life themes correlated positively, complexity negatively with mood. Research on false memory effects and the over-generalisation of memory in depressives showed that establishing coherence over different life episodes is a very forceful organiser of the autobiographical memory. It is supported by "anchors" of meaningfulness which govern the selection of episode retrieval. The work of our group started from the clinical observation that life themes frozen in schizophrenic delusion turned out to be a severe obstacle for rehabilitation because they neither could be developed nor let go. We constructed the "Interview for the Retrospective Exploration of Life Events" (IREL), which adopts the life chart method and an assessment module for the affective valence of life themes over their course. Validation data of the instrument will be presented as well as the first results of a pilot study which compares life themes in depressives and healthy controls. One major finding was that depressives show a higher degree of so-called regressive courses of life themes from positive to negative emotional valence compared to controls. Consequences for psychotherapy and perspectives for future research will be discussed.

SS20.
CHILDHOOD SEXUAL ABUSE, PARAPHILIAS AND SEX OFFENCE: ARE THEY RELATED? (Organized by the WPA Section on Psychiatry and Human Sexuality)

SS20.1.
AN EXPERIMENTAL STUDY ON SEX OFFENDER ASSESSMENT

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The present pilot study investigates 24 sex offenders, all males. 15 have been interviewed in the Rebibbia Jail of Rome and 9 have been assessed by experts of the Forensic Psychology Centre of Rome. The first aim of this study is to point out the level of risk for recidivism in the sample. Another aim is to find out any specific historical variables (individual, family, social or cultural factors) associated to sex offence. Finally, we studied moral disengagement mechanisms. We used a checklist developed by the Forensic Psychology Centre of Rome, the Static-99 for the assessment of recidivism risk and the Moral Disengagement Scale of Bandura. In line with recent literature, a low risk for recidivism has been found. No peculiar psychosocial characteristics were observed in the sample. More typical were the data concerning the mechanisms of moral disengagement.

SS20.2.
STIGMA, PSYCHIATRY AND THE SADOMASOCHISM-FETISH POPULATION

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The prevailing attitudes and related myths in the Western societies about the sadomasochism-fetish are presented, and contemporary stigma theory is used to analyze the relationship between the mechanisms of stigmatization, stereotyping and discrimination and these attitudes. Members of this population experience harassment, loss of jobs and custody of their children and this is often legitimized by lay people referring to the categorization of these three sexual orientations as diseases in the ICD system. The ICD-10 diagnoses F-65.0 (fetishism), 65.1 (fetishistic transvestism) and 65.5 (sadomasochism) give occasion for labeling as mentally ill a large population that does not meet the ordinary scientific criteria for psychiatric disorders. Possible psychiatric problems and disorders in this population that are presented to the clinician can better be described as in any other population by using the ordinary diagnoses that are not connected to specific sexual behavior. In contrast to the fight against stigma related to schizophrenia, the sadomasochism-fetish population as a minority group faces stigmatization, to which our non-updated psychiatric profession is contributing. The shortcomings of the present three diagnoses in the ICD-10 are discussed. The use of diagnoses based on myths and not science also gives the psychiatric profession a bad reputation. A revision is suggested to reduce this double-stigma.

SS20.3.
LATE PSYCHIATRIC SEQUELAE OF CHILDHOOD SEXUAL ABUSE

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A relationship between experiencing sexual abuse as a child and the level of subsequent adult adjustment has been hypothesized during the last decade. Childhood sexual abuse (CSA) was particularly hypothesized to have a marked impact on adult sexual functioning and adult adjustment. The prevalence of sexual abuse among patients attending psychiatric outpatient clinic of Cairo University Hospitals was studied. Of 1650 patients screened, 458 (27.75%) had a history of CSA (sexual abuse questionnaire and clinical interviews), of whom 69.2% were males and 30.8% were females. To study the impact of childhood sexual abuse on adult psychological functioning, 60 patients with history of CSA were compared with a control group of patients without CSA. Patients were assessed by a clinical interview, the Short-Check List 90, the Ego Strength Scale, the Defense Style Questionnaire, a measure for adult sexual functions, and the Negative Appraisals of Sexual Abuse Questionnaire (NASA). Patients with CSA showed a higher prevalence of psychi-

atric disorders, a lower age of onset of psychiatric illness, a lower frequency of a family history of psychiatric illness, a high celibacy rate, an unsatisfactory adult sexual functioning, and a higher symptom severity. The relationship with the perpetrator was correlated to adult psychological symptom severity, with intra-familial abuse being associated with more symptom severity.

SS20.4.
CHILDHOOD SEXUAL ABUSE

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Domestic violence is a highly prevalent social and psychiatric problem in Argentina and Venezuela. Childhood sexual abuse is perhaps the most damaging one. The data of both countries shows that at least 30% of our children are victims of some kind of sexual abuse. The black and silence data is and will be unknown. After a visit to Cordoba, Argentina we developed with several collaborators a research protocol which is under way: a) a model of clinical history with a special way to ask questions to a child victim, depending on age and clinical situation; b) a technique using video tape filming of cases in order to avoid repetition; c) a diagnostic model which takes into account the role of the family, the school and the society (more than 80% of the cases occurred inside the family group); d) a treatment scheme following Cohen's experience in dealing with the most controversial issues involved in each particular case; e) bringing to the attention of law makers, local and national governments, school directors and mass media the real situation involved in this pandemic, and formulating child adolescent protection laws; f) developing a treatment model and protocol for treatment of sex offenders. We present the approach from Argentina and Venezuela to this very sensitive problem.

SS20.5.
FORENSIC SERVICES AND THE MANAGEMENT OF VIOLENT SEXUAL PREDATORS

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A relationship has long been established between forensic psychiatry and institutions that house serious and violent criminals, including sexual predators. Along with many other doctors, psychiatrists have made it a point to work in these institutions where many of their charges suffer from major mental conditions and require specialized treatment either within the institutions or on temporary transfer to mental hospitals. A prominent group of inmates are incarcerated as a result of major and, usually, bizarre sexual crimes; the type that creates a feeling of abhorrence in the population. Physicians and psychiatrists are also expected to look after their health needs. A problem occurs, however, when these inmates are about to leave the institution and, by virtue of treatment relationships, are expected to continue receiving these services once released. Many correctional institutions have adopted a policy of "gating". Ordinarily, this means that the individual is immediately re-arrested and committed to a mental institution. The impacts of these policies and the deleterious effects on staff morale, retention of personnel, and budgetary allotments will be the subject of this presentation.

SS21.
LABOUR, LAW AND DISABILITY (Organized by the WPA Section on Forensic Psychiatry)

SS21.1.
CRIMINAL OFFENCES AND MENTAL ILLNESS: WHAT ARE THE PUBLIC PERCEPTIONS AND THEIR CONSEQUENCES?

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Despite increased efforts to reduce the stigma related to mental illness, public attitudes are still dominated by the perception that mentally ill people are generally violent and dangerous – which is unsupported by empirical findings. The stereotype of dangerousness continues to shape perceptions of people with a mental health problem, thus limiting patients' life chances. At the same time, the heightened public discussion on the role of mental illness in criminal behaviour has been accompanied by an increase in the number of criminal offenders who have been admitted for psychiatric treatment. In Germany, their number has doubled over the past 25 years. In addition to the legal system, psychiatry appears increasingly to be considered as an adequate institution for dealing with criminal offenders. This involves both chances and risks: on the one hand, mentally ill offenders increasingly have access to appropriate treatment rather than mere incarceration – with potentially more positive outcomes and better public security. At the same time, the growing pressure on forensic care and the emotionally taxing kind of therapeutic contact puts staff at these facilities at a stronger risk for burnout – with negative impacts on quality of care and treatment outcomes. This may lead to reinforcing public doubts as to the effectiveness of forensic interventions. Measures to reduce mental health-related stigma and improve the conditions for effective forensic care will be suggested, including: a) stress and burnout management programmes for forensic staff; b) placing forensic care within the legal rather than medical system, while offering psychiatric treatments; c) continuing public relation efforts, especially facilitating contact with people who have a mental illness to dispell stereotypes of violence.

SS21.2.
PRISON PSYCHOSES

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With reference to mental illnesses with psychotic symptoms, a substantial proportion of German psychiatrists maintain the distinction which originated in the last century between "true psychoses" and "prison psychoses". The disorders regarded as "true psychoses" generally fit into the category of schizophrenic illnesses, with psychopathology which may be coloured by prison conditions in aspects such as the contents of delusions, whereas "prison psychoses" are specific reactions to imprisonment. "Prison psychoses" have not entered international classification systems (ICD-10, DSM-IV) as a distinct clinical entity. Attempts to differentiate them diagnostically from the early manifestations of "true" psychoses, especially schizophrenic illnesses for which imprisonment has to varying degrees been identified as an important trigger, make reference to the narrowness of the scope of paranoid beliefs in prison psychoses, with a tendency for delusions to be limited to the immediate environment but not to relate directly to fellow prisoners. Another differentiating factor

which has been identified as crucial is the termination of prison psychotic phenomena with the interruption or ending of imprisonment, even though there may be "remnants" in the form of "now affect-free remains of delusions" or querulant or hypochondriac character traits. The research project deals with the question whether "prison psychoses" can be differentiated from schizophrenic disorders in prisoners and what special features are demonstrated by prisoners with the diagnostic label prison psychosis with regard to sociodemographic, clinical-psychopathological and forensic factors.

SS21.3.
ADDICTION TREATMENT AND JUSTICE SYSTEMS: EXPANDING LINKAGES

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This presentation will review the recent North American attempts to build bridges between the substance abuse treatment network and the criminal justice system. The conceptual bases for this rapprochement include the experiences of prohibition versus legislation as well as the "war on drugs" versus the "harm reduction" approaches. Other considerations include the issue of responsibility for one's behavior, the promotion of the disease model, the constitutional right to medical care as well as the influence of demographic variables such as race, gender and class. The developing North American alliance between police and health systems, drug courts as well as rehabilitative measures including therapeutic communities, substitution therapies such as methadone maintenance in the jail and in the community will be outlined along with implications for the future.

SS21.4.
STIGMA AND EMPLOYMENT INEQUITY

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No single activity conveys a sense of self more so than work. It influences how and where an individual lives, it creates opportunities for social contacts and social support, it gives a title and a social role, and it confers social identity. To be excluded from the workforce not only creates material deprivation, it erodes self-confidence, and results in isolation, alienation, and despair. Unemployment is a key risk factor for mental health problems ranging from mild psychosocial stress, to serious depression and suicide. The converse is also true. Mental health problems also predict unemployment, and the resulting social and economic hardships undermine quality of life, community participation, and recovery. Employment inequity occurs when one's chances of finding or keeping a job are hampered by prejudicial attitudes. It is the result of discriminatory employment practices, including hiring, firing, and workplace management of those with a mental illness. Disability legislation, enacted in many countries, requires employers to make reasonable accommodations for those with physical and psychiatric disabilities. Despite a willingness and capacity to work, those with mental health problems continue to be significantly underrepresented in the workforce. This paper synthesizes current knowledge on stigma and work, and how stigma functions through various forms of employment inequity to create and reinforce social disadvantage, poverty, and psychiatric disability.

SS22.
EUROPEAN PSYCHIATRY FROM 1800 TO 2004: INSTITUTIONS, CONCEPTS AND POLICIES (Organized by the WPA Section on History of Psychiatry)

SS22.1.
CONCEPTS OF MENTAL DISORDERS IN THE 19TH AND 20TH CENTURY: WHY DO THEY MATTER FOR PRESENT-DAY PSYCHIATRY?

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The concept which is applied by the individual psychiatrist in the treatment of his or her individual patient is not only a theoretical issue. It has a lot to do with practical questions like doctor-patient relationship, patient's autonomy and long-term therapy planning. This paper discusses three major approaches to the concept of mental disorders since the late 18th century: the realistic, nominalistic and biographical approach. This framework is still in use nowadays. The implications of each concept for practical issues in psychiatric therapy and research are discussed.

SS22.2.
MADNESS IN THE HOME. FAMILY CARE, PSYCHIATRY AND WELFARE POLICIES FOR THE MENTALLY ILL IN THE 19TH AND 20TH CENTURIES IN FLORENCE

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University of Florence, Italy

The view that the asylum is the only place for the care of the mentally ill is a prejudice. And it is necessary to promote family care. This represented the main advice that well-known psychiatrists such as Lombroso and Tamburini offered at the time that the first Italian law on insanity was being drafted. Why did this 1904 law, which insisted on the dangerousness of patients in psychiatric hospitals, brush aside the original advice of the experts? The model that they intended to extend to the national level was clearly in force in Florence, where family care began early (in 1866) and assumed important and lasting dimensions. In some cases the psychiatric patients were sent to a farm family on contract (according to a similar model for looking after abandoned children). But most often the patients were officially assigned in custody to their own families and subsidized by the government (contrary to the idea that it was the poor who wished to disembarrass themselves of their mentally ill relatives). The study of this experience, on the basis of archival sources of the asylum and the provincial government, permits an understanding, more scholarly than activistic, of a law that lasted too long, from 1904 to 1978, until the so-called Basaglia law. And the confrontation of evidence and self-interest - on the part of the municipality doctors, the psychiatrists, the police, the neighbors and in addition a lady who was a militant advocate of "aiding the working class"- gives us a rich group narrative of attitudes and behaviors concerning the mentally ill, important for the history of psychiatry as well as for the history of the family and of society.

SS22.3.
JURISDICTIONS OF PSYCHIATRIC PRACTICE: ON THE EMERGENCE OF UNIVERSITY CLINICS IN GERMANY

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The paper explores the emergence of university psychiatric clinics and their impact on professional development in late-nineteenth century Germany. It argues that these clinics represented a fundamental redistribution of expert labor insofar as academic practitioners acquired jurisdiction over the work of laboratory and bedside research, professional training, and hygienic prophylaxis. Focusing mainly on Wilhelm Griesinger's reform project at the Charite hospital in Berlin, it explores the professional politics of competing jurisdictional claims to control psychiatric practice - claims that pitted academicians, alienists, and representatives of other medical specialties against one another. The paper situates these jurisdictional disputes within the context of institutional priorities, administrative strictures, regional systems of psychiatric care, and growing public scrutiny of the profession in Imperial Germany. It illustrates how the organization of contemporary psychiatric practice is prefigured in debates that are nearly 150 years old.

SS23.
PSYCHIATRY, LAW AND ETHICS (Organized by the WPA Section on Psychiatry, Law and Ethics)

SS23.1.
EDUCATIONAL PROGRAMS IN ETHICS IN PSYCHIATRY

A. Carmi
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The student specializing in psychiatry during the course of his studies and the graduate psychiatrist during his clinical activities are both beset with more recurrent ethical problems than face any other health carer. Surveys of the educational syllabuses of the world's medical schools indicate a woeful lack of instructors and teaching aids in ethics. The dearth of instructors is evidenced by the fact that courses in ethics, if they exist at all, are given to students by staff members who have no qualifications in ethics. As for the lack of teaching aids, it derives from the fact that current syllabuses are not updated to accord with modern scientific progress and are not structured methodically. A contribution to the teaching of ethics by the WPA and by its Standing Committee on Ethics and the Section on Psychiatry, Law and Ethics in particular, will undoubtedly be of tremendous importance to the world's populations requiring treatment. The United Nations Educational, Scientific and Cultural Organization (UNESCO) became aware of the failure of ethical education at medical schools in most countries as a result of two surveys made at 150 medical schools of all the world's continents in 1995 and 2001. The Organization rightly attributed this defect to the phenomenon of the deterioration of relationships between health carers and their patients. UNESCO, entrusted by the United Nations with responsibility for worldwide progress in education as well as science, decided that it must play its part in redressing the situation by providing for the efficient training of the teachers and for ethical teaching aids. These can be achieved by the compilation of a professional curriculum of studies in ethics, followed by national and international seminars at which personnel can be trained to teach ethics as methodized in the new curriculum.

SS23.2.
ETHICS AND MENTAL HEALTH LEGISLATION

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For the past several decades a wave of reform has been felt in many countries in regard to general health services and, most specifically, mental health services. Many of these reform proposals or legislative changes have impacted or have the potential to impact negatively on the entitlements to access to health services. The negative impacts have many facets and range from lack of parity issues or constraints on access to diagnostic or therapeutic modalities to outright discrimination based on inability to pay for health services. Unfortunately, this last challenge to access affects mostly disenfranchised minorities. In mental health, the challenges go past the familiar stigmatizing and discriminating policies of long-term hospitalizations in institutions deprived of basic quality benchmarks and abuses to the dignity and civil rights of patients and onto issues brought about by deinstitutionalization including lack of jobs and discriminatory housing policies. This paper will review issues on mental health policies that perpetuate unethical and discriminatory practices against mental patients and their families.

SS23.3.
MENTAL DISEASES IN THE JEWISH DIVORCE LAW

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There are quite numerous references, already written about 2000 years ago in the Mishna and Talmud, to the mentally ill person, as one who is disconnected from reality and, therefore, is unable to take care of his own matters. Such a person, who is termed, in the Halacha literature, as Shote', is defined in Chagiga as having bizarre manners, such as sleeping in cemeteries and tearing his clothes. Obviously, such person's discretion is defected and accordingly, his legal competence, in matters where such discretion is a precondition to the validity of legal acts. The act of divorce in Jewish law, in particular the handover or servicing the Get, the divorce certificate, is preconditioned with absolutely free will of the Get server, the husband. After Rabenu Gershom's ordinance, the wife's consent as well is a precondition to the divorce. Consequently, it is difficult for the Rabbinical courts to validate divorce when one of the parties is dissociated from reality and cannot use the discretion needed for the free will of the husband, or the needed consent of the wife, to receive her Get. The question of the competence of the mentally ill patient to divorce has attracted a lot of debates during all centuries. The debates are rather in the area of divorce enforcement on the mentally ill husband while he is in remission from his psychotic state and is able both to understand the surrounding reality as well as to use discretion. The presentation will deal with the mental diseases in divorce law, as reflected in the responsa literature and in rabbinical courts ruling in Israel.

SS24.
INTERVENTIONS IN DISASTERS (Organized by the WPA Section on Military and Disaster Psychiatry)

SS24.1.
CHILDREN, FAMILIES, VIOLENCE AND DISASTERS

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Millions of children worldwide are victims of, or witnesses to, violence in the home, community or school. Intra-familial abuse and domestic battering account for the majority of physical and emotional violence suffered by children in the world. In homes where no physical or emotional violence is present, children are still bathed in violent images; the average child spends more than three hours a day watching television. Television, videogames, music and film have become increasingly violent. For thousands of children, school is not safe. The more common forms of school violence are intimidation, threat and simple assault. Much of this is youth on youth violence. When the child perceives threat (e.g., anticipating an assault on self or loved one), his/her brain will orchestrate a total-body mobilization to adapt to the challenge. His emotional, behavioral, cognitive, social and physiological functioning will change. Different coping strategies will be developed to face the danger. Children and the adults who care for them can become further stressed and feel unsupported when a disaster cause rifts in communities and families. Lifelong consequences and early intervention strategies will be discussed.

SS24.2.
NEW DEVELOPMENTS IN THE DIAGNOSIS AND TREATMENT OF POST-TRAUMATIC STRESS DISORDER

J.L. Medina Amor, J.L. Pérez-Iñigo, J. Gomez-Trigo, A. Rodríguez-Palanca
Complutense University, Madrid, Spain

The recent application of new neuroimaging techniques may be helpful in the development of new strategies for the diagnosis and treatment of post-traumatic stress disorder (PTSD). A revision of the diagnostic criteria for this disorder appears necessary, in order to make them more objective. We review recent research findings, including those by our group, obtained by magnetic resonance imaging, single photon emission tomography, electroencephalography and positron emission tomography. Future research lines are outlined. Treatment of PTSD is also reviewed. Several drugs have been studied and seem to be effective. Some antidepressants are actually used in clinical practice with positive results. Other drugs are still under investigation. There is no consensus at the moment about pharmacological strategies to be adopted in this disorder. We provide here some basic guidelines.

SS24.3.
THE ROLE OF THE MEDIA

L. Weysaeth
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The rhetoric of the mass media, particularly in their tabloid form, polarizes, simplifies, personifies, problematisizes, concretizes, brutalizes and vulgarizes traumatic events. The so-called "11 on top" criteria for the press are 1) the news, 2) the consequence, 3) the conflict, 4) the drama, 5) the rarity, 6) trendy, 7) personal focus, 8) "good news", 9) exclusivity, 10) "journalist knows a journalist", 11) nearness in geography. The above aspects of modern media and the work situation of journalists ought to be known by professionals in the rescue service and in the medical preparedness organization for accidents and disasters. The media have important societal responsibilities in connection with traumatic events and may for that reason be of invaluable help in the disaster work. But the media stress may in itself represent a considerable stress on the actors. The experience demonstrates that media strategies ought to be open, honest, engaged, warm and self-critical. If you appear as infallible, inaccessible, critical and cold "you ask for it". A media strategy presumes that there is contingency planning, a press center, a spokesman with clear authorization, media knowledge, mandate to take initiatives, for example to hold press conferences, that there is an understanding of the media's professional background and their resources, that the 24-hour cycle of the media is known, that there is collaboration, that leaders are willing to expose themselves for the media if necessary. Good risk communication, i.e. situations where there is a need to calm, but not to deny/belittle, demands that the communicator 1) is perceived as competent, 2) has a reputation for being open and honest and 3) has a capacity for empathic communication. Division of responsibility for disseminating information when the main rescue center/ local rescue center are involved in large transport accidents is as follows: 1) The transport company may confirm the event/facts related to the event, may take care of the interest of the injured, diseased and their next of kin, may/should inform about the background for the accident, inform about the transport company's implemented support services, about the consequences for continued transport activities ("business in the crisis"), prepare for interview with survivors/witnesses. 2) The rescue service is responsible for all information about the rescue operation, about injured/diseased and survivors, may make identities of deceased known and inform next of kin about the deceased or missing (coordination). 3) The hospitals are responsible for informing the next of kin of the injured, may give permission for journalists to interview with injured and may inform the media about physical injuries. 4) When it comes to foreign citizens, it is that nation's embassy that is entitled to disseminate information about the involved citizens and consequences for their activity, may disseminate name of injured and deceased and inform about other actions.

SS24.4.
DISASTERS AND SPECIAL GROUPS: CHILDREN AND ELDERLY

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Several authors report a very high prevalence of post-traumatic stress disorder (PTSD) among children who are exposed to a disaster. Detection of mental health problems and early intervention in these children are extremely important. We review some strategies developed in order to work with children in disaster situations, including psychological and pharmacological interventions. The elderly represent another high risk group. Few studies have been carried out in this group. Risk factors for mental health problems in a disaster situation are probably different among the elderly compared with the general population. The incidence of PTSD among the elderly who are exposed to a disaster is not clear. Recent studies show a special vulnerability among elderly with dementia. We review preventive measures to be adopted by both specialists and caregivers.

SS24.5.
THE PROCESS OF BEING A VICTIM IN DISASTERS AND CATASTROPHES

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[1]University of Buenos Aires, Argentina; [2]El Salvador University, Buenos Aires, Argentina; [3]Complutense University, Madrid, Spain

Psychiatric intervention in disasters and catastrophes should be aimed to prevent the development of pathological reactions, to assist those who have been harmed and to prevent a subsequent worsening of the problems. The process of being a victim is one of the most characteristic and dangerous in a disaster situation. The process of victimization is usually started by the damaged social group. The role of the victim is one in which the damage is perpetuated and from which the harmed person is not able to move. The process of being a victim has a great influence and impact on the indemnification that the harmed people receive. The way this indemnification is awarded can reinforce the process of being a victim. We will present the way to prevent, detect and manage this process.

SS25.
THE ROLE OF THE PSYCHIATRIST IN THE HIV/AIDS EPIDEMIC (Organized by the WPA Section on Urban Mental Health, in collaboration with the American Psychiatric Association, APA)

SS25.1.
HIV-ASSOCIATED PSYCHIATRIC AND NEUROPSYCHIATRIC DISORDERS: AN OVERVIEW

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Human immunodeficiency virus (HIV) infection affects the central nervous system in a variety of ways: exacerbating preexisting psychiatric disorders, as a result of the virus itself in the brain, as a consequence of opportunistic infections in the central nervous system (CNS), and as a result of treatments for HIV or secondary complications of chronic infection. The assessment and treatment of psychiatric disorders will be discussed, with emphasis on CNS complications, mood disorders/depression, drug-drug interactions, somatic syndromes, and psychotic disorders. Working with patients with CNS complications of HIV infection and immune deficiency requires a thorough understanding of both the medical and psychiatric aspects of HIV disease.

SS25.2.
THE PLACE OF HIV PSYCHIATRY IN THE INTERNATIONAL COMMUNITY

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The role of the psychiatrist in treating HIV-infected patients is becoming increasingly more significant. HIV-infected patients continue to face neuropsychiatric and psychiatric aspects of HIV disease: 10% of AIDS patients present with neurological diagnosis at first presentation and 75% of AIDS patients have brain pathology at autopsy. Psychiatrists worldwide, whether in urban or rural communities, are finding more and more that they are working with HIV-infected patients. Appropriate training is needed to assess, diagnose, and treat the neuropsychiatric sequelae of HIV disease. This paper will review the role of the psychiatrist in working with patients infected and affected by HIV.

SS25.3.
MENTAL HEALTH ASPECTS OF HIV/AIDS: AN INTERNATIONAL SURVEY

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In spite of considerable progress made in some countries in the prevention, identification and treatment of mental disorders in AIDS patients, many other countries continue to struggle with a myriad of problems related to lack of resources, insufficient education, difficult access to treatment, cultural issues, and stigma. To compile a database of needs concerning mental health aspects of AIDS, the American Psychiatric Association and the World Psychiatric Association (WPA) have mailed a survey to 119 member societies of WPA. The questionnaire is divided into four parts. The first part collects identifying information; the second part deals with demographic and epidemiological information. The third part poses questions concerning services for people with HIV-AIDS and the last part asks responders to rate their level of interest in training for various areas of treatment of neuropsychiatric aspects of AIDS. We will present the results of the survey and will discuss the implications for future projects aimed at addressing this most pressing problem.

SS26.
PSYCHOPHYSIOLOGICAL CHARACTERIZATION OF MENTAL DISORDERS: THERAPEUTIC IMPLICATIONS (Organized by the WPA Section on Psychoneurobiology)

SS26.1
STRUCTURAL BRAIN ABNORMALITIES IN GOOD AND POOR OUTCOME PATIENTS WITH SCHIZOPHRENIA

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In a series of imaging studies we examined the regional brain volumes in patients with schizophrenia and normal comparison subjects, and evaluated their relations to outcome. High-resolution magnetic resonance (MR) images were acquired in patients with schizophrenia (n=106) and normal comparison subjects (n=42). Patients were divided into good-outcome (n=52) and poor-outcome (Kraepelinian, n=54) subtypes based on their ability for self-care. Brain images were stereotaxically divided into 39 Broadman areas and gray and white matter segmented and volumetrically quantified. Compared to good-outcome group, patients with poor-outcome (Kraepelinian) schizophrenia exhibited significantly larger gray matter volume reductions in the temporal and occipital lobes, while no differences were found in the total frontal lobe volumes. Poor outcome in patients with schizophrenia may be associated with a more posterior distribution (posteriorization) of gray matter deficits across the widely distributed cortical regions. This pattern was also seen in detailed analyses of the anterior/posterior dimension of the cingulate gyrus (Broadman's areas of the cingulate arch 25, 24, 23, 31, 30, 29). Poor-outcome subgroup exhibited significant bilateral gray matter deficits in posterior cingulate and retrosplenial cortices compared to good outcome patients, while no white matter increases in these areas were seen. Possible consequences of this posterior volume change may include

thought disorder, disturbance of consciousness, treatment resistance, and cognitive decline, indicative of a dementing process, possibly a superimposed or inherent part of this schizophrenia subtype.

SS26.2. PSYCHOPHYSIOLOGICAL ABNORMALITIES IN CHILDREN WITH DYSLEXIA: THERAPEUTIC IMPLICATIONS

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This study is intended to investigate the cerebral mechanisms involved in reading through the analysis of event-related potentials (ERPs) recorded from normal children and from children affected by developmental dyslexia. ERPs were recorded during four reading-related tasks: the stimuli consisted of visually presented letters and non-alphabetic symbols. In the first two tasks, subjects were asked to passively watch at symbols and letters, respectively, without making any effort in reading or silently articulating them. In the other two tasks, subjects were asked to read aloud the letters that appeared on the screen after the technician or the subjects themselves respectively pressed a button. On the basis of the muscular activity of the lips during reading aloud and of the forearm flexor muscles during button press, the ERP components were divided into four periods. The premotor period occurs while the subject is preparing to read and precedes the stimulus onset. The pre-lexical period (<160 ms post-stimulus onset) comprises the first stages of visual information processing. The lexical period (160-420 ms) is likely related to stimuli categorization and control mechanisms. The post-lexical period contains long-latency components (420-800 ms) associated with long-term memory and feedback processes. Statistically significant differences of latency and amplitude of several reading-related components were noticed comparing normal and dyslexic children. The possibility to disentangle the reading function in different lexical periods allows a deeper comprehension of the functional alteration of the normal reading processes in pathological conditions and has therapeutic implications since provides the possibility to develop tailored rehabilitative intervention programmes.

SS26.3. COGNITIVE PREDICTORS OF TRANSITION TO PSYCHOSIS IN AN ULTRA-HIGH-RISK GROUP

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While cognitive deficits are frequently reported in psychotic disorders, it is unclear whether these impairments predate the onset of illness and to what extent they are predictive of later transition to psychosis. Ninety-eight symptomatic and help-seeking patients meeting inclusion criteria for an ultra-high-risk (UHR) for psychosis treatment program were compared to 37 controls. Thirty-four (34.7%) of the UHR group developed psychosis over the course of the investigation. Measures of premorbid and current IQ, attention, memory and executive function were obtained, including subtests from the Wechsler Memory Scale-Revised (WMS-R). Analyses compared the two outcome groups derived from the UHR sample to the control group. The UHR groups included those who became psychotic (UHR-P) and those who did not become psychotic (UHR-NP). Overall, the UHR subjects were significantly impaired in performance IQ ability compared to controls. Further, impairments were also found in the visual reproduction subtest and the verbal memory index (predominantly due to lower logical memory scores) of the WMS-R that were specific to the UHR-P group. No other memory, attentional or executive tasks discriminated between any of the groups. These findings suggest that visuo-spatial processing and some memory deficits were apparent from before the full expression of psychotic illness. Cognitive performance on more complex tasks requiring rapid registration and efficient recall may be compromised prior to development of first episode psychosis. Further experimental tasks that challenge these cognitive domains are required to clarify the predictive value of these results.

SS26.4. NEUROPSYCHOLOGICAL INDICES IN SUBJECTS WITH EATING DISORDERS BEFORE AND AFTER SSRI TREATMENT

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Few studies have investigated neuropsychological and psychopathological indices before and after drug treatment in patients with eating disorders (EDs), reporting an improvement in both domains after treatment. Relationships between psychopathological improvement and cognitive amelioration have rarely been investigated. The present study was aimed to assess neuropsychological and clinical indices before and after short-term treatment with selective serotonin reuptake inhibitors (SSRIs), as well as the relationships between changes in these indices. Sixteen outpatients fulfilling the DSM-IV criteria for EDs (10 bulimics and 6 anorexics) were enrolled. Neuropsychological assessment was carried out by tests exploring executive functions, attention/short term memory and automatic learning of supraspan recurring sequences. Psychopathological evaluation included the Eating Disorder Inventory (EDI) and the Bulimic Investigation Test Edinburgh (BITE). Neuropsychological and clinical assessments were carried out at baseline and after three months of treatment with either fluoxetine or fluvoxamine. The scores on the BITE subscale "symptoms" and on the EDI subscales "bulimia", "drive for thinness", "perfectionism" and "ineffectiveness" were significantly reduced after treatment. Patients were more accurate on the verbal version of the Conditional Associative Learning Task, a test exploring executive functions, and were faster on both verbal and spatial versions of the same test. Clinical amelioration was not related to cognitive improvement. In line with literature, these data confirm an improvement of the neuropsychological and the clinical aspects of EDs after treatment with SSRIs, and suggest that these two domains are at least partially independent.

SS26.5. NEW CONCEPTS OF EPILEPTIC PSYCHOSIS

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In epilepsy there are various psychiatric manifestations. Epileptic psychosis is the most significant, and since the middle of the 19th century it has strongly attracted psychiatrists' interest. The main focuses of attention have been the alternative occurrence of seizures and psychotic symptoms, and the relationship between epilepsy and schizophrenia (or schizophrenia-like psychosis). In this paper epileptic psychosis is reappraised regarding psychiatric symptoms or states in relation to seizures and/or disturbances of consciousness and con-

sidering the time span of psychotic states. Further, the neural mechanism underlying psychotic symptoms is discussed on the basis of the concept of abnormal neural plasticity. One can classify epileptic psychotic states as follows: postictal psychotic state, petit mal status, temporal lobe status, cerebral organic or toxic psychotic state, episodic psychotic or dysthymic state, interictal neurotic state, interictal psychotic state. In epilepsy psychiatric symptoms or states are temporally described as ictal, episodic and continuous. The time span of the symptoms or states may relate to the neural mechanisms underlying the events. Most psychotic symptoms or states of epilepsy appear after a somewhat long period since the first seizure. A neuronal mechanism of abnormal plasticity develops with the repetition of seizure activity, underlying psychotic symptoms or states. Additionally, psychological circumstances influence the patient's mental state and worsen psychopathological symptoms or states.

SS27.
ACCESS TO CARE IMPEDIMENTS: AFRICAN, AMERICAN AND EUROPEAN EXPERIENCES (Organized by the WPA Sections on Conflict Management and Resolution; on Women's Mental Health; on Psychiatry, Medicine and Primary Care; and on Occupational Psychiatry)

SS27.1.
ACCESS TO CARE IMPEDIMENTS: THE EXAMPLE OF TUNISIA

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Up until recently, mental health was afforded low priority in Tunisia as in other developing countries faced with major health concerns such as epidemic diseases or infant mortality. Consequently, despite steady advances, psychiatric care did not share the progress of the rest of medicine and remains greatly underdeveloped. Thus, today, the access to mental health care is significantly hampered by a crucial shortage of resources (one bed/10,000) and manpower (one psychiatrist/75,000) facing a huge growing request of care. Furthermore, the expressed needs are far below the potential needs, as shown by some epidemiological data. As an example, less than 10% of patients with major depressive disorder and only 50% of individuals with schizophrenia are seeking professional help and benefit from specific treatments. In fact, many cultural constraints still stand in the way of mental health care seeking and access, such as the strong belief in a variety of supernatural causes of mental illnesses, the cultural-bound "somatoform symptomatology", and above all the stigmatisation of mental disorders and psychiatric care. Last but not least, health care is becoming increasingly expensive and low-income people cannot benefit from the new but costly therapeutic opportunities that can optimise the compliance and minimize the risk of relapse. Information and sensitisation are the best tools to enhance mental health care access in countries where psychiatric care hasn't always been fully in harmony with the prevailing cultural norms in the community.

SS27.2.
ACCESS TO CARE IMPEDIMENTS: SCANDINAVIAN PERSPECTIVES

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Free and equal access to health services, including mental health, irrespective of sex, race, age, ethnic group or social class, is a basic assumption of the health systems in the Scandinavian countries. An increasing number of patients entering mental health care come from other cultures and till now insufficient focus has been directed towards investigating special needs and demands of psychiatric ill immigrants. About 8-10% of patients treated in Danish psychiatric institutions have a non-Danish background with large geographical variations. No mental health policy is directed towards immigrants and no special public services provided. In order to elucidate the particular problems related to the immigrant population, a questionnaire was sent to all Danish psychiatric institutions to assemble information about local services/projects involving immigrants. Based upon this regional focus, group interviews were carried out with the local liaison officers. The paper will concentrate on issues of concern related to: delineation of the population treated at psychiatric institutions, available psychiatric services, staff competence and treatment. Recommendations for strategies to overcome care impediments and enhance the cultural competence of psychiatric staff will be outlined.

SS27.3.
MEDICAL NECESSITY: ITS USE AND MISUSE IN THE AMERICAN MANAGED CARE SYSTEM

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Medical necessity has become the fulcrum upon which criteria for approval or denial of health care have evolved in the context of managed care in the United States in the last two decades. Initial lack of professional societies' involvement in defining the terms and reaching a consensus regarding "medical necessity" combined with the misuse and abuse of the term by managed care companies contributed to significant impediments to mental health care, in general, and in-patient care, in particular. Furthermore, the virtual autonomy that physicians had, in the last century, to determine what was medically necessary, has been significantly eroded. The author presents data of a United States study on medical necessity that he stimulated as chairman of the Partnership for Parity Working Group of the Washington Psychiatric Society and as a consultant to the project. The study data indicate that American health insurers increasingly reserve the contractual authority to make medical necessity decisions that depart from scientific evidence regarding what is appropriate treatment for psychiatric disorders. Common procedural problems and challenges to "medical necessity" will be presented, as well as the important role of professional organizations, advocacy and advocacy alliances networks in stemming and possibly reversing such misuses and abuses of "medical necessity".

SS28.
MILITARY PSYCHIATRY (Organized by the WPA Section on Military and Disaster Psychiatry)

SS28.1.
THE PSYCHIC STATE OF THE HUNGARIAN SOLDIERS BEFORE AND AFTER PEACEKEEPER MISSIONS

G. Kovacs
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The aim of our study was to evaluate the psychic state of "healthy" soldiers before and after the peacekeeper operations and to compare the psychological effects of different stressful missions. We used two scales to measure psychological functions: the Short Check List-90 (SCL-90) and the State-Trait Anxiety Scale. The study was carried out in the soldiers deployed to the SFOR-KFOR Task Force and to Iraq. Anonymity was allowed but the soldiers could give their name for the follow-up. The state and trait anxiety level of the SFOR-KFOR soldiers was lower after the deployment. The factors of the SCL-90 were decreased after the mission. We could compare the results of the groups of soldiers deployed to the Balkans and to Iraq. The pathological effects of different deployments can be recognized only by personal examination and/or follow-up.

SS28.2.
COPING WITH STRESS DURING IRAQ DEPLOYMENT

L. Weysaeth
University of Oslo, Norway

During their last week of service in southern Iraq, 84% of the first Norwegian contingent responded to a 25 page questionnaire for the study "Perception of risks, threats, and a meaningful service". The three most frequently mentioned positive aspects of the service were teamwork, excitement and carrying out a job one was prepared to do. While half of the soldiers judged the Norwegian force contribution in Iraq as highly successful, two thirds saw their own contribution in a similar light. Separation from family, the physical conditions and the media coverage were the most negative aspects. Improvised explosive devices (IEDs), extreme heat and hostile public crowds were reported as the most significant risks. Some 80% had experienced stone throwing from crowds, about 25% had been exposed to small arms fire, 16% had been involved in severe danger situations. One out of four stated that the service was a strain on the relationship to partner. Telephone was a more important communication channel to family than e-mail. 75% reported that phone contact was of vital importance. The fear arousing effect upon the families at home by the tabloid media coverage, and its consequences for the family support to the soldier appears to be a major concern. However, 68% felt they had been able to correct the family's exaggerated worries based upon mass media reports. Twenty percent stated that skewed media reports about what they had accomplished reduced the meaningfulness of their service. The study sheds some light on the effects of the former regime lojalists' strategy of inflicting losses in the force in order to arouse family and public concern in home country.

SS28.3.
MILITARY PSYCHIATRY: CURRENT ISSUES

P. McAllister
Duchess of Kent's Psychiatric Hospital, Catterick, UK

The recent conflict in the Arab Gulf saw the large-scale deployment of field mental health teams (FMHT), in support of one UK division and its constituent brigades. This presentation describes the goals, activities and findings from a FMHT deployed alongside a general support medical regiment covering the rear divisional area. The rate of psychiatric casualties was much lower than anticipated, but the expected bias towards less experienced personnel and reservists will be demonstrated. We will cover all stages of the operation, from predeployment training to reception, staging and onward integration, operations, redeployment and homecoming, describing the core activities of the FMHT at each stage. The presentation will expand upon the team's publication in the Journal of the Royal Army Medical Corps in June 2004 and present data on personnel who were returned from active duty on mental health grounds.

SS28.4.
WAR SYNDROMES: A HISTORICAL PERSPECTIVE

J.L. Perez-Iñigo, J.L. Medina Amor, J. Gomez Trigo, A. Rodríguez-Palanca
Complutense University, Madrid, Spain

War syndromes have been described for more than two hundred years, with different names. All of them consist of a group of symptoms, affecting several organs. They have many symptoms in common, wherever they have been described. Also, it seems there is no specific expression depending on the different cultures. Even when they have been initially studied as somatic affections, they have been finally found to have a psychological etiology. In recent conflicts, various syndromes (e.g., the Gulf syndrome, the Balkan syndrome) have been described. Comparing them with the other previously described syndromes, we find a very significant similarity in their expression. It seems that we are talking about a unitary syndrome, related to stress and psychological factors, that appears in every war situation, with no important differences.

SS28.5.
MILITARY PSYCHIATRY: FUTURE TASKS

P.W. Jepsen
Military Psychiatrist, Denmark

Written just after the Korean War, that of classical military psychiatry was the story of a success. The story was that, if the proper treatment was provided, 80% or more of mass casualties suffering from a combat related mental breakdown could be cured within a few days. This was just the news needed in a cold war with few if any reserves in manpower on the Western side. The cured mental casualties were the potential reserve in manpower. Fortunately the cold war never became hot. So we will never know if the story was true. But looking back, what were the facts behind the story? Late in the First World War, Salmon introduced the concept of forward psychiatry. However, we know very little about possible effects of this intervention. Salmon also introduced the concept of 'preventive psychiatry', meaning predeployment selection of personnel by psychometric measures with the purpose to deselect future mental breakdowns. Used for the first time in large scale in the beginning of the Second World War, preventive psychiatry turned out to be a failure and for this reason the Allied Armies reintroduced forward psychiatry. Although there was certain-

ly a tendency that the number of mental and physical mass casualties varied with the roughness of combat, there was only limited evidence for the effect of acute psychiatric intervention. We have only limited data from the Korean War and as of the Vietnam War data are inconclusive. However, the conclusion might very well be that the story of classical military psychiatry was too good to be true. But there is another story. In modern Western warfare there is a limited number of casualties and no mass casualty situations. A significant fraction of veterans, however, develops post-deployment syndromes, the nature of which remains at least partially obscure. These disorders give rise to significant morbidity. The so-called Gulf War syndrome is an example. It seems that every major war has produced a similar syndrome of its own. Most of these veterans do not fulfil the diagnostic criteria for post-traumatic stress disorder and it remains to be proved that these disorders are long-term consequences of combat stress or cumulated stress. These veterans claim to have a psychical disease rather than a mental one and typically they relate their disease to environmental combat factors rather than to stress. It is the challenge of future military psychiatry to address these complicated questions. The main task of future military psychiatry may no longer be to handle mass casualty situations during combat but to diagnose and offer treatment to veterans with post-deployment disorders.

SS29.
QUALITY IMPROVEMENT: PRACTICE GUIDELINES AND SUICIDE PREVENTION (Organized by the WPA Section on Quality Assurance in Psychiatry)

SS29.1.
TREATMENT GUIDELINES IN SCHIZOPHRENIA

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Mental disorders pose an increasing burden on societies all over the world. At the same time, treatment variations within and between countries are prevalent. Reasons for this have to be investigated in order to improve care for people with mental disorders. The World Psychiatric Association (WPA), Section on Schizophrenia (W. Gaebel), Section on Quality Assurance (J. McIntyre), and N. Sartorius; the World Health Organization (WHO) Regional Office for Europe (W. Rutz); and the German Society of Psychiatry, Psychotherapy and Nervous Diseases (DGPPN), Section on Quality Assurance and Guidelines (W. Gaebel), have set up a program on Treatment Guidelines in Psychiatry. The program is coordinated by the University Department of Psychiatry, Dusseldorf, Germany. The aim of the program is: a) to collect existing treatment guidelines worldwide, b) to evaluate these guidelines according to predefined criteria, c) to compare them with respect to key recommendations, d) to investigate regional, cultural and other specific characteristics, and e) to estimate the impact on psychiatric care in different countries. National scientific societies and other national institutions concerned with mental health care have been addressed using a specifically developed questionnaire. Results of this survey will be presented.

SS29.2.
THE AMERICAN PSYCHIATRIC ASSOCIATION PRACTICE GUIDELINE PROJECT: STATUS AND CHALLENGES

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The American Psychiatric Association has published 12 practice guidelines over the past decade. Most of the guidelines are Axis-I disorder based, but the most recently published guidelines are on suicidal behaviours, and last year the first guidelines for a personality disorder (borderline personality disorder) were published. The guidelines are being increasingly used in the United States, and some of them have been translated into 9 languages. A number of derivative products have been developed, including quick reference guides to increase the use of the guidelines by psychiatrists in their day-to-day clinical work. In further increasing the use of the guidelines a number of challenges remain. These will be discussed in this presentation and include increasing the exposure to the guidelines in residency programs, developing other derivative products including pocket cards and personal digital assistant (PDA) versions, being used by managed care organizations and other systems of care. Issues concerning the development of internal guidelines will be highlighted.

SS29.3.
QUALITY IMPROVEMENT EFFORTS AND PRACTICE GUIDELINES: WHOSE GUIDELINES?

J. Arboleda-Florez
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Over the past several years, and in an attempt at improving the quality of medical intervention, there has been a proliferation of practice guidelines and other methods against which to measure whether a particular intervention meets standards for evidence-based medicine. Whether practice guidelines are a good method to improve quality of care or a hindrance and a threat to independent medical decision-making depends on many factors, not the least the originators of the guidelines or those who have commissioned their compilation. Practice guidelines like evidence-based medicine itself cannot be taken as panaceas for quality improvement. Many times they are not what they look to be in the surface, so they require a critical review and a sceptical approach before they can be fully accepted and implemented. This presentation will review some pitfalls of practice guidelines within the general contexts of evidence-based medicine.

SS29.4.
A NATIONWIDE PREVENTION PROGRAM OF DEPRESSION AND SUICIDE IN ICELAND

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National Prevention Against Depression, Directorate of Health, Reykjavik, Iceland

Our program is shaped after a German model, tested in at least one site in Germany and which is currently being organized/launched in several European sites. This project works simultaneously at the level of primary health care, important multipliers or keyholders (teacher and school consultants, social services workers, policeman, priests, media), high-risk groups and the general public. It consists of training workshops, public information, pamphlets, videotapes, posters and

other means. Outcome evaluation in based on impact of training, changes in suicide and suicide attempts rates, changes in antidepressant prescription patterns and public attitude towards depression. The programme was launched in the spring of 2003. Initial assessment of public knowledge showed a reasonably sophisticated level of knowledge of depression and little prejudice. The training workshops concluded so far have received a highly favourable rating by all participants. Baseline measures are available for all parameters and will be repeated annually for the next three years. No conclusions on the impact can be drawn as yet. We will discuss some of the obstacles met in launching a program nationwide and the difficulties in measuring changes in a small population such as resides in Iceland.

SS30.
NEW PERSPECTIVES ON NEUROIMAGING IN SCHIZOPHRENIA (Organized by the Section on Neuroimaging in Psychiatry)

SS30.1.
CORTICAL AND SUBCORTICAL BRAIN VOLUMES IN DEFICIT AND NONDEFICIT SCHIZOPHRENIA: A MULTICENTER MRI STUDY

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Structural brain imaging studies comparing patients with deficit schizophrenia (DS) with patients with nondeficit schizophrenia (NDS) have yelded inconsistent findings. In a multicenter study, sixty-five patients with a DSM-IV diagnosis of schizophrenia (34 DS and 31 NDS) and 27 healthy controls were enrolled. Each subject underwent a conventional spin echo magnetic resonance imaging (MRI) examination and both cortical and subcortical gray matter volumes were analyzed. Gray matter volumes were decreased in frontal and temporal lobes in the whole patient group, when compared to controls. All the evaluated subcortical structures, with the exception of the left caudate, showed an increased volume in the patient group, which was statistically significant for the pallidum and thalamus. Thalamic and lateral ventricles volumes were increased in the NDS group, with respect to healthy controls. The volume of right thalamus was larger in NDS than in DS patients. The relationships between antipsychotic treatment and the volume of subcortical structures were then investigated. Fifteen patients were treated with standard antipsychotics, 38 with novel antipsychotics and 7 with both types of drugs. ANCOVA analyses revealed that the volumetric abnormalities found in DS vs. NDS patients were not related to the dose or type of antipsychotic treatment or to the illness duration. Brain morphological differences between DS and NDS lend support to the hypothesis that the two syndromes may have different etiopathogenetic mechanisms. At least in chronic and stabilized patients with schizophrenia, volume increase in subcortical structures seems to be independent of antipsychotic treatment.

SS30.2.
PHARMACOGENOMICS OF ANTIPSYCHOTICS IN SCHIZOPHRENIA: A ROLE FOR FUNCTIONAL NEUROIMAGING?

A. Bertolino[1,2,3], G. Caforio[1], G. Blasi[1,2], M. De Candia[1], V. Latorre[1], V. Petruzzella[4], M. Altamura[1,2], G. Nappi[1], S. Papa[4], J.H. Callicott[2], V.S. Mattay[2], A. Bellomo[5], T. Scarabino[3], D.R. Weinberger[2], M. Nardini[1]
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Molecular genetic approaches provide a novel method of dissecting the heterogeneity of psychotropic drug response. These pharmacogenetic strategies offer the prospect of identifying biological predictors of psychotropic drug response and could provide the means of determining the molecular substrates of drug efficacy and drug-induced adverse events. In this sense, choosing the right phenotype is a key issue. We are pursuing use of intermediate phenotypes to try and unravel the complexity of genetic susceptibility to schizophrenia and the heterogeneity of response to treatment with antipsychotics. For example, deficits in working memory (WM) and in prefrontal cortical physiology are important outcome measures in schizophrenia and both have been associated with dopamine dysregulation and with a functional polymorphism (Val108/158 Met) in the catechol-O-methyl transferase (COMT) gene that affects dopamine inactivation in prefrontal cortex. We performed a study in patients with schizophrenia to evaluate the effect of COMT genotype on variation in symptomatology, WM performance, and prefrontal cortical physiology in response to treatment with an atypical antipsychotic drug. 30 acute untreated patients with schizophrenia were clinically evaluated with the Positive and Negative Syndrome Scale (PANSS), were genotyped for COMT val/met, and entered a prospective study of eight weeks of treatment with olanzapine. Twenty patients completed two functional magnetic resonance imaging (fMRI) experiments, at four and at eight weeks, using a 3T magnet and the N-back task. There was a significant interaction of COMT genotype and the effects of olanzapine on prefrontal cortical function. Met allele load predicted improvement in WM performance and prefrontal physiology after eight weeks of treatment. A similar effect was found also for negative symptoms assessed with the PANSS. These results suggest that a genetically determined variation in prefrontal catabolism of dopamine impacts on the therapeutic profile of olanzapine. Furthermore, use of intermediate phenotypes seems to be promising to contribute clarifications to the heterogeneity of response to treatment with antipsychotics.

SS30.3.
IMAGING THE FRONTO-STRIATO-THALAMIC CIRCUIT IN SCHIZOPHRENIA

M.S. Buchsbaum[1], W. Byne[1], B.T. Christian[2], D.S. Lehrer[2], E. Hazlett[1], E. Kemether[1], S. Mitelman[1], R. Prikyrl[3], L. Shihabuddin[1], A. Brickman[1]
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In a series of imaging studies we examined the components of the fronto-striato-thalamic circuit. High-resolution magnetic resonance (MR) and diffusion tensor images were acquired in patients with schizophrenia (n=106) and normal comparison subjects (n=42) and a subset of 101 subjects had the medial dorsal and pulvinar traced by fluorine 18-fluorodeoxyglucose positron emission tomography (FDG-PET) while off medication. In a separate cohort of 13 normals and 12 never previously medicated patients, PET scans with D2/D3 ligand 18F-fallypride and with FDG were obtained. Patients with schizophrenia had smaller medial dorsal nuclei, and showed reduced relative metabolic rates in both previously medicated and never-medicated samples. 18F-fallypride binding potential was reduced in the region of the medial dorsal nucleus and this was confirmed both with significance probability mapping and with traced nuclei. Putamens were bigger in patients with schizophrenia who had previously received neuroleptic treatment. The frontal lobe was reduced in size in patients with schizophrenia and showed relatively less FDG uptake in never-previously medicated patients. The anterior limb of the internal capsule where thalamocortical fibers linking the medial dorsal and other thalamic nuclei pass on their way to the prefrontal region was of smaller size in patients with schizophrenia. Taken together, these studies indicate the importance of the fronto-striato-thalamic circuit in schizophrenia and suggest that the thalamus and/or striato-thalamic interaction may be a more important anatomical substrates of drug action than previously appreciated.

SS30.4. SCHIZOPHRENIA P50 SENSORY GATING DEFICIT: CLINICAL AND NEUROCOGNITIVE CORRELATES

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Inadequate inhibition of redundant sensory information, measured as a deficit in auditory sensory gating, is thought to underlie reports of sensory overload and attentional dysfunction in patients with schizophrenia. EEG studies have documented abnormal modulation of sensory information, assessed by P50 amplitude in an auditory paired-click paradigm. Since P50 has traditionally been measured using EEG at one central electrode (Cz), little information is available about hemispheric differences in sensory gating among controls and patients. Unlike standard EEG signal processing, magnetoencephalography (MEG) permits independent left and right hemisphere M50 source strength measurements. In addition to the issue of laterality, the relationship of the P50 gating deficit to clinical phenomena has not been fully explicated. Event-related EEG and MEG were simultaneously recorded from 20 patients with schizophrenia and 15 controls in an auditory sensory gating paradigm. EEG and MEG gating ratios were calculated as P50/M50 amplitude following the second stimulus divided by that for the first stimulus (S2/S1). The Positive and Negative Syndrome Scale (PANSS), the Scale for the Assessment of Negative Symptoms (SANS) and a neuropsychological test battery were administered. M50 dipoles localizing to superior temporal gyrus demonstrated gating similar to that of P50. As expected, patients demonstrated less P50 gating than did controls. Left- but not right-hemisphere M50 gating correlated with EEG gating, differentiated patients and controls, and correlated with symptom ratings and with neuropsychological measures of sustained attention and working memory. Converging evidence from EEG and MEG sensory gating measures, psychopathology ratings and neuropsychological measures strongly suggests a left-hemisphere dysfunction in schizophrenia that is strongly related to the well established sensory gating deficit.

SS31.
WELL-BEING AND QUALITY OF LIFE IN THE 21ST CENTURY (Organized by the WPA Section on Mass Media and Mental Health)

SS31.1.
WELL-BEING AND QUALITY OF LIFE IN THE 21ST CENTURY

M.A. Materazzi
Foundation for Interdisciplinary Investigation of Communication, Buenos Aires, Argentina

Well-being and quality of life are parameters supported by both the education and culture of societies. For the time being, however, they are strongly hindered by violence, discrimination, and a certain banalité that, at times, bursts out violently and, at other times, seems to be subtly in disguise. It is thus absolutely necessary that the structure and means of education are firmly sustained, and we propose that such support be created on the basis of a mix between the teachings of the brillant pedagogists from the 20th century Iván Ilich and Pablo Freire, who keep being in full force in our century.

SS31.2.
MIGRATION AND MENTAL HEALTH: THE ROLE OF THE MASS MEDIA

M. De Berardinis
Local Health Unit, Florence, Italy

Within the frame of the globalization effects that are characteristic of the beginning of this new century, we comment on the impact on mental health of the migration process which took place from Albania to the Florence area of Mugello. Our study examined in particular the role of the mass media in the above mentioned phenomenon as well as in the integration of these Albanian migrants with the local culture.

SS31.3.
THE RELATIONSHIP WITH THE MEDICAL STAFF AND QUALITY OF LIFE IN ONCOLOGY

P.M. Furlan
Mental Health Department, San Luigi Gonzaga Hospital, University of Turin, Italy

We have developed a brief instrument, the Patient Alliance Index (PAI), to measure the patients' perception of the alliance with the medical staff and its correlation with the modifications of their quality of life (QoL) during advanced oncological illness. In all the advanced stages of illness, where the patient and his/her relatives are increasingly involved in the care provision, QoL becomes one of the main factors conditioning the treatment. To guarantee success, the "quality of the relationship" that has been established between the patient, his/her relatives and the staff is crucial. In fact, all the events of the oncological treatment take place within a relational field that defines the impact and the significance of the whole course of events. A functioning relationship with the staff may help patients to "contain" difficult emotions, to face the ongoing reality and even to better tolerate the side effects of treatment. On the contrary, if the relationship with the staff is too "technical", the patient feels himself/herself in the hands of an illness that is progressively worsening, increasing the experience of fear, desperation and loss of control. Since the symptoms are the link with the medical staff, the patient may be induced, more or less consciously, to give expression to his/her emotional needs through the language of physical symptoms. Our study suggests that the PAI can be regarded as an easy to use and relevant instrument characterised by a validity evaluated by an expert team and by patients. From a psychometric viewpoint, it is mono-factorial and characterised by a high self-consistency. A reduced psychological distress was associated with an improvement in the alliance with the staff. A reduced alliance was associated with the worsening in the occurrence of symptoms such as pain, appetite loss and constipation.

SS32.
ECOLOGICAL CHANGES AND MENTAL DISTRESS: THERAPEUTIC PERSPECTIVES (Organized by the WPA Sections on Ecology, Psychiatry and Mental Health, and on Mass Media and Mental Health)

SS32.1.
THE MASS MEDIA, THEIR ENVIRONMENT PERCEPTION, AND CONSEQUENCES THEREOF ON MENTAL HEALTH

M.A. Materazzi, I.-J. Puig
Faculty of Medicine, University of Buenos Aires, Argentina

Currently, it could be said that the mass media are eager to replace the Athens Academy by just manipulating information so that an absolute dominion is generated upon the communities they want to subdue by any spurious means at hand. Hence, a mix between Ivan Ilich's proposal, and Pablo Freire's proposal, i.e. de-schooling on the one hand and increasing the public awareness of the communities on the other hand could be a good possibility to intercept the scheming of the Power, even though we are aware that this is to be an uneven struggle for the time being. Struggle, however, could be strengthened gradually so that George Orwell's *1984* forecast would not come true. To the contrary, the "Book Men" Ray Bradbury created in *Fahrenheit 451* could be in a position to targeting this aim.

SS32.2.
ECOLOGY AND MENTAL HEALTH IN DEVELOPING COUNTRIES: AN EGYPTIAN PERSPECTIVE

T.A. Okasha
Institute of Psychiatry, Ain Shams University, Cairo, Egypt

Africa is a large continent, prone to strife, especially south of the Sahara. Most of its countries are characterized by low incomes, high prevalence of communicable diseases and malnutrition, low life expectancy and poorly staffed services. Mental health issues often come last on the list of priorities for policy makers. Where mortality is still mostly the result of infectious diseases and malnutrition, the morbidity and disablement due to mental illness receive very little attention from the government. Health in general is still a poorly funded area of social services in most African countries and, compared to other areas of health, mental health services are poorly developed. This talk will discuss the effect of ecology on psychiatry and mental health in developing countries, taking Egypt, a North African country, as an example.

SS32.3.
ECOLOGICAL PSYCHIATRY: BIOLOGICAL AND PSYCHOLOGICAL ASPECTS

V. Krasnov
Moscow Research Institute of Psychiatry, Moscow, Russia

Ecological psychiatry, which developed at the end of the last century, had different background, basic thesis, and focuses of attention in Western and Eastern Europe. Among different ecological (outward) factors which influence individuals' and groups' health, Western Europe researchers focused on micro social environment. In Russia and other countries of Eastern Europe, the ecological branch of psychiatry focused on technogenic accidents' consequences and unfavorable physical and chemical industrial factors, as well as particular climatic and geographic conditions. Psychological factors were considered secondary. The revealed disorders mostly corresponded to exogenous reaction type to outward influences. Nevertheless, long-term examination and treatment of patients with ecology related disorders makes us regard these states as the reflection of a whole consisting of biological and psychological factors. Cognitive, affective and asthenic disorders of psychorganic type provoke repeated psychological problems in families, prevent professional activity and complicate or limit social contacts. Polymorphic symptomatology of disorders is sometimes complicated by neurosis-like disorders and personality deviations. In addition, alcohol abuse quite often creates new psychosocial problems. Modern trends of development in ecological psychiatry include studying of both biological and psychological aspects of pathological states. Treatment of disorders caused or provoked by ecological unfavorable factors include pharmacotherapy, psychotherapeutic and psychosocial methods, as well as provision of social support. Family and closest social environment play a significant role in patient's social adaptation.

SS32.4.
SOCIO-CULTURAL CHANGES AND TREATMENT OPTIONS FOR PSYCHIATRIC DISORDERS IN DEVELOPED COUNTRIES

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Changes of human environment, in its social and cultural aspects, influence the approach to the psychiatric disorders, which are in turn

modified by these changes. The rapid and dramatic increase in mood, anxiety, impulse control, substance use and eating disorders in the last decades reflects broad phenomena of developed countries such as population turnover, worsening of relationships, media perception, evolution of people's life style and way of thinking. For instance, panic attacks and post-traumatic stress disorder are syndromes that until a few years ago were not recognized or underestimated and now are in need of adequate integrated treatments. It could be said that "new" psychopathological entities represent reactive and coping modalities rather than ordinary forms of illness according to the medical model. Likewise, behavioral disturbances and personality disorders take place instead of more functional and organized adjustment attempts. In line with a process which could be defined as "psychopathomorphosis", treatment options in psychiatry are changing: self-help groups, non-conventional groups and communities, day hospital settings are increasingly available among the therapeutic resources. More eclectic and resilient attitudes are requested from the therapists' educational track so that they are enabled to face such emerging situations. The complexity of treatment programs is growing and is shared by both territorial and hospital services.

SS33.
TOPICS OF PREVENTION: EVIDENCE AND RESEARCH (Organized by the WPA Section on Preventive Psychiatry)

SS33.1.
WHAT WORKS IN MENTAL DISORDER PREVENTION: A REVIEW OF INTERNATIONAL EVIDENCE

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Prevention of mental disorders is a public health priority in view of the enormous burden these disorders cause and the limitations of existing methods of treatment. However, the attention and resources earmarked for prevention have been rather scarce so far. Increasing evidence on effectiveness of prevention can lead to more widespread utilization of these interventions all over the world and especially in low and middle income countries where the need is the greatest. Effective preventive interventions include macro-strategies (e.g. improving nutrition, housing, access to education, reducing economic insecurity, strengthening community networks and reducing use of addictive substances). Meso- and micro- level strategies can reduce stressors and enhance resilience; these include home-based and preschool interventions in early years of life, reducing child abuse and neglect, managing parental mental illnesses for benefits to children, school-based programmes to reduce risks and to enhance resilience, prevention of family disruption, interventions at workplace and those targeted to the elderly, chronically ill and other vulnerable groups. In addition, a number of strategies are available to prevent specific mental conditions like conduct disorders, depressive, anxiety and eating disorders, substance use disorders, psychotic disorders and suicides. Wider utilization of these strategies requires integration of scientific knowledge into policy and programmes and developing effective links with other sectors.

SS33.2.
CONTRIBUTION OF THE HELLENIC PSYCHIATRIC ASSOCIATION TO PSYCHIATRIC PREVENTION IN GREECE

G.N. Christodoulou, V. Alevizos, V. Kontaxakis, D. Anagnostopoulos
Hellenic Psychiatric Association, Athens, Greece

National associations can play an important role in activities aiming at psychiatric prevention. The Hellenic Psychiatric Association has established a special program to advance this scope on the basis of the following: mental health promotion addressed to the general public; seminars for general practitioners; the Athens Mental Health Promotion Program, organized jointly with the Athens University Department of Psychiatry, the Section of Preventive Psychiatry of the WPA and other agents; special seminars for priests of higher education. There are plans for expansion of this program especially towards more extensive use of the media.

SS33.3.
PROMOTING WELL-BEING AND HEALTH IN RURAL AND REMOTELY BASED POPULATIONS

S. Rajkumar
University of Newcastle, Bloomfield Hospital, Orange, Australia

The paper outlines conceptual issues on health and well-being in rural and remote populations. Drawing lessons from Australian rural experience, mental health promotion programmes that are effective are discussed. Rural settings have difficulties in retention and recruitment of mental health workers and doctors. Given these restraints and the geographical isolation, the quality of care needs to be managed by community health workers, primary care doctors and the nurses in general. Effective programmes need to keep a life span approach in implementing a spectrum of interventions. A comparison is made of rural and remote areas. Mental health promotion in relation to farming communities, vulnerable families, ageing in the country are covered. Promoting well-being and health in aboriginal people in remote areas is explored. Concepts of well-being, health promotion strategies and factors causing mortality, morbidity, suicide, and incarceration in institutions are further elaborated. Efficacy and effectiveness of mental health promotion programmes in rural settings are critically reviewed and suggestions offered on developing more appropriate prevention and promotion activities.

SS33.4.
WHAT CAN WE LEARN FOR PREVENTION AND TREATMENT FROM PROTECTIVE HEALTH RESOURCES REPORTED BY MENTAL PATIENTS?

M. Schmolke
Dynamic Psychiatric Hospital Menterschwaige, Munich, Germany

The paper outlines the concept of psychological (personal) and external (social) resources and their protective functions in disease processes and health care. The concept of resources needs to be embedded into a broadly conceptualized prevention framework which includes a positive health orientation. This would involve a health promotion and salutogenesis orientation complementing a pathogenetic orientation which focuses on diseases, deficits and risk avoidance. Recent research results on protective health resources in schizophrenic patients (such as self help, coping, regulatory activities and social support networks) are presented and their clinical value for prevention and treatment is discussed.

SS33.5.
BURNOUT SYNDROME AMONG PRIMARY CARE PHYSICIANS: A NEED FOR PREVENTION

D. Lecic-Tosevski[1], S. Dimic[1], B. Pejuskovic[1], E. Tanovic-Mikulec[2], B.O. Hoftvedt[3]
[1]Institute of Mental Health, School of Medicine, University of Belgrade, Serbia and Montenegro; [2]Institute of Public Health, Sarajevo, Bosnia and Herzegovina; [3]Committee for Human Rights, Norwegian Medical Association, Oslo, Norway

The burnout syndrome has been claimed to affect a great percentage of human service professionals. Its etiology is multidimensional and includes a variety of organizational, environmental and individual factors. Our study aimed to assess the level of burnout among primary care physicians. The sample consisted of 111 general practitioners (31 from Sarajevo, 41 from Oslo and 39 from Belgrade), who were examined by the Maslach Burnout Inventory, measuring the three dimensions of exhaustion, depersonalization and inefficacy. The inventory was administered during training seminars on mental health in primary care. The highest burnout scores were found in Belgrade physicians, followed by the Sarajevo and Oslo samples. The emotional exhaustion was correlated with the female gender as well as with the daily number of patients. Since burnout affects personal well-being and professional performance, it is important to undertake preventive measures against its development, such as strategies focused on individual and organization.

SS34.
UPDATING SUICIDOLOGY (Organized by the WPA Section on Suicidology)

SS34.1.
VIOLENCE AND SUICIDALITY – A MODERN ISSUE?

J.P. Soubrier
WPA Section on Suicidology

The discussion is based on the link between suicide and violence. Definitions are different: suicide, as a crime against oneself, an act of despair; violence, as a criminal act against others. Prevention has been organized differently. In 2002, the World Health Organization (WHO) Report on Violence – A Planetary Challenge included suicide for the first time, proposing three categories of violence. Psychoanalytical approaches will be described as well as modern suicidological approaches. Cultural and biological information will also be given. An up-to-date socio-political report (France) will be presented. All this confirms the research made by Van Praag on violence and suicidality.

SS34.2.
GLOBAL PERSPECTIVES IN SUICIDAL BEHAVIOUR

J.M. Bertolote
World Health Organization, Geneva, Switzerland

Although the impact of mortality associated with suicide is known from general mortality data banks (such as the one maintained and updated by the World Health Organization, WHO), there is no systematic collection of data related to morbidity (including disability), associated with a variety of suicidal behaviours, particularly suicide attempts. In the absence of population data on that, measures of suicidal ideation and planning have been proposed as indirect indicators of the potential burden of suicidal behaviours in general. Data from a recent WHO study conducted in representative general population samples from ten countries will be presented and discussed. These data refer to suicidal ideation, planning and attempts, and their eventual ensuing contacts (or not) with health care services.

SS34.3.
THE RELEVANCE OF CHILD TRAUMA TO THE PSYCHOPATHOLOGY OF SUICIDAL BEHAVIOURS

M. Sarchiapone, G. Camardese, V. Carli, C. Cuomo, R. Lacerenza, P. Madia, S. De Risio
Institute of Psychiatry, Catholic University, Rome, Italy

Suicidal behaviours are characterized by a phenomenology whose etiology consists of a constellation of components that act together, which vary from one individual to another. Risk factors, from an epidemiological perspective, can be organized in a framework that differentiate between predisposing factors and potentiating factors. To examine psychopathological predisposing risk factors for suicidal behaviour in depressed patients we interviewed 70 patients and completed the Childhood Trauma Questionnaire (CTQ) and Eysenck Personality Questionnaire (EPQ). We will present data showing the relevance of psychopathological variables and childhood trauma to suicide attempts of depressed patients.

SS34.4.
TEACHING SUICIDAL CRISIS INTERVENTION TO HEALTH CARE PERSONNEL AND MEDICAL STUDENTS

J.P. Kahn
Department of Psychiatry and Clinical Psychology, CHU de Nancy, France

Suicide prevention has been considered as one of the major public health priorities by the National Health Conference in France since 1999. In this context the Department of Health (Ministère de la Santé) launched several programs, among which a National Consensus Conference on «Detecting and taking care of a suicidal crisis» (October 2000) and a nationwide program aiming at teaching practical intervention skills to medical staff, nurses, social workers, and other primary care personnel. This program and how it was set up in Lorraine will be presented and its advantages and drawbacks discussed.

SS34.5.
SUICIDE IN BORDERLINE PERSONALITY DISORDER

R. Tatarelli
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Estimates of the lifetime risk of death by suicide among patients with borderline personality disorder (BPD) range from 3% to 9.5%. Patients with BPD represent 9% to 33% of all suicides. According to some studies, patients with chronic suicidality who made 4 or more visits in a year to a psychiatric emergency often meet criteria for BPD. A high incidence of BPD in the adolescents and young adults aged 15 to 24 years who engage in suicidal behavior has also been reported. Those at higher risk appeared to be young, ranging from adolescence into the third decade, which likely reflects a decrease in symptoms severity later in adulthood for most patients. The high rates of suicidal behavior in patients with BPD are reflected by the inclusion of

recurrent suicidal behavior, gestures, threats, or self-mutilating behavior as diagnostic criteria in the DSM-IV. A history of suicidal behavior is found in 55% to 70% of individuals with a personality disorder and in 60% to 78% of individuals with BPD. Suicides by individuals with BPD may carry an extra burden for survivors. Putative risk factors for attempted or completed suicide in BPD, derived from clinical reports and longitudinal follow-up studies, include: a) comorbidity with affective disorder; b) alcohol and substance abuse; c) impulsivity, aggression, and hostility; d) repeated attempts; e) antisocial traits; and f) severity of the disorder. Borderline patients who attempted suicide have more substance abuse than control subjects. Various studies found that the suicide attempters suffering from BPD had experienced more adverse life events recently, particularly in the area of stressful events at home, with the family, or financially. Our meta-analysis shows that suicide among patients with BPD is more frequent than in the general population. All studies except two reported that patients with BPD committed suicide more often than their counterparts in the general population.

SS34.6.
DEPRESSION AND SUICIDE BEHAVIOUR IN THE ELDERLY IN ROMANIA

N. Tataru
Ambulatory Psychiatric Clinic, Oradea, Romania

The aging of population is becoming a reality in developed and less developed countries. As aging is a period of decline, to understand better the needs of the elderly, we must analyse the significant losses of late life, which contribute directly or indirectly to the high prevalence of depression and other psychiatric disorders. Multiple losses in old age are important in decreasing the quality of life and increasing mental health problems in the elderly. Suicide and attempted suicide are one of the major health problems in the world. In all countries old people are the most vulnerable of all groups in human life span. There are very few studies on suicide and attempted suicide in Romania. In the traditional Romanian society, the elderly usually enjoyed much respect and care. The social and cultural changes, with an increase in urban life style and a decrease in the three generation family support, are now a dwindling of our traditional family life and also a challenge. This study presents an analysis of suicidal behaviour in a 50 year and over group from Bihor county, Romania. The aim of this study was to assess any risk factors for parasuicide and completed suicide in a five-year follow-up of a sample of elderly suicide attempters. We made a comparison of people who committed or attempted suicide with controls matched for age, gender, ethnicity, profession and community of residence. To find predictors of suicide in old age is an urgent task for prevention. Caring of the elderly requires an understanding of biological changes in late life and of the specificity of elderly mental disorders. It also requires the recognition of the medical comorbidity in the elderly and the high prevalence of depression. We believe that mental disorders in the elderly are underrecognized and undertreated. These disorders could be more recognizable and better treated if we used an educational prevention program for primary care and a combination treatment including psychopharmacotherapy and community care.

SS35.
PSYCHOIMMUNOLOGY: EVIDENCE AND PERSPECTIVES (Organized by the WPA Section on Immunology and Psychiatry)

SS35.1.
IMMUNOLOGY: CURRENT CONCEPTS IN PSYCHIATRIC DISORDERS

M. Ackenheil
Psychiatric Hospital of the University of Munich, Germany

Alterations of the immune system (IS) are described in various psychiatric disorders. Considering abnormalities of brain functions (BF), especially at the level of neurotransmitters and the endocrine system (ES), and with regard to our current knowledge of cross talks between these three systems, it is easy to understand that the IS itself must be involved in the etiopathogenesis of psychiatric disorders. Nowadays it is widely accepted that psychological stress and psychiatric illnesses may interfere with immune functions. Vice versa, altered immune functions due to somatic illnesses like HIV infection, neurodegenerative disorders and autoimmune diseases interfere with brain activities leading to abnormal behaviours. An outline of our knowledge of interactions between IS, ES and brain functions explains possible abnormalities in relation to psychiatric disorders like schizophrenia, depression, Alzheimer's disease and functional somatic symptoms (e.g. fibromyalgia, chronic fatigue syndrome). The most abnormal clinical findings so far are reported in schizophrenia, a subgroup of which most probably is caused by immune disturbances. In affective disorders, either immune abnormalities induce behavioural symptoms or the concomitant stress causes abnormalities of the IS. Other complex interactive models are discussed for anxiety disorders and organic brain diseases. Current research activities should not be restricted to one single system but must connect the three systems in a comprehensive way.

SS35.2.
IMMUNOLOGICAL RESEARCH IN NEUROLOGICAL AND PSYCHIATRIC DISORDERS

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Several lines of evidence suggest a role for the immune system in the multifactorial pathogenesis of schizophrenia and other psychiatric and neurodegenerative diseases. We report the results of our research on cytokines in different groups of psychiatric and neurological patients. We observed a predominant type 1 cytokine profile in acute multiple sclerosis patients, while IL-10 production predominated in stable multiple sclerosis individuals. The modifications of cytokine profiles observed in schizophrenic patients suggest that clinical improvement is associated with a reduction in the inflammatory-like situation present in those not currently under treatment. Our data on Alzheimer's disease (AD) support the role of the inflammatory process in the pathogenesis of AD and reinforce the hypothesis that the neurodegenerative processes in the AD patients are associated with an abnormal antigen-specific immune response. The activation of immune system mechanisms observed in obsessive-compulsive disorder could be due to the combination of endogenous (hormonal alterations associated to the modifications in the hypothalamic-pituitary-adrenal axis) and exogenous (viral or bacterial infection) factors.

SS35.3.
GENE POLYMORPHISMS IN NEURODEGENERATION: INFLAMMATORY ASPECTS

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An inflammatory process seems to be involved in the pathogenesis of Alzheimer's disease (AD). A "cytokine cycle" has been proposed in the neurodegeneration mechanisms, where the anti-inflammatory interleukins (the best characterised is IL-10) control the beta-amyloid-induced microglial/macrophage response inhibiting the proinflammatory cytokine production (i.e. IL-6). The promoter region of both cytokine genes possesses single nucleotide polymorphisms (SNPs) that correlate with their production (IL-10: –1082 G/A; IL-6: –174 G/C). However, it is not known whether this production represents a late or an early step or precedes the diagnosis itself. We analysed these SNPs in 34 patients with mild cognitive impairment (MCI), a preclinical state of AD, 120 with established AD and 100 healthy controls (HC). The percentage of IL-10 –1082A low-producer allele was significantly higher in AD and MCI patients than HC (66.2%, 64.7% and 55.1% respectively; p=0.06). As expected, the G/G high-producer genotype was lower in AD and MCI than HC (9.8 and 5.9% vs. 20.3%; p<0.05). Noteworthy, the AA genotype and A allele were over-represented in MCI who converted, after three years of follow-up, into AD, compared with stable MCI (allele: 68.2% vs. 61%, genotype: 36.4% vs. 30.4%; p<0.05). For IL-6 SNP, the frequency of C high-producer allele and CC genotype was higher in AD than HC (allele: 38.9% vs. 30.4%; genotype: 14.7 vs. 7.2) and in converting MCI than stable MCI (allele: 36.4% vs. 28.6%; genotype: 9.1% vs. 0%, p<0.05). These data support the theory that the overall risk of developing AD may be governed by a "susceptibility profile" and cast a light on the pivotal role of inflammatory genes in this profile.

SS35.4.
ABNORMAL CYTOKINE PROFILES AND COGNITIVE IMPAIRMENT IN SCHIZOPHRENIA

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On the ground of several lines of evidence, the immune system can be considered one of the factors involved in the pathogenesis of schizophrenia; in particular, abnormalities in the cytokine profile have been reported in people affected by the disease. The most significant evidences include an altered production of interleuchin (IL)-2 and gamma-interferon (IFN) in vitro, higher serum concentrations of the soluble receptor of IL-2 (sIL-2R) and abnormal IL-2 concentrations in the cerebrospinal fluid. Nevertheless, results are often controversial, mostly because of methodological limitations, such as the interference of antipsychotic medication. Since there are some studies showing a link between neuropsychological dysfunctions and abnormalities in the cytokine profile, we decided to investigate this relationship in a sample of schizophrenic patients, by considering their performance on the Self-Ordered Pointing Task (SOPT) and on the Visual Conditional Associative Learning Task (VCALT), which are specific for Broadman areas 46/9 and 8 in the dorsolateral prefrontal cortex (DLPFC) respectively. Preliminary data show a significant correlation between poor performance on SOPT and a higher gamma-IFN production in schizophrenic patients, while no such association was observed for VCALT. Nevertheless, further research is needed to understand better the complex role of cytokines in the pathogenesis and in the cognitive impairment in schizophrenia, maybe with the help of genetic and functional brain imaging techniques.

SS35.5.
IMMUNE-BASED THERAPEUTIC APPROACHES IN SCHIZOPHRENIA

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Findings like increased activating cytokines in the cerebrospinal fluid (CSF) and signs of inflammation in the central nervous system (CNS) have been discussed controversially. Cyclooxygenase-2 (COX-2) - constitutively expressed in the CNS - is suggested to have an important functional role. COX-2 interacts with neurotransmitters such as acetylcholine, serotonin and glutamate, but is also involved in the regulation of immune system and in inflammation in the CNS via effects of prostaglandins, in particular prostaglandin E2. Recently, a role for the new generation of selective COX-2 inhibitors in the treatment of psychiatric disorders has been discussed. Until now, COX-2 inhibitors have failed to show therapeutic effects in Alzheimer's disease, but studies from basic research point to a possible effect on cognition. A clinical effect of the COX-2 inhibitor celecoxib on cognition was observed in schizophrenic patients. The therapeutic effect of celecoxib add-on treatment to the atypical antipsychotic risperidone, however, is not restricted to cognition. A general effect on symptoms of schizophrenia was observed, this finding supporting the view that an immunological/inflammatory process is involved in the pathogenesis of schizophrenia. Other immuno-therapeutic approaches result from viral theories of schizophrenia. Liquor-pheresis showed impressive results in single cases. These approaches are discussed in the context of the type-1/type-2 immune hypothesis of schizophrenia.

SS36.
EVOLUTIONARY PSYCHOPATHOLOGY: TOWARD EMPIRICAL AND EPIGENETIC EXPLANATIONS (Organized by the WPA Section on Psychotherapy)

SS36.1.
EVOLUTIONARY EPIDEMIOLOGY OF PSYCHIATRIC TEMPERAMENTS AND SUICIDE

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Intra-species competition stratifies populations in terms of reproductive fitness in each generation, with two basic alternatives as described by mathematical biology: escalation, Hawk, or de-escalation, Dove. Variations on these strategies are part of what defines both entire species genomes and polymorphisms therein. The Hawk-

Dove model exemplifies deeply canalized neuromentalities entirely compatible with both the basic and clinical science germane to manic-depression and psychosis, the occurrence of which are rendered even more robustly adaptive when epidemiological calculations are corrected for suicide. Moreover, a number of studies link genes expressive of bipolar phenotypy to a variety of traits germane to Darwinian selection, including social dominance, scientific genius, religiosity, artistic creativity and suicide. First reviewed are studies of well-known artists and their family psychiatric histories that associate bipolarity in general and mood cycling in particular with artistic genius and productivity. Then considered is how treatment may be optimized to balance symptom control with creativity and other adaptive features. The paper closes with a discussion of psychotherapeutic and ethical considerations made more pressing amid progress in molecular genomics of psychopathology.

SS36.2.
BIPOLAR TEMPERAMENTS, SUICIDALITY AND ADAPTATION: A DATA-BASED REVIEW

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Prospective and retrospective data-bases are analyzed to better understand the precursor and intermorbid behavior of individuals suffering bipolar psychopathology and suicidality. Interim analysis of empirical clinical data strongly conforms with evolutionary etiological models. The author submits that the affective temperaments represent the most prevalent phenotypic expression of the genes underlying bipolar disorder and that the disorder itself is an aberration, and exists simply because the genes themselves, likely to conform to oligogenic transmission, are useful for evolutionary ends. Depressive traits subserve sensitivity to the suffering of other conspecifics. Generalized anxiety temperamentally subserves altruistic worries that enhance kin survival and, by proxy, that of one's own genome. Cyclothymic traits render the subject more difficult to attain for love-making and sexual selection, thereby attracting more robust spouses for enhanced survival of offspring. Hyperthymic traits lend distinct advantages in exploration, territory, leadership and mating. In line with this Darwinian formulation, new data from the author's international research team has shown that both cyclothymic (.35) and hyperthymic (.34) traits are positively and the depressive (-.10) and anxious (-.14) negatively correlated with Temperament and Character Inventory's novelty seeking. By contrast, harm avoidance is positively correlated with the depressive (.58) and the anxious (.48), but interestingly also with the cyclothymic (.49), and negatively with the hyperthymic (-.53). These data are of clinical relevance, particularly toward the abatement of morbidity and mortality risks.

SS36.3.
PSYCHOSIS, SUICIDALITY AND ADAPTATION: A DATA-BASED REVIEW

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MacLean's conceptual platform essentially describes two opposing archetypal neuromental circuitries at three levels upon which our sociality is based. The first level is the brain stem, midbrain, and part of forebrain. MacLean called this the R(reptilian)-complex, insofar as it became fully instantiated in the reptilian line ancestral to humans. The second comprises a more recent assemblage abutting the earlier R-complex, *viz*, the limbic system (or paleo [old]mammalian complex) arisen with transitional mammals about 300 million years ago. It facilitates nursing of infants, parent-infant bonding, and continuous interactive, reciprocal 'warm-blooded' social life and the emergence of play – reciprocal and convivial social interation - among mammals. The third level, the neocortex (or neomammalian complex) extends increasingly sophisticated and often domain-specific functions such as language, abstract reasoning, and a greatly extended reciprocally interactive social life, including self-consciousness. Prospective and retrospective data-bases are analyzed to better understand the precursor and intermorbid behavior of individuals suffering psychotic psychopathology. Interim analysis of empirical clinical data strongly conforms with evolutionary etiological models. These data are of clinical relevance, particularly toward the abatement of morbidity and mortality risks.

SS36.4.
SUICIDE, ACHIEVEMENT AND CREATIVITY

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Data concerning suicide, psychosis and creativity are analysed with respect to history of obstetric complications as well as psychiatric genetics. Risk of suicide in schizophrenia appears to correlate with persistence of relevant epigenes in excess of population genetic models. This excess is in part due to phenomenologically greater creativity within lineages with psychotic diatheses. That is, suicidality in psychosis is best understood as an example of kinship selection as it is linked to greater creativity which more than compensates for the added mortality of suicide. These data are of clinical relevance, particularly toward the abatement of morbidity and mortality risks.

SS37.
INTERVENTION STRATEGIES FOR MENTAL RETARDATION: AN INTEGRATIVE APPROACH (Organized by the WPA Section on Mental Retardation)

SS37.1.
THE INTEGRATIVE APPROACH: A NEW CONCEPTUAL CARE MODEL AND ITS APPLICATION TO MENTAL RETARDATION

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In 2001, the US National Research Council released a document that identifies a broad domain of questions at the interface of social, behavioural, and biomedical science for improving the health of the population. This conceptual model provides a new paradigm of care for chronic conditions such as mental retardation, where the traditional bio-psychosocial approach failed to provide an adequate framework for care planning and intervention. It defines ten priority areas of social, psychological and biomedical integration: predisease pathways, positive health, gene expression, personal ties, healthy communities, inequality, population health, interventions (effectiveness), methodology and infrastructure. The importance of the key issues in each of these areas with regard to mental retardation is reviewed. The integrative model opens a new and comprehensive approach to care in the mental retardation field.

SS37.2.
A NEW INSTRUMENT FOR THE DIAGNOSIS OF PERVASIVE DEVELOPMENTAL DISORDERS

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SPAID is the Italian acronym for Psychiatric Instrument for the Intellectually Disabled Adult. This is a system of diagnostic instruments. The aim of the present study was to evaluate the psychometric properties of the subscale for pervasive developmental disorders (PDD; SPAID – DGS). A sample of 40 people with intellectual disability was randomly recruited to be assessed using the SPAID – DGS, the Italian adaptation of the Matson's Diagnostic Assessment for the Severely Handicapped (DASH) and the Kraijer's Scale of Pervasive Developmental Disorder in Mentally Retarded Persons (PDD-MRS). Most of subjects were resident in specialised institutes. Around 25% of the sample was found to present a cluster of symptoms consistent with a diagnosis of PDD. The correlation of scores between SPAID and the other two instrument (DASH and PDD-MRS) resulted to be higher than 60%. The internal consistency and inter-rater reliability of the SPAID also resulted to be high.

SS37.3.
APPLICATION OF PHARMACOGENOMICS TO MENTAL RETARDATION

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The fundamental understanding of the genetic processes and their potential application as research tools and therapeutic approaches in many disease areas are increasing rapidly and mental disorders are not exception. Genetic mental retardation is a clinical manifestation of the variable phenotype of a group of diseases (Angelman syndrome, Prader-Willi syndrome, fragile X syndrome, Williams-Beuren syndrome...) involving specific genetic and epigenetic abnormalities. Different molecular mechanisms have been identified in affected patients, including microdelections, intragenic mutations, uniparental disomy, and imprinting centre defects. In contrast to single gene diseases, psychiatric disorders involving mental retardation are genetically complex and involve the expression of a multitude of genes in extremely complex temporal patterns. The heterogeneity of the clinical phenotype hampers the application of a pharmacological treatment. Moreover, a given genetic predisposition may confer a less favourable response to drugs. Pharmacogenomics is the use of genetic information (the influence of the DNA-sequence variation on the effect of a drug) to guide pharmacotherapy and improve outcome by providing individualised and science-based treatment decisions. Drug efficacy and safety could be improved in patients with mental retardation by using pharmacogenomics. Most of new drugs will be likely derived through molecular genetic approaches in the years to come.

SS37.4.
COMMUNITY INTEGRATION OF PERSONS WITH MENTAL RETARDATION: RIGHTS AND RESPONSIBILITIES

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Children's Hospital and Harvard Medical School, Boston, MA, USA

As the result of the normalization movement, it has been widely accepted that persons with mental retardation (MR) have the right to be included in the community and to obtain there integrated habilitation and medical (including mental health) services. However, it was often forgotten that integration into the community requires a transactional, interactive accommodation between the society and the individuals. Often the persons with MR are poorly prepared to make informed and appropriate decisions in order to accept medical and other services, as well as to conform their behavior to the society's standards. Conversely, the services provided by the society may not meet their needs for guidance and support. A related issue is the need to assess the results of the measures to integrate persons with MR into the community. This need led to the concept of quality of life and development of instruments to measure it. Another important issue is how one can assess a person's ability or competence to make informed decisions concerning exercising the rights while fulfilling the responsibilities. The past view that persons with MR are by definition not competent is clearly inappropriate. Currently many jurisdictions use the concept of partial competence that may exist for certain decisions but not for others. We will present data from a cohort of 23 adults with MR who lived in the community and who got into a variety of legal and personal difficulties.

SS38.
THE USE OF PSYCHOANALYSIS IN TODAY'S URBAN MENTAL HEALTH SETTINGS
(Organized by the WPA Sections on Urban Mental Health and on Psychoanalysis in Psychiatry)

SS38.1.
FROM DSM-IV CULTURAL FORMULATION TO PSYCHODYNAMIC UNDERSTANDING IN CULTURALLY DIVERSE URBAN POPULATIONS

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Urban populations are growing increasingly diverse. Migratory waves from rural areas and other countries account for the expanding multiculturalism of urban areas. The DSM-IV cultural formulation outline uses a subjective and narrative approach to understanding the impact of cultural factors on mental illness and its treatment. Using this outline the author explores the multiple layers of interaction between the patient and its cultural environment and demonstrates how this may provide a useful "point of entry" into the psychodynamic understanding of the patient. The cultural perspective provides a useful prism from which to view the patient's symptoms, psychosocial functioning and interpersonal relations. This enhanced understanding may considerably contribute to greater effectiveness of therapeutic approaches. Illustrative cases will be presented for each of the headings and subheadings of cultural formulation.

SS38.2.
WHAT CAN PSYCHOANALYSIS DO FOR HOMELESS' MENTAL HEALTH?

M. Botbol
Clinique Dupré, Sceaux, France

Exclusion and insecurity are becoming major issues in our postmodern urban settings. They increasingly tend to challenge the efficiency of social and health systems in big cities. This applies particularly to mental health of homeless people, which asks for an integrated approach involving many different organizations. Faced with this problem, each public organization tends to ascribe its failure to another, claiming for a drastic and urgent change of the functioning of the latter. In this frame we are facing a double risk: a) to deny the social and political dimension of the problem; b) to neglect how this social condition affects the subjectivity of these persons and how it relates with their psychopathological organization. We advocate the necessity to keep the psychopathological eye open and to build network programs taking into account what this eye can see.

SS38.3.
PSYCHOANALYSIS AND MENTAL HEALTH

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Psychoanalysis is more than a hundred years old, and has currently a scientific status. As a science, it may be applied to various fields. One of the more important questions in psychoanalysis is the link between individual and collective moves. The majority of world population lives in big cities, in big urban zones, with a strong human density. For psychoanalysts, each person must be envisaged in a complete integrity, including biological, psychological and social aspects. Mental health is a important parameter in big cities. The French organisation of mental health care is based on "secteurs". Through psychoanalysis we can introduce the notion of "secteur d'appartenance", belonging to a group by affective and historical ways, including street life, community life, social life, but also family life.

SS38.4.
THE DOCTOR-PATIENT RELATIONSHIP AND PSYCHOTHERAPEUTIC APPROACHES IN MEDICATION MANAGEMENT

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It is well known that adherence to recommended treatment is improved in the context of an ongoing and trusting doctor-patient relationship. This is particularly true when the primary treatment is pharmacologic, as occurs in many community mental health centers. Unfortunately, the clinical approaches advocated within many private and government reimbursement programs, as well as other economic and workforce issues, have led to decreased attention to this important aspect of our clinical encounters. This presentation will review a variety of aspects of the doctor-patient relationship from the perspective of both the patient and the physician. Increased attention to these aspects of patient care in both office and hospital setting improves patient adherence with recommended treatment, thus providing higher quality care and greater patient satisfaction.

SS39.
VIOLENCE AGAINST WOMEN ACROSS CULTURES (Organized by the WPA Section on Women's Mental Health)

SS39.1.
VIOLENCE AGAINST WOMEN IN NORTH AMERICA

D.E. Stewart
University Health Network, University of Toronto, Canada

Despite the public perception of women's autonomy and power in North America, many women live with violence, abuse, and discrimination. Domestic violence, particularly wife abuse, remains a hidden social problem with physical and mental health sequelae. Even less recognized is violence toward marginalized women – the homeless, addicted, incarcerated and mentally ill. Mail-order brides, exotic dancers, sex trade workers, illegal immigrants and impoverished women may live in violent environments with little opportunity to escape. Increasing globalization and poverty in South East Asia, Eastern Europe and Latin America brings many women to North America in search of a new and better life. Instead, some find themselves trapped in violent spirals and slip into demoralization and depression. The role of mental health professionals in assisting these women to disclose their situations, seek appropriate services from legal, social, medical and mental health services, and combat institutionalized sexism will be addressed. The principles and examples of mental health treatment for women living in violent environments will be the focus of this presentation.

SS39.2.
RESPONSES TO GENDER BASED VIOLENCE IN LATIN AMERICA

M.B. Rondon
Universidad Peruana Cayetano Heredia and Hospital Nacional Edgardo Rebagliati Martins, Lima, Peru

Violence against women has long been recognized as a public health and human rights issue. In spite of the efforts of multilateral organizations, states and the organized civil society, violence continues being the cause of several mental and physical health problems (anxiety, depression, suicide attempts, substance abuse, chronic pelvic pain). Under-reporting leads to difficulties in recognition of the problem at decision-taking levels. Deep cultural roots of violence give raise to high social tolerance which combines with demographic factors such as limited education, and individual ones, like alcohol use and exposure to violence as a child, to account for very high rates of violence against women in Latin America. A system of services which provide safety, minimize distress and offer adequate referrals to affected women is under construction. The needed changes in health policy and in health care providers' attitudes and knowledge have not occurred yet. However, several countries (Mexico, Chile, Venezuela, Bolivia) have been able to design programs that in the short term provide services for victims and punish perpetrators and in the long term will address the social determinants of violence. The strategies used include the development of culture sensitive learning material, building the capacity of the staff and educating the community, providing public space for exploration of communal ideas and values, advocacy at the public health, professional sector and community leadership levels and some types of local activism with establishment of networks. These model programs and available outcomes will be discussed in the presentation.

SS39.3.
VIOLENCE AGAINST WOMEN IN ARAB AND ISLAMIC COUNTRIES

S. Douki, F. Nacef, S. Ben Zineb
Service de Psychiatrie, Hospital Razi, La Manousa, Tunisia

In Arab and Islamic countries, domestic violence is not yet considered a major concern, despite its increasing frequency and serious consequences. Surveys in Egypt, Palestine and Tunisia show that at least one out of three women is beaten by her husband. The indifference to this type of violence stems from attitudes that wife abuse is a private matter and, usually, a justifiable response to misbehaviour on the part of the wife. Selective excerpts from the Koran are used to prove that men who beat their wives are following God's commandments. These religious justifications, plus the importance of preserving the marital links and the honour of the family lead abusers, victims, police, justice and health professionals to join in a conspiracy of silence rather than disclosing these offences. We shall present the results of a recent survey carried out in Tunisia among a sample of 424 married women which confirms the same observations. We shall then demonstrate that a fair reading of the holy texts in Islam shows that wife abuse, like "genital mutilation" or "honour killings", are a result of culture rather than religion. Mental health providers can play a critical role in preventing violence against women, in addition to treating its consequences, by beginning to address the cultural as well as psychological conditions that create and support this kind of violence in our societies.

SS39.4.
ASPECTS OF SOUTH ASIAN CULTURE CONCERNING VIOLENCE AGAINST WOMEN

U. Niaz
Psychiatric Clinic and Stress Research Centre, Karachi, Pakistan

Cultural factors are resilient to overcome and this is the main reason why violence against women presents in different more ghastly forms: acid throwing, dowry deaths, cutting a woman's nose for suspicion of adultery, or karo kari (both the man and the woman are murdered for adultery by the local Jirga System, parallel legal system in the tribal areas). In South Asia women are under the tremendous burden to abide by the cultural traditions. Women have struggled over the years to declare these heinous crimes against them. Different prevailing forms of violence against women will be discussed, and the progress made by women activists will be described.

SS39.5.
PSYCHODYNAMIC TRAINING ON SEXUAL VIOLENCE EFFECTS IN ADDIS ABABA, ETHIOPIA: A TRANSCULTURAL EXPERIENCE

A. Orlandini
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In this paper I will describe my experience in the establishment of the first rape center in Ethiopia (Addis Ababa) and in providing a psychodynamic training to the staff (psychologists and social workers) of the center. The increasing attention given to sexual abuse and its psychological consequences is strictly related to the recent cultural changes that have spread in Ethiopia. Psychodynamic training has been a challenging work because Ethiopian psychologists have no psychopathological or psychotherapeutic knowledge, and belong to a social and cultural background different from the Western one. Therefore, one of the major problems was the selection of the contents to be transmitted, and also of the technical issues. Teaching and supervising clinical cases has been very stimulating for the unexpected problems that have occurred but also for the unexpected solutions that have been found. The results of the encounter between an African environment and psychodynamic knowledge will be presented.

SS40.
GENETICS AND PSYCHOPATHOLOGY OF SUICIDAL BEHAVIOURS (Organized by the WPA Section on Suicidology)

SS40.1.
NEW DATA ON GENETICS OF SUICIDE

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National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Bethesda, MD, USA

New data will be presented showing an interaction between the serotonin transporter genotype and childhood trauma and suicide attempts in psychiatric patients. New data will also be presented about the trypytophan hydroxylase (TPH) genotype and suicide attempts. Genetic variants of TPH 2 are associated with suicide attempts in psychiatric patients and also with high scores on the Barratt Impulsivity Scale.

SS40.2.
THE GENETIC BASIS OF SUICIDAL BEHAVIOURS

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Suicide is a multidetermined act. The importance of psychiatric, social and biological factors as determinants of suicide is now well established. The results from family, twin, and adoption studies support the hypothesis of a genetic contribution in the expression of suicidal behaviour. Numerous abnormalities have been found in the serotonergic system in suicide attempters and completers. The hypothesis of a serotonin deficiency in suicidal behaviour has been proposed. A great deal of progress has been seen in scientific investigation of human and molecular genetics as it relates to the transmission and expression of disease. Many of the genes potentially involved in the control of serotonin metabolism, such as those for tryptophan hydroxylase (TPH), serotonin receptors and transporters, have been cloned. Some (but not all) molecular genetic studies have reported an association between suicidal behaviour and a number of serotonin gene polymorphisms. Further replications of serotonin and other molecular genetic findings are needed in order to determine the role that polymorphisms in serotonin and in other neurotransmitter systems may play in the multi-determined act of suicide. On the other hand, genetic factors related to suicide may largely represent a genetic predisposition for psychiatric disorders associated with suicide, particularly affective disorders. Furthermore, there is some evidence for an independent genetic component for suicide, possibly related to the control of impulsive behaviour. Future approaches should examine this, not yet well established, relationship.

SS40.3.
DISENTANGLING GENOTYPIC AND PHENOTYPIC HETEROGENEITY OF SUICIDAL BEHAVIOR

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Suicidal behaviors are inherited independently of transmission of associated major psychiatric disorders. Genes encoding proteins involved in serotoninergic metabolism are major candidate genes in suicidal behavior. In particular, the tryptophan hydroxylase (TPH) gene and the serotonin transporter (5-HTTP) gene have been found to be associated with suicidal behavior independently of the primary psychiatric diagnosis. We present data of a meta-analysis on the interaction between these two genes in suicidal behavior and preliminary data showing associations between specific clinical characteristics and vulnerability factors. We performed a meta-analysis on nine association studies (n=1061 Caucasian suicidal patients), taking into account heterogeneity between studies, and confirmed the association between the A allele of TPH (TPH A 218C) gene with both suicide and the subgroup of violent suicide. In parallel, Anguelova et al. performed a meta-analysis with 5-HTTP and also confirmed the association between the "s" allele of the promoter of the 5-HTTP and suicidal behavior. We explored the interaction between TPH and 5-HTTP genes in suicidal behavior. We will present data showing that, in a sample of 960 suicidal patients and 436 controls, there was no interaction between TPH and 5HTTP candidate genes for suicidal behavior. These data also suggest that different subgroups of suicidal patients are associated with either TPH or 5-HTTP alleles and/or with environmental factors. In order to further explore this hypothesis we present data on dimensional characteristics evaluated by the Buss and Durkee Hostility Inventory, the Barratt Impulsivity Scale and the Spielberger Anger Scale and on the impact of early events assessed by the Childhood Trauma Questionnaire associated with either 5-HTTP or TPH alleles in a large population of suicidal patients.

SS40.4.
GENETIC ANALYSIS OF SUICIDAL BEHAVIOURS: CLUSTER ANALYSIS OF SUICIDE ATTEMPTERS AND THEIR PARENTS

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Twin studies, adoption studies, and family studies indicate the role of genetic factors in suicidal behaviours. Psychobiological hypotheses regarding suicidal behaviours involve neurotransmitters such as serotonin, norepinephrine, dopamine, and their correlation to psychological functions. In our study comprising 244 triplets (244 suicide attempters, and 488 parents), we performed a cluster analysis concerning the presence of different personality variables measured by the Neo-Personality Inventory - revised version (NEO-PI-R), the World Health Organization (WHO) Well-Being Scale, Beck's Depression Inventory and Trait Anger Scale. Three clusters were found for the suicide attempters and parents with a history of suicide attempt: a depressive cluster, a borderline cluster with pronounced angry and hostility characteristics, and a "normal cluster" (in comparison to the NEO-PI-R variables in the total population). Parents without suicide attempt constitute two clusters: a depressive cluster and a "normal cluster" which in turn can be split into two groups with normal and low anger and hostility values. The borderline cluster was missing. Heredity for suicidality was overrepresented in "normal" and borderline (angry/hostility) clusters. In our previous genetic analysis we studied tyrosine hydroxylase (TH) polymorphism in the group of patients with diagnosis of adjustment disorder (AD). AD predominates in "normal clusters" in the present material. TH is a key enzyme in norepinephrine and dopamine biosynthesis. Our future strategy for genetic analysis will be discussed.

SS40.5.
GENES, LIFE EVENTS AND SOCIAL NETWORK IN THE DEVELOPMENT OF THE RISK OF SUICIDAL BEHAVIOUR IN SLOVENIA

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Suicidal behaviour is attributable to many causes. A comprehensive method for identifying risk factors for suicide is to consider that they are composed of genetic and environmental influences and their interactions. High suicide rate in Slovenia is thus a consequence of genetic and environmental factors. Being lonely, divorced, widowed and living in stress are the most important among environmental factors, while history of suicide behaviour in the family stands for genetic vulnerability. At higher risk for suicide are single, widowed and older people, people with mental disorders and lower education. Particularly at risk are people with depression, alcohol dependency, people with more pronounced impulsive and aggressive personality features and persons with previous suicide attempts. Suicide risk increases dramatically when factors which are usually independent interact. The present study focuses on risk factors in the general population and in particular in vulnerable groups (depressives, alcoholics, impulsive/aggressive persons, persons with previous suicide attempts). This is a rather novel approach in the field of suicide research as we have been including genetic, life events and social network variables. We have been using the DNA analysis to determine genetic risk factors, and psychological autopsy or cognitive tests to determine psychological factors. As for the social risk factors, we have been relying on mathematically and statistically supported analysis of social support and social networks of an individual. The end result of our investigation will be a mathematical multifactor model of risk to develop the suicidal behaviour.

SS41.
THE MIND CLINICAL IMAGING CONSORTIUM: A MULTIMODALITY COLLABORATIVE STUDY OF SCHIZOPHRENIA (Organized by the WPA Section on Neuroimaging in Psychiatry)

SS41.1.
TRAINING AND CALIBRATION FOR STRUCTURED INTERVIEW TOOLS USED BY THE MIND CLINICAL IMAGING CONSORTIUM PROTOCOL

F. Fleming
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The clinical assessments of the MIND collaborative study are being made using established structured interview tools to measure psychotic, disorganized and negative symptoms and depression in patients with schizophrenia. The Scale for the Assessment of Negative Symptoms (SANS), the Scale for the Assessment of Positive Symptoms (SAPS) and

the Calgary scale are currently used at each site, allowing for training to be carried out with a series of patient interviews on videotape and a set of "gold standard" ratings prepared such that individual raters may review ratings and discuss any differences. To monitor individual site differences we will ask sites to tape the interviews and jointly establish "gold standard" ratings via telecom. Medication side effect scales (Abnormal Involuntary Movement Scale, Simpson-Angus Scale, and Barnes Scale) will be administered upon completion of a training module. The threads that weave these cross-sectional assessments together are the Comprehensive Assessment of Symptoms and History - On Follow-Up (CASH-UP) and the Psychosocial Status You Currently Have - On Follow-up (PSYCH-UP). These instruments have been utilized at Iowa University for the last 18 years to collect longitudinal data at six month intervals for analysis. These interviews record psychosocial functioning, treatment (nonsomatic, electroconvulsive therapy, drug therapy, compliance and subjective evaluation), lifetime diagnosis, duration and course of the disorder. To establish inter-rater reliability, a series of taped interviews have been presented and rated by experienced raters at Iowa University. These videos were then shown in group settings to new raters who applied the instruments to the interviews and filled out the forms. Initially the forms were filled out in a large group setting to facilitate discussion and questions. The final phase of training was done on an individual level. Ratings were tabulated and outliers received additional training based on specific areas of need.

SS41.2.
A PROTOTYPE TABLET-PC APPLICATION FOR THE COLLECTION OF CLINICAL AND NEUROPSYCHOLOGICAL ASSESSMENTS AND SOCIO-DEMOGRAPHIC HUMAN SUBJECT DATA

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Paper-based data recording has historically been used for the collection of clinical and neuropsychological assessments, socio-demographic, and other data collected on human subjects for neuroscience research. Research data is only useful within an electronic form. There are a number of problems with manually recording data to paper forms: missing, ambiguous, conflicting, and extraneous data. Technological solutions have been developed to assist researchers in converting paper sources into usable electronic data, such as using OCR and TELEFORMS. Most of these solutions, however, permit mistakes that must be manually reviewed and corrected. Since the persons that data enter paper forms typically are not those who rated the subject and recorded the data, there are often delays or mistakes. Due to their size and awkwardness, desktop and laptop computers are typically not compatible with the clinical assessment environment. Personal digital assistant (PDA) devices typically suffer from small screen size and low amounts of storage space. We propose using a Tablet-PC that combines the advantages and avoids the disadvantages of the laptop and PDA. The Tablet-PC utilizes a stylus that interacts with the screen like a PDA but on a full letter-sized page. The prototype Tablet-PC application developed provides ease of navigation across multiple-page assessments, intelligent entry, and annotation. The application provides the rater with feedback about missing or conflicting data, allowing the resulting data to be exported and archived. The Tablet-PC application eliminates the need for researchers to record data onto paper and provides an efficient way of collecting reliable research data in a clinical environment.

SS41.3.
MULTI-SITE FUNCTIONAL MAGNETIC RESONANCE IMAGING STUDIES: APPROACHES TO THE ASSESSMENT AND REDUCTION OF SCANNER DIFFERENCES

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Multi-site functional magnetic resonance imaging (fMRI) studies are becoming popular because they allow for the creation of datasets with larger numbers of subjects, including psychiatric patients. The increased statistical power that multi-site studies promise may be particularly important for psychiatric research, where the effects are often small and many studies are not replicated. The ability to merge functional imaging results across sites would be a major step forward but scanners can differ in field strength, manufacturer, gradients and hardware. Software differences in pulse sequence design (e.g., EPI versus Spiral, single versus double echo, etc.) and the reconstruction algorithm can also impede the merging of multi-site data. Our work focuses on assessing these differences and their impact on the functional activation maps. We are also trying to develop post-processing schemes to minimize site-to-site differences. Finally, statistical approaches to analyzing multi-site data are also being explored. This line of investigation will help clarify the technical challenges to multi-site collaborative fMRI research and begin to address these challenges. This will be of interest in our own research on schizophrenia but will also have wider implications for other research efforts where multi-site studies are necessary. For example, fMRI studies of rare diseases will greatly benefit. Also, multi-site fMRI studies of the effects of treatments may be helpful in documenting the generality of treatment effects.

SS41.4.
MULTI-SITE COLLABORATIVE FUNCTIONAL MAGNETIC RESONANCE IMAGING STUDIES OF AUDITORY TARGET DETECTION IN SCHIZOPHRENIA

V. Clark
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Alterations of the P3 event-related potential (ERP) and its sub-components evoked by the oddball task are highly sensitive markers for schizophrenia. However, similar P3 alterations have been found in other psychiatric disorders, due in part to the limited anatomical resolution of ERPs, and thus cannot be used to obtain specific diagnoses. Functional magnetic resonance imaging (fMRI) may offer improved detection of altered neural activity specific to schizophrenia, due in part to its superior anatomical resolution. In order to pursue this line of research, we have dealt with a variety of methodological difficulties, including the development of methods for using the oddball task with fMRI, increasing the sensitivity of fMRI data analysis, and dealing with the variability of fMRI measures obtained from different MRI systems at different field strengths. This last issue was examined by obtaining fMRI data using the auditory novelty oddball task from ten healthy subjects in two sessions at each of the four MIND Consortium sites, including two 3 Tesla systems (at the University of Minnesota and Massachusetts General Hospital) and two 1.5 Tesla systems (at the University of Iowa and the University of New Mexico). Generally good replication was found across sites, with

some effects of field strength, MRI vendor and session order. Data obtained from schizophrenic patients and a variety of other clinical populations (including traumatic brain injury, attention deficit disorder, addictive and antisocial disorders, among others) using the oddball task are providing new information on the neural and cognitive bases of these disorders.

SS41.5.
WHITE MATTER INVOLVEMENT IN SCHIZOPHRENIA

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Postmortem studies examining cellular morphology and gene expression have found abnormalities in white matter in patients with schizophrenia. Magnetic resonance methods including conventional imaging, diffusion tensor imaging, magnetization transfer and T2 relaxography can provide complementary, in vivo information about white matter. These methods have been applied to the study of schizophrenia and have revealed subtle abnormalities in the white matter. This presentation will provide an introduction to these imaging methods and how they are being applied to the study of schizophrenia.

SS41.6.
MAGNETIC RESONANCE SPECTROSCOPY AND THE PATHOPHYSIOLOGY OF SCHIZOPHRENIA: STUDIES OF GLUTAMATE FUNCTION IN PEDIATRIC AND ADULT POPULATIONS

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Neuroimaging methods are contributing essential information regarding abnormalities in brain structure and function in individuals with schizophrenia. While significant evidence supports a neurodevelopmental component in the pathogenesis of schizophrenia, the role of a neurodegenerative process is still controversial. Better characterization is necessary to guide preventative measures in pharmacologic treatment and public health policy. The presence of abnormal glutamate function in schizophrenia, which may lead to neuronal damage, is becoming increasingly well-recognized. Early trials of therapeutic agents aimed at modulation of glutamatergic function are currently underway in adults with schizophrenia. Magnetic resonance spectroscopy (MRS) is a technique by which selected brain metabolites such as glutamate may be measured *in vivo*. This allows the exploration of pathophysiological processes which may be related to the decreased brain volumes found in schizophrenia. Metabolites of interest include N-acetyl aspartate (NAA), a measure of neuronal integrity; glutamate; and glutamine, which may be a more accurate index of glutamatergic activity associated with neurotransmission. We are currently using 1H-MRS to study different patient populations with schizophrenia, including children and adolescents, first-episode adult patients, and chronically ill patients, using both clinical and high field (4-Tesla) MR scanners. This presentation will discuss our findings and their potential relevance to the pathophysiology of schizophrenia.

Supported by the MIND Institute and by NAMI of Dane County through the NARSAD Research Partners Program

SS42.
REHABILITATION OF TORTURE VICTIMS AND THE PROBLEMS OF THESE VICTIMS FROM THE PSYCHIATRIST'S VIEWPOINT (Organized by the WPA Section on Psychological Consequences of Torture and Persecution)

SS42.1.
TREATMENT OF TORTURE SURVIVORS: SPECIFIC PROBLEMS IN RELATION TO GENDER

M. Kastrup
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There is no indication that men and women have different lifetime prevalence of exposure to traumatic events. But women have a lifetime prevalence of post-traumatic stress disorder (PTSD) that is twice as high as men. Women exposed to a given trauma are four times as likely to develop PTSD, and the course of disorder tends to become more chronic. Findings of gender differences in PTSD among persons exposed to torture are inconsistent and surprisingly little attention has been paid to female torture survivors and the specific problems they encounter as refugees. Treatment of women with a history of manmade violations including torture comprises consideration of the complexity of the social context in which they live. Women are providers of emotional support, and exposure to further trauma may overload the woman's capacity to cope. Female torture survivors in a mental health setting often share common traits and may experience dis-empowerment, fear for safety of themselves and their children, and continuous harassment. In order to empower such women, the therapist and the patient have to look for common ground and agree on goals for treatment in recognition of cultural incongruities. The presentation will outline ways to optimize the fulfillment of the need for treatment of female torture survivors with a particular focus on the rights of these women.

SS42.2.
NEW ASPECTS OF TREATING TORTURE SURVIVORS WITH VERBAL AND NON-VERBAL THERAPEUTIC GROUP METHODS

L. Hárdi
CORDELIA Foundation for the Rehabilitation of Torture Victims, Budapest, Hungary

The author summarizes the verbal and non-verbal individual and group methods used in Hungary in the process of treatment of the rehabilitation of refugees, survivors of torture. She describes the circumstances in which the therapies are carried out and the background of the rehabilitation process (the therapeutic team and the coworkers, the connection with the local staff etc.). The history of the "animation group" therapy goes back to the years of the Bosnian crisis. The group of patients was stimulated to use more artistic tools in the group sessions. More active elements and special psychodrama-elements characterize the "station group" therapeutic model elaborated during the war period in Kosowo. The ancient culture shining through the therapy of our clients from Afghanistan, Iraq and Iran stimulated the elaboration of the "symbol group" therapy, using universal and characteristic symbols in the therapeutic process of our clients.

SS42.3.
SOCIAL IMPACT OF WAR TRAUMA AND TORTURE

L.T. Arcel
University of Copenhagen, Denmark

A study on a Bosnian tortured population residing in its own post-conflict society documented a high degree of psychological and social effects on the survivors' life. Trauma was here documented not only as a psycho-physiological process but also as a social suffering. Torture survivors have not only to manage their health and mental health symptoms but must also cope with poverty and social exclusion in their own society. Although not exiled as is the case with Bosnian refugees in the Western European societies, the stressor of internal displacement is very potent, so that protracted socio-economic problems can be expected. Separation from the family network, loss of original social support networks, uncertainty about the future, problems in adapting to a big city, economic problems, all aggravate the trauma of torture. Additionally, all torture victims feel their poverty as a new humiliation. Imprisonment has shown to have a negative effect on all social areas of the torture survivors' life.

SS42.4.
DIAGNOSTIC APPROACHES AND PSYCHOTHERAPY OFFERED IN SPECIALISED TREATMENT CENTRES FOR SURVIVORS OF TORTURE

T. Wenzel
Blumberggasse 4, Vienna, Austria

Resources, strategies and needs in regard to treatment and research in treatment centres for survivors of torture and civil war were evaluated using a structured questionnaire developed by the WPA Section on Psychological Aspects of Torture and Persecution. 48 centres, serving as out-patient treatment units in 33 countries, representing all geopolitical regions, responded, indicating interest in international research and training collaboration. One group (n=19) is operating in countries with continuous danger to patients or physicians. No significant differences were found in regard to mean number of patients treated between safe and unstable regions, or between the regions. Research is done in all regions, but less frequently in one of the regions (North America). A large range of resources and services is offered by most centres, including especially a focus on mental health. Special service offers include most frequently different forms of psychotherapy (n=45, 94% of centres). Data presented also include details on transcultural perception of sequels and diagnostical approaches in regard to diagnostic systems and instruments used in daily research and treatment. Networking and collaboration strategies based on the study include training, research and international support for centres in unstable regions. Centres might offer important contributions to education and research regarding sequels of extreme trauma and transcultural medicine. The presentation includes an overview of activities of the Section, including the educational programme developed and offered in collaboration with international organisations.

SS43.
DEPRESSION ASSOCIATED WITH MEDICAL CONDITIONS IN PRIMARY CARE AND OTHER SETTINGS (Organized by the WPA Section on Psychiatry, Medicine and Primary Care)

SS43.1.
DEPRESSION COMORBIDITIES

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Depression is one of the most frequent and costly psychiatric conditions to treat. In the United States, it causes over 500,000 psychiatric admissions per year as well as 16,000 suicides. Besides, its direct, indirect and loss of productivity costs amount to about 16 billion annually. In the general population, major depression has a lifetime prevalence rate of 10-25% among females and 5-12% among males. The recurrence rate is very high, with 50-60% probability after the first episode and 90% after the third episode. At times, the course of depression becomes chronic, and requires a long-term treatment strategy. Among the factors that complicate the diagnostic and treatment approaches to depression, comorbidity is, perhaps, the most relevant one. For instance, among neurological conditions, depression is frequently observed in multiple sclerosis, Parkinson's disease, Huntington's disease, epilepsy, strokes, head trauma, chronic fatigue syndrome and fibromyalgia. Similarly, it is very frequently observed among cardiovascular illnesses such as myocardial infarction, coronary artery disease and cardiomyopathy. Similarly, depression comorbidity is also observed in endocrine diseases and psychiatric disorders, and other medical illnesses. In this presentation, these rather important comorbidity factors will be addressed and discussed. Additionally, priority and attention will be given to the management of these comorbidities in different settings such as inpatient units, outpatient programs and psychiatric consultation and liaison services in general hospitals.

SS43.2.
DEPRESSION AND CARDIAC SURGERY

A.M. Freeman III
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Just as depression may precede or follow myocardial infarction (MI), the same relationship may apply in patients undergoing cardiac surgery. Often patients are involved in an ongoing cycle of depression and recurrent cardiac events. This can be seen in post-MI depression, followed by post-coronary bypass grafting (CABG) depression and ultimately, depression after cardiac transplantation. Although cardiac surgical techniques have improved with time and experience, the possibility of neuro-psychiatric sequelae of micro-emboli still exists. This can lead to cognitive compromise and delirium, both of which can induce further depression. Immunosuppression used in patients undergoing cardiac transplantation can also be a risk factor for depression. Depression itself, following MI or a CABG procedure, can induce platelet aggregation, thus increasing the likelihood of further cardiac illness. Newer antidepressants are clearly safer than the tricyclic antidepressants, which may put patients at increased cardiac risk. Cardiac rehabilitation programs including aerobic exercise can be both therapeutic as well as preventive. Group and individual psychotherapy further complement the therapeutic options. In general, depression in patients undergoing cardiac surgery is under-recog-

nized and under-treated. This paper will illustrate methods for reducing the association between cardiac surgery and depression utilizing pharmacotherapy, psychotherapy, exercise and social support.

SS43.3.
DEPRESSION IN CARDIAC POST-INFARCT: OUR EXPERIENCE

R. Fahrer
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Cardiovascular diseases and depression are among the most common diseases. 17% of the population with cardiovascular disease has major depression, and if we include dysthymia the rate goes up to 25%. In the USA, mortality of cardiovascular diseased patients is around 45%, and 54% of those deaths is due to coronary disease. Depression is a high risk factor and contributes to cardiovascular morbidity and mortality. This paper will deal with depression in somatic illness, diagnostic criteria for depression in medicine, depression and cardiovascular diseases. I will present a study carried out at the Department of Mental Health of the University Hospital of Buenos Aires, showing that the progression of mood symptoms 6 months after an acute coronary event is associated with an impairment of autonomic control of the heart in elderly people.

SS43.4.
THE PATIENT ADMITTED TO A MEDICAL WARD WITH COMORBID DEPRESSION AND SELF HARM BEHAVIOUR RISK

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Self-harm behaviours in medical inpatients are important reasons for referral to a consultation-liaison psychiatry service in the general hospital. This group of patients usually includes those admitted after suicide attempts and the chronically medically ill with comorbid depression, especially in cases of severe pain, transient confusion, poor prognosis, or after recent adverse news. Physical disease is an independent risk factor present in a high proportion of people who commit suicide or parasuicide. At Modena University Hospital, in a four-year time, 1070 patients were referred for psychiatric consultation after attempting suicide (n=142, 4.39% of total referred patients) or because of self harm behaviour risk (n=928, 28.67%). Analysing the data from our local experience, we developed an integrated pathway for both categories of patients. The fundamental steps of the integrated pathway include: stabilization of medical conditions; rapid referral to our service by medical staff previously trained in the recognition of the suicidal risk; psychiatric assessment within a hour with risk assessment; analysis of the therapeutic-caring strategies. The latter consist of pharmacologic treatment, daily follow-up psychiatric consultations, liaison with community mental health team, general practitioners and social services when needed, special monitoring of the patient by the ward staff, environmental restraints, up to the rare necessity for admission to the psychiatric ward.

SS44.
TRANSCULTURAL PSYCHIATRY IN EUROPE: SOMETHING IS GOING ON (Organized by the WPA Section on Transcultural Psychiatry)

SS44.1.
MENTAL HEALTH SERVICES FOR IMMIGRANTS IN DENMARK: PROBLEMS AND CHALLENGES

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Immigrants comprise today about 7% of the Danish population. About 10 % of patients treated in Danish psychiatric institutions have a non-Danish background, with large geographical variation, as some areas of Copenhagen have up to 25% of their patients with a non-Danish background. In certain services, e.g. forensic psychiatry, up to 50% of the patients have a non-Danish background. This study comprises the transcultural patient population that received treatment in 2004 at the regional outpatient clinic of the psychiatric department, serving an area densely populated with immigrants. Information was collected on sociodemographic background, diagnoses, severity of disorder as well as treatment offered. The paper will provide a comparative analysis of this population and the Danish population at the same outpatient clinic, with particular reference to possible limitations of the present services from a cultural perspective and ways to overcome them.

SS44.2.
THE ITALIAN APPROACH TO MENTAL HEALTH CARE OF IMMIGRANTS

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Migration in Italy can still be considered a relatively recent phenomenon, compared to other European countries. On the other hand, as shown by official figures, the presence of foreigners, immigrants, refugees and asylum-seekers in Italy is an increasingly important phenomenon at a social and cultural level. In some catchment areas the high presence of immigrants is sufficient in itself to pose a mental health problem. Nevertheless, an official policy on immigrants' mental health has not been structured yet, there are no public mental health services for immigrants in Italy and the organization of public mental health services in order to face the peculiar needs of foreign users, both in terms of service planning and mental health professionals' training, is still lacking. Another aspect to be considered is the existence of alternative health care systems to provide medical assistance to legal and illegal immigrants in Italy. These organizations, the most famous of which is Caritas, are often of a religious kind. They divert the immigrants' health care request towards themselves, rather than towards the national health system, and this is particularly true for those immigrants whose illegal status makes them reluctant against the contact with any official Italian institution. At a scientific level, in Italy the amount of empirical research on the immigrants' mental health and mental health care is extremely poor, most of all if compared to that produced in other European countries and to the importance immigration has recently gained at the social and political level. In this article, possible reasons for these peculiar Italian phenomena are discussed.

SS44.3.
THE PROVISION OF SERVICES IN EAST LONDON

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East London and the City Mental Health Trust, London, UK

In order to know why the provision of services in East London means also in large part the psychiatric treatment of ethnic minorities, one has to appreciate the sociodemographic characteristics of this area. The borough of Newham is presented as an example. Here, 68% of the population belong to "ethnic minorities", namely Indian and Afro-Caribbean, making it the most culturally diverse borough in the whole UK. Mental health services in Newham comprise a newly built hospital with 4 adult wards and a psychiatric intensive care unit, community mental health teams, an assertive outreach team, a alcohol and drug service, a rehabilitation and continuing care team with residential care homes and supported living, the day opportunities service with a broad spectrum of activities and groups, and the more psychotherapeutically oriented services like the psychological therapy service and the psychotrauma clinic. In addition, there are also voluntary services and charities offering social support, occupational therapy and vocational training. Furthermore, there are voluntary services for ethnic minorities. A lot has been achieved over the last 7-8 years. However, the service is still some distance away from racial and ethnic equality. Rather than the creation of separate services, we will pursue the aim to raise knowledge, skills and transcultural awareness of the whole workforce regarding ethnic minorities and their needs.

SS44.4.
FORTY YEARS ON THE IMMIGRANTS' SIDE: THE ACTIVITY OF THE MINKOWSKA CENTER IN PARIS

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The Minkowska Center is a medical, psychological and social institution, based in Paris and working with refugees and migrants since more than 40 years. The Center is involved in a community health approach where the main goal is to answer in the most appropriate manner to important and complex needs coming from the migrant population in Paris and suburbs. The main concern is to facilitate access to medical, mental and social care in a medical, clinical and anthropological setting allowing therapeutical approaches such as psychoanalysis, ethnopsychiatry, cognitive and systemic psychotherapy. The linguistic issue is solved either because the therapists speak the language of the patient or by the help of linguistic and cultural translators. The clinical sessions have the characteristic of being free of charge. Epidemiological data will illustrate different aspects of the needs, of the psychiatric morbidity and of the peculiarities in the population consulting the centre.

SS45.
POSITIVE AND NEGATIVE IMPACT OF NEW TECHNOLOGIES IN PSYCHIATRIC SCIENCES (Organized by the WPA Section on Informatics and Telecommunications in Psychiatry)

SS45.1.
USER PERSPECTIVES ON THE IMPACT OF AN ONLINE PEER SUPPORT GROUP

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Psycho-Babble (http://www.dr-bob.org/babble) is a website that consists of a number of message boards. Members of the community receive support and education from each other, and a mental health professional maintains a supportive milieu. Group members post under names of their own choosing. All posts are public. There is no charge to participate. In early 2004, members were asked what impact they thought the site had on: a) how empowered and knowledgeable they felt, b) their treatment and their relationship with their treatment provider, and c) the larger mental health community. They were also asked how much they used the site and for some information about their illness and treatment course. In this paper, we present their responses. These findings are not intended to be generalizable. Group members were self-selected in that they had Internet access, the motivation to seek out the site, the cognitive and technical ability to use it, and some degree of comfort with text communication. Also, the site itself may be atypical in terms of longevity (it was started in June 1998), activity level (there were >360 posts/day in February 2004), and efforts made to maintain a supportive milieu.

SS45.2.
TELEPSYCHIATRY IN PSYCHIATRIC CLINICS

I. Modai
Shaar Menashe Mental Health Center, Hadera, Israel

A videoconference system was set up in two distant satellite clinics (Or Akiva and Hadera) of the Eiron Outpatient Clinic of Shaar Menashe Mental Health Center. 51 patients were treated using this system for the first time in Israel. Nine months results are encouraging. The number of days of hospitalization has declined (179 inpatient days in the nine months following implementation of the system as compared to 231 in the same time period prior to implementation). Rate of compliance increased from 76% to 87.8%. The Brief Psychiatric Rating Scale (BPRS) total score decreased from 31.8 to 26.52, whereas the Clinical Global Impression (CGI) score remained stable (4.3 pre vs. 4.2 post). Satisfaction for both patients and psychiatrists increased. Evaluation of costs revealed savings of 5,829 NIS for patients, 3,780 NIS for therapists, 32,920 NIS in medications, whereas institutional costs remained the same (188,952 pre, 189,932 post). The patients get dressed up for the videoconference meetings and report that they feel good about the sessions, and do not feel any change in their relationship with the psychiatrist. Routine use of telepsychiatry can be economically effective in the public service by reducing the need for physical accommodations in the clinics, and by managing the patients' and physicians' time more efficiently. This method can be also implemented for initial consultations with family physicians, which may reduce referrals to psychiatric clinics.

SS45.3.
THE PSYCHOLOGICAL AND PSYCHIATRIC IMPACT OF NEW COMMUNICATION TECHNOLOGIES

P.M. Furlan
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The extent and the nature of the changes in communication technology have gone far beyond any of the predictions made twenty years ago. Instantaneous free or cheap communication throughout the day all over the world, multiple participant open access, limited identification with little or no data protection, together with an increasing desire or even need to chat, have added new dimensions to the formation and structure of communities. The use and choice of language is being rapidly transformed and not always according to the standard grammatical norms; not only the creation of neologisms and a new lexicon, but also a change in the logical patterns governing the thought processes is occurring. The phenomenon not only includes the writing of e-mails and chatting in discussion groups, but also short messages and the taking and transmission of instantaneous pictures and/or recording. On the one hand short messages lead to concision; on the other this very concision can lead to misunderstandings or even an invasion of personal space and/or privacy. With the new technologies, millions of people can receive unsolicited and unauthorized short messages, have their presence and movements immediately detected and be themselves detected and their own messages be memorised and stored. All that implies strong changes in individual psychology and thus in the psychiatric approach, bearing also in mind that communication technology is more and more present in the daily medical practice.

SS45.4.
IMPACT OF NEW TECHNOLOGIES IN PSYCHIATRY: A PERSPECTIVE FROM DEVELOPING COUNTRIES

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Africa is a large continent, prone to strife, especially south of the Sahara. Most of its countries are characterized by low incomes, high prevalence of communicable diseases and malnutrition, low life expectancy and poorly staffed services. The lack of mental health resources, whether human resources, mental health professionals, inpatient or outpatient facilities and even community care, is becoming a problem that is in need of an immediate solution. In remote areas of developing countries transport is difficult and the centralization of services exists only in big cities, so that the next revolution in promoting mental health services in developing countries becomes the use of new technologies mainly through telecommunication, to reach the remote areas giving advice about diagnosis, management and reassurance to primary care physicians or mental health professionals. An evaluation of the impact of new technologies in psychiatry and mental health in developing countries will be presented.

SS45.5.
INTERACTIVE AUDIOCONFERENCES: THE NEW FRONTIER OF SCIENTIFIC COMMUNICATION IN PSYCHIATRY

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The worldwide accessibility of the web will allow in the future to organize and standardize new forms of medical education, in which people with different knowledge will work side by side in constructing new paradigms and new protocols. Technology and contents are the milestones to start from: a technology which is easy to use and contents which are certified and constantly updated, following the nature of the web, where all is in movement and in constant development. The WPA can be the center of international projects aimed to develop a common background for all psychiatric professionals worldwide, with no colonialistic intent and no will to impose a particular view against another.

SS46.
THE HIDDEN BURDEN OF MENTAL RETARDATION (Organized by the WPA Sections on Mental Health Economics and on Mental Retardation)

SS46.1.
THE MAGNITUDE AND BURDEN OF MENTAL RETARDATION

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Mental retardation (MR) is a meta-syndromic descriptor that encapsulates a variety of clinical conditions (some of which described at a syndromic level). The nature of these specific clinical conditions range from nutritional (e.g. iodine deficiency), genetic (e.g. Down syndrome), infectious (e.g. intrauterine rubella), metabolic (e.g. phenylketonuria) to toxic (e.g. fetal alcohol syndrome and heavy metal intoxications). While the prevalence of MR in developed countries varies between 0.5% and 2.5%, in some developed countries it can be up to twice as high. There are, however, important variations in the severity of MR, with has major implications for determining the degree of disability caused by MR. Level of disability is crucial for the assessment of the burden of disease. Methodological and conceptual problems for estimating the economic burden of all forms of mental retardation will be presented.

SS46.2.
CONSUMPTION AND OUTCOMES OF MENTAL HEALTH SERVICES FOR PEOPLE WITH MENTAL RETARDATION

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Significant differences in service consumption and outcomes were found in referral patterns over a period of time in people with mental retardation. These related to ethnicity, residence, psychiatric diagnosis, the level of mental retardation and psychiatric admissions. An increased presence of psychopathology was associated with older age, mild mental retardation, admission to an inpatient unit, referral from generic mental health services and detention under current mental health legislation. Regression models relating to specific psychiatric diagnoses generally accounted for a limited amount of variation. No significant differences were observed in the use of different aspects of mental health provision in relation to diagnostic groups. Characteristics of "heavy" service users were identified. Clear service arrangements are essential for individuals with mild mental retardation who have a high incidence of psychiatric disorders.

SS46.3.
INTERNATIONAL RESEARCH ON MENTAL HEALTHCARE SYSTEMS FOR PEOPLE WITH INTELLECTUAL DISABILITIES IN EUROPE: BRIDGING THE GAPS WITH CARE POLICY

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In the recent years a considerable effort has been put forward to gather systematic information on services and care systems for people with intellectual disabilities (PWID) and mental health needs in Europe. Three European Union (EU) funded networks have produced relevant information and experience. The MEROPE network brought together the expertise of 5 countries (England, Austria, Greece, Spain and Ireland) in order to share information in relation to the mental health of PWID. The project considered four key aspects of dual diagnosis: service provision, assessment and diagnosis, improving awareness of mental health needs, and the development of a European database. It had significant implications for the use of clinical assessment tools in Europe and the development of dual diagnosis services. The Intellectual Disability Research Network (IDRESNET) project involved seven countries (Belgium, England, Germany, Greece, The Netherlands, Spain and Sweden) and focused on: a) deinstitutionalisation and the development of community care, b) legal aspects, c) the use of direct payments or personal budgets, and d) the development of person-centred planning. A series of common methods for care system assessment were suggested. The POMONA project, carried out in 13 EU member states, was aimed at developing health indicators useful for health monitoring and policy planning in Europe. A considerable effort has been made towards better understanding of care systems for PWID in Europe. However, this effort has not been translated into international health policies. It may be necessary to promote further links between existing networks, to achieve consensus on service research methods and to build bridges between researchers and policy planners.

SS47.
PSYCHOSIS: MEANING, MECHANISM AND INTERPERSONAL CONSEQUENCES (Workshop organized by the WPA Section on Psychoanalysis in Psychiatry, in collaboration with the International Society for the Psychological Treatment of Schizophrenia and other Psychoses, ISPS)

SS47.1.
PSYCHOSIS: MEANING, MECHANISM AND INTERPERSONAL CONSEQUENCES

A.-L. Silver[1,2,3], B. Martindale[1,2]
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Increased understandings of unconscious psychological mechanisms and of disturbances in symbol formation allow scientific exploration from these perspectives of both the form and content of psychoses. These discoveries/understanding are needed to complement research that focuses on the biological underpinnings of psychoses. Biological research looks for what is common to those with certain psychoses. Psychoanalytic investigations are more likely to focus on what is particular to an individual in terms of the personal and developmental history and personal psychology in coping or not coping with mental pain. In terms of treatment, recognising the personal psychology will lead to establishing recovery goals that are personally relevant. Close definition is needed of the specific personal, relationship and environmental factors and the affects that could not be managed prior to the psychosis. We discuss case material to demonstrate and discuss with the participants unconscious meanings and mechanisms in psychoses. We also discuss the interpersonal manifestations of these phenomena during the course of a psychotherapeutic relationship in psychotic cases.

SS48.
THE RELEVANCE OF NEUROPSYCHOPHYSIOLOGICAL RESEARCH TO PSYCHIATRIC TREATMENT (Organized by the WPA Section on Psychophysiology)

SS48.1.
THE RELEVANCE OF NEUROPHYSIOLOGICAL RESEARCH TO THE TREATMENT OF SCHIZOPHRENIA

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Neurophysiological research in schizophrenia is primarily aimed to understand the pathophysiology of the disorder and, more recently, of specific symptoms. Like in other basic research areas, the relevance to clinical practice (i.e. to prognosis, diagnosis and treatment) is an indirect goal and may be missed or turn out to be a hardly predictable by-product. The presentation will show time-honored and new examples of neurophysiological contributions with importance to the treatment of schizophrenia. Among these are electroencephalographic diagnostic procedures, the meaning of cognitive evoked potentials in prognosis and therapy planning, the contribution of functional imaging and of transcranial magnetic stimulation. It is concluded that neurophysiological research has a great potential to improve the clinical handling of schizophrenia, although in many of the promising cases, unfortunately, the last necessary step of independent clinical validation has been left undone.

SS48.2.
PSYCHOPHYSIOLOGY OF OBSESSIVE-COMPULSIVE DISORDER

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Converging neuropsychological and neuroimaging evidence suggests the presence of frontal lobe overactivity in obsessive-compulsive disorder (OCD). Event-related potentials (ERPs) may be used to investigate the speed of cognitive processes and may be recorded during tests designed to assess frontal functions, such as the Stroop test. Frontal lobes also play an important role in the control of voluntary movement, particularly in motor planning and execution. These circuitries may be investigated using event-related desynchronization (ERD) analysis. ERD of the sensorimotor EEG rhythms evaluates the temporal course of cortical activation during movement preparation and execution; event-related synchronization (ERS) of the same rhythms, occurring after movement termination, is considered a cor-

relate of cortical idling or inhibition. We will present findings on the application of ERPs and reaction times to the Stroop test and of movement-related ERD/ERS in patients with OCD. All findings are consistent with the hypothesis of a frontal lobe dysfunction in this disorder.

SS48.3. THE RELEVANCE OF NEUROPSYCHOPHYSIOLOGICAL RESEARCH TO TREATMENT OF DEMENTIA

T. Dierks
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Electroencephalography (EEG) reflects the spontaneous neuronal activity. Hans Berger demonstrated EEG alterations in patients suffering from cognitive deficits already 60 years ago. Since then many investigations aimed at demonstrating the clinical usefulness of EEG and its value in the elucidation of pathophysiological aspects of the cerebral processes underlying cognitive deficits. In Alzheimer's disease (AD), in general a slowing of the EEG has been described, which correlated in some frequency bands with the severity of the cognitive deficits. Alpha and theta activity seemed more to be a state marker of cognitive function in AD, whereas beta activity was seen as a trait marker. Topographical changes of EEG in AD reflected alterations of cerebral glucose metabolism and results indicated that topographical parameters might predict AD in a preclinical stage. The prediction of AD converters in subjects with mild cognitive impairment would provide an indication of which subjects would be suitable for a pharmacological treatment at an early point. Additionally EEG, complementary to behavioral measures, provides important information about the individual pharmacological treatment course on a neuronal level. In addition, the effect of non-pharmacological treatment strategies can be monitored by neurophysiological techniques. Complementary to the electrophysiological methods, neurophysiological tools like functional magnetic resonance imaging can potentiate the insights into the neuronal mechanisms of brain function in cognitive disorders. Together these neurophysiological tools will probably allow in the future both a better evaluation of medications and a better planning and monitoring of treatment strategies in individual patients.

SS48.4. EMOTIONAL PROCESSING IN SUBJECTS WITH PANIC DISORDER

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Advances in both pharmacological and psychoterapeutic interventions have contributed to ameliorate the outcome of panic disorder (PD), although etiopathogenetic mechanisms underlying the disorder remain unclear. We have recently explored the hypothesis that a dysfunction of temporo-limbic regions, in particular those of the right hemisphere, plays a crucial role in the pathogenesis of PD and may underlie key psychological features described in these subjects, i.e. alexithymia, the tendency to interpret ambiguous stimuli as threatening and an attentional bias toward threat-related cues. In 22 drug-free patients with DSM-IV PD and matched healthy controls (HC), alexithymia was evaluated by the Toronto Alexithymia Scale, and EEG-based brain imaging was carried out by using the low resolution electromagnetic tomography (LORETA) on event-related potentials (ERPs) recorded during a visual target detection task in which stimuli with different emotional valence were used. Alexithymia was more frequent in PD subjects than in HC. Different activation patterns were observed in HC and PD subjects. For erotic stimuli, an activation of the anterior cingulate, insula and medial frontal areas was observed in HC, while a hypoactivation of the right parieto-temporal regions was found in PD subjects. For threat-related stimuli, no activation patterns were found in HC, while a hypoactivation of right temporal regions was observed in PD subjects. The results confirm the hypothesis that a dysfunction of temporo-limbic regions, in particular those of the right hemisphere, is involved in the disorder and suggest that subjects with PD may benefit from psychotherapeutic interventions addressing difficulties in emotional processing.

SS49. ATTENTION-DEFICIT/HYPERACTIVITY DISORDER IN PRIMARY CARE (Organized by the WPA Section on Psychiatry, Medicine and Primary Care)

SS49.1. ADHD: BEYOND DIAGNOSIS

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According to recent epidemiological studies on attention deficit/hyperactivity disorder (ADHD), approximately 3 to 7% of school age children suffer from this disorder. In most cases, the disorder produces not only academic dysfunction, but also social and familial malfunctioning, hindering more adequate adaptation processes, and developing in a high percentage into the adult life of those patients. This is a lifetime syndrome which not only affects the patients' cognitive or behavioral areas, but also impacts on their emotional and functional life. Although information is accumulating on the involvement of dopaminergic or noradrenergic pathways associated with the control of impulsivity or attention, the possible link between inattention and the control of inhibitory mechanisms, and the difficulties in the inhibition response that may lead to secondary execution deficit, further research is needed in order to perceive what is basic or fundamental for these children, improve their functioning and ensure a less stigmatizing life, beyond just diagnosis.

SS49.2. IMPULSIVITY AND INATTENTION IN ADULTS: DIFFERENTIAL DIAGNOSIS AND TREATMENT CONSIDERATIONS FOR PRIMARY CARE PHYSICIANS

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Rarely will adult patients present to their primary care physician with complaints of making careless mistakes or boredom at work, difficulty maintaining attention or concentration, misplacing things frequently, being easily distracted or problems remembering appointments or obligations. Similarly, adults will not offer a chief complaint of feeling restless or fidgety, compelled to always be active, talking too much, frequently interrupting others or having no patience when forced to wait in lines. However, these classic symptoms of impulsivity and inattention result in significant life impairment for patients who experience them on a regular basis. The problem of not identifying these important symptoms is the result of physicians not asking and patients not providing this information to their doctor. Most patients see these symptoms as life problems, and not appropriate to

discuss with their family doctor. As is the case in all areas of clinical medical practice, symptoms unidentified and untreated usually result in progressive impairment and difficulty in achieving successful symptom relief when the diagnosis is delayed. The differential diagnosis of impulsivity and inattention in adults begins with asking the appropriate questions and includes a lengthy list of possible diagnoses. Psychiatric syndromes which can present with symptoms of impulsivity and inattention include major depression, bipolar disorder, anxiety disorders, learning disorders, psychotic disorders, substance use disorders and attention-deficit/hyperactivity disorder. A number of neurologic and cognitive disorders may also present with similar symptoms. This presentation will offer guidelines in assisting the primary care provider in making an accurate diagnosis and suggest effective treatment strategies for each of the potential diagnoses. Recommendations will be based on the current clinical research literature.

SS49.3.
TRAINING OF THE PRIMARY CARE PHYSICIAN IN ADHD: AN EDUCATIONAL PROGRAM

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Attention deficit/hyperactivity disorder (ADHD) is a chronic neuropsychiatric disorder that produces severe functional impairment. In approximately 65% of the children with ADHD, the symptoms will persist into adulthood. There are estimations showing that 85% of adult patients with ADHD are not diagnosed. The syndrome goes unnoticed for years, and by adulthood people with high intellectual quotient have developed effective compensatory abilities. There is no validated procedure or tool to detect and diagnose ADHD in adults. The diagnosis is commonly missed by primary care physicians. We will present an educational program to train the primary care physician, who is the first point of contact with the patient, to early detection of this disorder.

SS50.
VIOLENCE: A MAN MADE DISASTER (Organized by the WPA Section on Psychological Consequences of Torture and Persecution)

SS50.1.
STRATEGIES FOR PREVENTIVE MEASURES AGAINST TORTURE

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In several European countries, estimates and studies have shown that, amongst refugees, the percentage of torture victims is 20-30%. In the US, medical doctors in the rehabilitation centres estimate that, amongst refugees, there are 400,000 torture victims. In other parts of the world it is difficult to estimate the exact number, but knowing that half of the population in the world, 3 billion people, are living in countries where the authorities only can keep the power because they are torturing their own citizens, the number of torture victims is freightening. Disaster is known as a destructive event that causes a discrepancy between the number of casualties and the treatment capacity. Working against the man-made disaster represented by torture, the prevention model, which has been implemented during our 30 years of medical work against torture, will be presented. Primary prevention aims at eradicating torture before it occurs: identify the causes of torture, the possible agents of torture, the systems that permit, organise and spread torture, and the "high risk for torture" groups in each specific country of intervention. Secondary prevention is to limit the occurrence and consequences of torture, through education and training of health professionals and other professional groups, specifically law enforcement personnel. Tertiary prevention aims to lessen the effects of torture. It is person-related and provides support and treatment to the individual torture victim. A detailed description of the three prevention strategies will be provided. This approach is a reflection of a medical conceptualization of prevention that we have found to be extremely useful. The special role of the psychiatrist in primary, secondary and tertiary prevention will be discussed.

SS50.2.
MENTAL HEALTH CONSEQUENCES OF STATE PERPETRATED VIOLENCE

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According to the United Nations Convention of 1984 against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, states having signed the Convention shall ensure that education and information regarding the prohibition of torture are included in the training of medical personnel who may be involved in the custody or treatment of individuals deprived of their liberty. Unfortunately, few countries enforce this, implying that few psychiatrists receive any such education and thus have appropriate knowledge on the issue of torture. Knowledge about the mental health consequences of state perpetrated violence, including torture, is of clear clinical relevance for psychiatrists worldwide, as a significant proportion of refugees and migrants have experiences of war, strife, persecution and torture and a large proportion of the world population live in countries that condone torture. The paper will outline the psychiatric symptomatology following exposure to state perpetrated violence, prevailing therapeutic models, preventive considerations as well as educational needs for the psychiatric profession.

SS50.3.
WAR TIME EXPOSURE, HELP-SEEKING AND POST-TRAUMATIC STRESS DISORDER IN WAR VICTIMS FROM BOSNIA-HERZEGOVINA

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The fate of Bosnia-Herzegovina (BH) and specifically that of Sarajevo has become a symbol of war exposure in a civilian population. Sarajevo became emblematic in the early 1990s for the suffering of the civil population. Prosecution of those responsible is ongoing in an important step to justice and prevention in the Den Haag court. The effect caused by crimes against humanity and war must be seen as long-term, though it is presently overshadowed by war reconstruction in Iraq and Afghanistan. Psychological sequels are part of the after effects that should be taken into account and could be argued to be eligible to recompensation, based on research and individual findings. Long-term health care programmes are often based on the

expectation that symptom presentation and help-seeking might influence prevalence data that are the base of long-term health care planning. We evaluated treatment and non-treatment seeking war survivors (n= 30 for both groups) using the Harvard Trauma Questionnaire (HTQ) and the Impact of Events scale in Bosnian language. The questionnaire evaluated general war related events, general and sexual torture, rates of intrusive and avoidance cluster symptoms, and symptoms of general and complex post-traumatic stress disorder (PTSD). Key findings of relevance include a high rate of PTSD symptoms even 6 years after the war. High age and torture appear to be major risk factors for PTSD, while patients who had suffered rape as crime of war had lower rates of general PTSD symptoms, but high rates of complex PTSD on the HTQ. While PTSD symptoms were high mainly in the help-seeking group, and usually low in the non-treatment group, the different cut-off scores in the literature and especially the application of the DSM-IV criteria did greatly influence the PTSD rate.

SS51.
SUBSTANCE ABUSE AND THE FAMILY (Organized by the WPA Section on Addiction Psychiatry)

SS51.1.
FAMILY THERAPY AND SUBSTANCE ABUSE: A RESEARCH OVERVIEW

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Aspects of family life and relationships have long been connected to the initiation, exacerbation and relapse of the spectrum of substance use disorders. Examples include that poor parent-adolescent relationships consistently predict adolescent drug use across cultures and time; negative communications and poor coping strategies within a marriage may initiate and perpetuate drug use, while close relationship with healthy families-of-origin may buffer the abuser from relapse. Based on the above, family-based interventions have been identified as "promising", but until recently not "definitive" as a treatment modality, due to the relative dearth of empirical support. More rigorous investigation of the impact of these interventions is now possible, spurred by the presence of several manualized family-based approaches. Particularly, among adolescent populations, cost-effective family-based treatment approaches are now shown to significantly reduce drug use, achieve better retention rates, reduce comorbid externalizing problems, improve school and performance as well as overall family function. The evidence for family interventions with adult abusers is more limited. A notable exception has been a series of studies involving behavioral couples therapy (BCT). This growing empirical evidence is however overwhelmingly rooted in a Western and particularly North American family perspective. It is therefore timely to compare the experience of family interventions in other cultural contexts, including structure, power division, attitude towards drugs and the role of self-help.

SS51.2. BEHAVIORAL COUPLE THERAPY (BCT): INDIVIDUAL AND GROUP INTERVENTIONS

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In the context of the predominantly nuclear family structure, behavioral couple therapy (BCT) has gained prominence for enlisting the family's help after the alcohol or drug-dependent person has sought treatment. Recent research has demonstrated its utility with a range of addictions, gender and social classes, citing enhanced cost-effectiveness and benefit to children. This intervention aims to build support for abstinence and to improve relationship functioning. This paper describes the process of selecting and preparing couples for treatment along with the use of behavioral contracts to promote abstinence and the complementary relationship enhancement and communication skill training. The optional use of prophylactic medication to support abstinence is also reviewed. Although this program was originally designed to be delivered to groups, most of the 17 published outcome studies have focused on individual marital therapy. We also focus on our pilot group marital therapy program, based on the experience with 35 couples so far. The pros and cons of group versus individual intervention are reviewed, as well as clinical insights gained from successes and failures.

SS51.3.
THE FAMILY: A SITE FOR CONTROL AND CARE OF ALCOHOL ABUSE

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While cultural norms that influence drinking behavior have been widely explored, the importance of sociocultural factors in shaping family attitudes toward drinking and the drinker have been rarely addressed. However, it has been recognized that some family-centered European cultures (like the Italian, Portuguese and Spanish), exerting familiar informal social control with regard to drinking, are most successful in preventing alcohol abuse. In the same countries, families act as the primary groups for alcohol-related problem intervention. We present the results of an Italian experience where an early active inclusion of families in the recovery process, in the context of a community-based rehabilitative program for the treatment of alcoholism, proved to be the main ingredient leading to success. It follows that more culturally informed strategies of intervention should be a future aim.

SS51.4.
EXPRESSED EMOTION AND SUBSTANCE-RELATED DISORDERS IN OUTPATIENT AND RESIDENTIAL TREATMENT: A CASE CONTROL STUDY

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Little is known about expressed emotion (EE) as a predictor of relapse for substance related disorders, and there have been few published clinical trials evaluating family psychoeducation in these disorders. We compared high-EE status rates between families of patients with substance related disorders in outpatient and residential treatment and of schizophrenic patients in standard outpatient

care. Seventy-one relatives of addicted patients, in outpatient and residential treatment, and 45 relatives of schizophrenic patients were compared as regards EE status. High-EE status is more frequent in the substance related group, particularly in residential treatment, than in the schizophrenic group. The benefit of family intervention and the predictive power of EE in schizophrenia emphasize the need of controlled trials of family psychoeducation interventions for substance related disorders.

SS51.5.
CULTURAL ISSUES AND FAMILY TREATMENT OF SUBSTANCE ABUSE

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Each family has its own culture and its own dynamic and, when substance abuse occurs, the response of different family members is not necessarily uniform. For example, the family may split into rejecting and rescuing factions, thus leading to family conflict. Wider cultural factors undoubtedly also affect the family's response to substance abuse. In traditional societies, accustomed to folk methods of confronting difficulties and problem-solving, a professional therapist may meet considerable resistance, which can be alleviated if the position of an older person in supervising treatment is recognised and acknowledged. To understand the experience of a family from a very different culture requires a mind that can be open to new constructions of the pattern of family life, both internally and externally and in terms of custom and expectation. For example, respected kinship and authority structures in Asian and African extended families are strikingly different to those in Western families and, in countries where the family is the nucleus of society, it often plays a significant role in bringing the abuser to treatment. Certainly, substance abusers themselves perceive family support as most important for remaining in treatment. All of these examples demonstrate the importance of understanding the impact of culture on family life and also its effects on treatment interventions. Studies of substance abuse in different parts of the world demonstrate that people in different countries are doing very different and sometimes quite contradictory things to help substance abuser and this presumably reflects markedly different views about the nature of the disorder being treated and of the helping processes. Case studies will demonstrate the influence of culture in different forms of family treatments and the important role which family does play in recovery or otherwise.

SS52.
SETTINGS AND TECHNIQUES OF INTERVENTION IN EMERGENCY PSYCHIATRY: A COMPARISON OF DIFFERENT MODELS (Organized by the WPA Section on Emergency Psychiatry)

SS52.1.
PSYCHODYNAMIC CRISIS INTERVENTION FOR BORDERLINE PATIENTS WITH A SUICIDE ATTEMPT

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Suicidal patients with borderline personality disorder have an increased risk of completed suicide and poor treatment response. After recent research indicated that both antidepressant medication and psychotherapy improve the outcome of borderline patients with self-damaging behaviour, new research should be aimed to develop better acute treatment for these subjects. To address this issue, we further developed a well studied crisis intervention program in order to provide cost-effective ambulatory therapy to borderline patients referred to emergency room for a suicide attempt. We present here a first prospective evaluation of this program. Inclusion criteria were the following: consenting subjects, with an age range between 20 and 65 years, referred to emergency room with self-poisoning, major depression and borderline personality disorder, and requiring psychiatric hospitalisation. Psychotic disorders, bipolar disorder, severe substance dependence, mental retardation were exclusion criteria. After emergency treatment (up to 5 days), consecutive subjects meeting criteria were assigned to comprehensive outpatient crisis intervention including standard clinical management with selective serotonin reuptake inhibitor (SSRI) medication, suicidal risk case management and psychodynamic psychotherapy (2 session per week). At 3 month follow-up we found substantial symptom improvement, fair to good global functioning, negligible rates and severity of self-damaging behaviour. In addition, most patients exhibited remarkable adherence to treatment within crisis intervention and after discharge from the program.

SS52.2. PSYCHIATRIC EMERGENCIES: FROM DIAGNOSTIC EVALUATION TO INTERVENTION IN A PSYCHIATRIC EMERGENCY SERVICE

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Psychiatric emergencies are characterized by the acute subjective suffering which accompanies mood, thought and behavioral disorders. The subjective feeling expressed by the patient that his/her emotional balance has broken down requires that he/she receives immediate help and a specific treatment. In order to decide which intervention would be most appropriate, a careful examination of the psychiatric profile and the available resources is necessary. This is often not possible within the environment of a first aid department, for logistic and operational reasons. The outpatient clinic "Orientating Interviews" was set up in 1998 at the Psychiatric Clinic of Milan State University in order to bridge the gap. This is a service without any appointment list, where users have free access, thus permitting patients to be immediately accepted for treatment. During the first visit the user's reasons for requesting the service are explored, together with the expressed needs. A diagnostic evaluation is made and indications for treatment are provided, in accordance with the expressed needs and the psychopathological profile. If a clinical condition which falls within the definition of psychiatric emergency is found, the user is referred to the psychotherapy unit for specialized emergency interventions, which may take the form of crisis intervention (supportive psychotherapy lasting for 8-12 sessions once a week), brief psychotherapy, a medium-term analytically-oriented treatment (40-60 weekly sessions) or psychiatric therapy (support sessions plus drug therapy) with periodic check-ups.

SS52.3.
EMERGENCY PSYCHIATRY AND THE REQUEST OF PSYCHIATRIC INTERVENTION BY GENERAL PRACTITIONERS

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This research stems from the fact that in Italy the rationale of the psychiatric reform has been to involve most of the categories of health professionals in psychiatric care rather than isolating it in a separate mental health setting. As a result, mental disorders are more likely to be treated by non-psychiatric health professionals. Furthermore, the need to reduce costs means that psychiatric specialists might not be involved at all or only involved in a later stage. These and other factors have led us to concentrate our study on the role of general practitioners in psychiatric treatment and on the role of doctors working in the emergency ward. We studied one sample for each of the above, consisting of 50 subjects. Our preliminary results show that the number of requests for specialist psychiatric intervention by general practitioners decreased by 50% if these doctors had attended an emergency medicine training course. Furthermore, we evaluated whether or not the request for specialist psychiatric consultation was appropriate. Here too, our findings are revealing a remarkable difference between general practitioners with specific training and those without it. We highlight some of the problematic issues raised by the study and suggest some possible solutions.

SS52.4.
PSYCHIATRY AND EMERGENCY MEDICINE IN METROPOLITAN AREAS: BETWEEN SEPARATION AND INTEGRATION

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Modern psychiatry has to provide an intervention in situations which are different with respect to goals (from prevention to rehabilitation), settings (hospital, community, residential facilities, houses), time frame (from emergency to lifetime treatments). Therefore, the link between the hospital and the community, and between somatic medicine and psychiatry, becomes more and more important. The differences in the needs of the population and in the commitments which are required become even more complex in the urban areas, where the organization frames have to be specific and flexible at the same time, finding a balance between an immediate taking care of patients, some of them with new pathologies, and their consent to the treatment. The experience of a community psychiatry program in Genoa is presented.

SS52.5.
FAMILY INTERVENTIONS IN CHILDHOOD POST-TRAUMATIC STRESS DISORDER

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In childhood, post-traumatic stress disorder (PTSD) may be the consequence of sharing a sexual activity not suitable to the age, of being the victim of actual or threatened physical violence, or of having witnessed events which can arouse strong emotional feelings. The manifestations of the disorder in children may include impulsive or self-injurious acts, physical discomfort, feelings of despair or shame, isolation and refusal of contacts with the surrounding world. Therapeutic interventions are different and of various theoretical derivation. In our experience, what seems fundamental is the intervention on the family, implemented with various techniques, so that the therapeutic action is naturally mediated by educational figures with whom the child has a meaningful affective bond.

SS53.
COMMON MENTAL DISORDERS IN PRIVATE PRACTICE (Organized by the WPA Section on Private Practice)

SS53.1.
AFFECTIVE CONDITIONS IGNORED IN ACADEMIC PSYCHIATRY

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The last decade has witnessed an increasing gulf between clinical psychiatry and academic psychiatry. The focus on research by academic faculty who are increasingly divorced from patient care has led to concepts and data whose pertinence to clinical practice is, accordingly, increasingly irrelevant. They tend to focus, for instance, on "pure" disorders: dementia, schizophrenia, mania, major depression, post-traumatic stress disorder, individual personality disorders, anorexia nervosa, and addictive disorders. Clinicians treat highly comorbid disorders involving various combinations of the above, in particular those involving dysthymia, bipolar II disorder, bulimia, social phobia, panic disorder, and substance/alcohol use disorders. We submit that research conducted by clinicians represents a "corrective" alternative to academic research.

SS53.2.
BIPOLAR II DISORDER: NEW RESEARCH FINDINGS

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Bipolar II disorder (BP-II), defined as a mood disorder with major depressive episodes (MDE) and hypomanic episodes, is much more common than reported by DSM-IV (0.5%). Community prevalence was found to be as high as 11%. Higher prevalence of BP-II is related to improved probing for past hypomania and to interviews done by clinicians. Probing for past hypomania was improved by focusing more on overactivity (increased goal-directed activity) than mood change. Overactivity is an observable behavior, easier to remember by patients and family members/close friends than mood change. Recent studies have shown that overactivity may have at least the same priority level given by DSM-IV to mood change for the diagnosis of hypomania. DSM-IV requires an observable change in functioning during hypomania, but does not state in the diagnostic criteria that functioning is often increased. Recent studies have shown that in hypomania functioning may be more often increased or decreased according to the non-tertiary-care versus tertiary-care setting ("sunny" and "dark" hypomania). It was shown that "dark" hypomania often had an underlying highly unstable temperament (cyclothymic temperament), while the "sunny" BP-II were more likely to be relatively stable between the episodes. Duration of hypomania usually ranges from few days to weeks. A minimum duration of 2 days (versus DSM-IV 4 days) has been validated. The cross-sectional picture of BP-II depression (MDE) was shown to be often an atypical depression (oversleeping, overeating), and also to have frequently concurrent hypomanic symptoms

(usually irritability, racing/crowded thoughts, psychomotor agitation, more talkativeness). Mixed depression (depressive mixed state) was defined as an MDE with 3 or more concurrent hypomanic symptoms. This definition was validated by its association with classic bipolar validators such as young age at onset, many MDE recurrences, atypical depression, and bipolar family history. A dose-response relationship was found between number of intra-MDE hypomanic symptoms and bipolar family history loading in probands' relatives. The distribution of intra-MDE hypomania symptoms was found to be near normal, supporting a dimensional definition of mixed depression. Worsening of mixed depression if treated only with antidepressants was also observed, as well as the positive impact on mixed depression by treating first the hypomanic symptoms by mood stabilising agents.

SS53.3. LONG-TERM PHARMACOLOGICAL TREATMENT OF PANIC DISORDER IN CLINICAL PRACTICE: FOCUS ON RESISTANT FORMS

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Data on pharmacological treatment of panic disorder (PD) derived from controlled studies cannot be judged without the regular measurements of outcomes in daily practice. In fact, patients enrolled in controlled trials are usually young, physically healthy and suffer from an acute phase of their illness in the absence of severe comorbid conditions. "Atypical" forms of PD, in which symptom-limited attacks, unreality feelings and other psychosensorial features prevail, are almost neglected. Moreover, drug treatment is typically episodic or discontinuous, occurring at random points, and does not capture the naturalistic situation. Hence, the need to focus on sample characteristics, which distribute along a wide range of age, symptomatology, severity and comorbidity, as is the case in routine clinical practice. In a sample of 326 PD patients treated with antidepressants in a setting of routine clinical practice and followed up for three years, we observed a significant number of complete symptomatological remissions (nearly 95%), but in many cases our PD patients showed a relapsing course. The longest period of remission of PD was associated with low severity, medium-lasting course in patients with an onset of the illness in young adulthood. A high percentage of patients who had achieved symptom remission tended to drop out from further treatment; adherence to long-term treatment with antidepressants was predicted by severe and long-lasting symptomatology. Further information is needed with regard to drug effectiveness and therapeutic management in the long-term treatment of PD, especially focusing on "atypical" forms, bipolar II comorbidity and long-term use of benzodiazepines as possible predictors of treatment failure.

SS53.4. OBSESSIVE-COMPULSIVE DISORDER, DEPRESSION AND SOFT BIPOLARITY: A COMPLEX COMORBIDITY

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Clinical and epidemiological studies on obsessive-compulsive disorder (OCD) have largely focused on co-morbidity with major depression. Less attention has been devoted to the co-morbidity between OCD and bipolar disorder. In the present paper we deal with a more complex pattern of co-morbidity involving bipolarity. As contrasted to non-bipolar OCD, these patients had a more gradual onset of their OCD, which, nonetheless, pursued a more episodic course with greater number of concurrent major depressive episodes. OCD bipolars had a significantly higher rate of sexual and religious obsessions and a significantly lower rate of checking rituals. They reported more frequently panic disorder-agoraphobia and the abuse of different substances (alcohol, sedatives, psychostimulants and coffee). OCD probands with non-bipolar major depressive co-morbidity ("unipolar" OCD) were older in age, had a more chronic course with more frequent hospitalizations and suicide attempts and had greater co-morbidity with generalized anxiety disorder when compared with the remaining of OCD cases. Finally, they were more likely to have aggressive obsessions and those with philosophical, superstitious and bizarre content. These data suggest that co-morbidity with bipolar and unipolar affective disorders has a differential impact on the clinical characteristics, co-morbidity, and course of OCD. Selective serotonin reuptake inhibitors (SSRIs) represent the first choice treatment for comorbid OCD and major depression, which would suggest a diagnostic priority for OCD when concomitant with major depression. In bipolar-OCD patients, clomipramine and, to a lesser extent, SSRIs may worsen the course of bipolar disorder, especially if initiated before treatment with a mood stabilizer. When antidepressants are used, SSRIs should be preferred and started after an adequate mood stabilization has been achieved.

SS53.5. BIPOLAR DISORDER IN CHILDREN AND ADOLESCENTS

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If adult-onset bipolar disorder (BD) is a well-established clinical entity, only recently clinicians have begun to take this diagnosis seriously in childhood. A timely diagnosis of early-onset BD is crucial, as it can provide the best opportunity for possible prevention of behavioral disorders, failure at school and subsequent psychosocial impairment, which is the major risk for the chronic forms of BD. This paper describes phenomenology, diagnosis, natural history and treatment of BD in children and adolescents. Some possible precursors are examined, such as temperamental dysregulation, major depressive disorder and/or dysthymia, anxiety disorders and externalizing disorders (attention-deficit/hyperactivity disorder and conduct disorder). Phenomenology of early-onset BD is described according to two different definitions, the "narrow", adult-type definition, and the "broad" definition, which considers the atypicality of the early-onset clinical picture (non-episodic course, prevalently dysphoric mood, frequent mixed or rapid-cycling episodes). The natural history is briefly described, considering the relapse rate as well as the risk of suicide or dangerous behaviors and of superimposed substance abuse during adolescence. Finally, drug treatment strategies are described, considering the first-choice drugs, the management of treatment-resistant episodes, and the problem of duration of pharmacological prophylaxis.

ZONAL SYMPOSIA

ZS1.
INTERDISCIPLINARY APPROACHES TO TREATMENT OF MENTAL DISORDERS: THE EXPERIENCE OF EASTERN EUROPE (Organized by the WPA Eastern Europe Zone)

ZS1.1.
COMPREHENSIVE (PHARMACO- AND PSYCHOSOCIAL) TREATMENT FOR SCHIZOPHRENIC PATIENTS

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Moscow Research Institute of Psychiatry, Moscow, Russia

We evaluated the effectiveness of a comprehensive biopsychosocial treatment for problematic schizophrenic populations emerging in a naturalistic setting: a) patients with frequent hospital admissions; b) patients with long-term hospital stay (hospital residents); c) patients with early psychosis. All groups were assessed clinically and with the use of the Positive and Negative Syndrome Scale (PANSS) and scales evaluating family burden, social functioning and quality of life, social networks, instrumental and emotional support. These indices were assessed before and after the complex treatment program including psychopharmacotherapy and psychosocial interventions (psychoeducation, social skills training, neurocognitive training, ongoing psychosocial support). The program allowed to achieve significant decrease of the number of hospital admissions and the duration of hospital stay and to maintain a high level of social functioning and quality of life with less family burden and better social support network. Treatment of early psychoses was provided in an outpatient setting.

ZS1.2.
INTERDISCIPLINARY INTERACTION OF FAMILY MEDICINE, PSYCHIATRY, CARDIOLOGY: THE EXPERIENCE OF KYRGYZSTAN

V. Solozhenkin, T. Nelubova, X. Solozhenkina
Kyrgyz-Slavonic University, Bishkek, Kyrgyz Republic

A system of interdisciplinary interaction was created, initiated by the Kyrgyz Psychiatric Association. It included two stages. First stage included the analysis of possible areas of interdisciplinary interaction; the evaluation of the situation in the country; the statistical analysis of diagnostic, including laboratory and paraclinical, and therapeutic approaches and the analysis of failures of educational programs for family doctors on the diagnostis of affective disorders in primary care. In the second stage, on the basis of the results of the analysis, we defined the following disorders as the subjects of multidisciplinary scientific and practical work: vegetative dystonia, neurocirculatory asthenia, liquor (cerebrospinal fluid) hypertension, headaches. We also encouraged the update of old diagnostic categories, the use of informative, evidence based categories and the adoption of schemes of therapy in the frame of evidence based medicine. Old didactic technologies were revised. We selected a model of multidisciplinary team as the most effective form of interdisciplinary interaction.

ZS1.3.
INSURANCE MEDICINE AND STATE PROGRAM OF PSYCHIATRIC CARE - EXPERIENCE OF GEORGIA

G.B. Naneishvili
M. Asatiani Research Institute of Psychiatry, Tbilisi, Georgia

Since 1995 in Georgia there has been a gradual reform in the health system. The introduction of free market principles of economic relations and a large administrative, organizational and financial freedom of medical establishments has required new approaches to the organization of psychiatric service. The difficult economic situation has produced the necessity to define not only priority directions in the medicine financed by the state and free of charge for the citizens of the country, but also to select diseases which are socially most significant. The limitation of resources was reflected also in the state program for psychiatric care, where the limited responsibilities of the state in providing care are precisely determined. One of the most important and difficult problems is the coordination with the professional activities of specialists of other medical disciplines in the state program for psychiatric care. Original solutions of these problems have been found, within the framework of limited resources and of rigid medical standards.

ZS1.4.
TEAM WORK IN PROVISION OF AID FOR PEOPLE WITH STRESS-RELATED DISORDERS

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We describe the experience of team work in two Chechen campuses in Ingush Republic with a population above 20 thousand. Two centers of medical psychological help (MPHC) were opened, and in each of them a team of specialists (a psychiatrist, psychologists, a general physician, nurses and hospital attendants) started to work. In the primary stage of post-traumatic stress disorder (PTSD), psychologists from MPHC carried out debriefing sessions during regular campus rounds. Among 5134 participants in these sessions, 2354 (45.8%) referred to MPHC and got appropriate psychological and psychiatric help. 52.2% of them needed psychopharmacotherapy and were treated by a psychiatrist. 29.3% consulted a psychologist and 18.4% were included in closed psychotherapeutic groups. In the secondary stage, group therapy was carried out in 5 groups including 54 women and two groups including 40 men with PTSD and other stress-related disorders. An ethnocultural approach was used taking into account national and religious peculiarities of the groups' participants.

ZS1.5.
THE DEVELOPMENT OF PSYCHOSOCIAL TREATMENT METHODS IN UKRAINE

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Psychiatric care in Ukraine has been in the past at a distance from general healthcare network and concentrated on the contingent of patients with psychotic disorders. The development of psychiatric care in Ukraine has been directed towards the reconstruction of a psychiatric health protection system, to develop out-patient and half-stationary structures which would provide social support and rehabilitation to patients, to organize specialized departments and centers, to develop psychosocial methods of therapy and psychological counseling. Psychiatric services in the Zhitomir area of Ukraine are an example of such transformations. During the last 10 years the

number of in-patient beds was reduced by 50%. A sanatorium in the suburbs was opened for rehabilitation of patients leaving hospitals. A counseling center was created where, along consultations, cognitive behavioral therapy, art therapy, motion therapy and communicational training are available. The cooperation with social organizations of relatives and users and with social services has been achieved. Patients' self-support groups work effectively.

ZS1.6.
NEUROPSYCHOLOGY IN RUSSIAN PSYCHIATRY

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Neuropsychology was developed in Russian psychiatry mainly following the studies of A.R. Luria. The works of Luria are well known in other countries. His concept of neuropsychological syndromes became the foundation for applied methods widely used in psychiatry, in particular the set of tests called Luria-Nebraska. By this time we can mention both similarities and differences in the application of neuropsychological methods in Russia and in other countries. In Russia, as well as in the USA and Western Europe, neuropsychological methods are used to diagnose dementia of Alzheimer type and multi-infarct nature, and for the study of neurocognitive deficits during schizophrenia. At the same time, due to some historical conditions, several specific branches of neuropsychology have been formed in Russia. One of them is related to the development of neurorehabilitation. Luria's particular interest in aphasia led to the development of neuropsychological training methods for the recovery of speech and other higher psychic functions after strokes and cerebral injuries. Another trend is related to the study of mild, non-demented forms of organic psychosyndrome and the study of therapeutic efficacy of nootropic and neurometabolic agents and their influence on cognitive functions.

ZS2.
PARTNERSHIP IN MENTAL HEALTH CARE IN AFRICA (Organized by the WPA Southern and Eastern Africa Zone)

ZS2.1.
THE NEED FOR EVIDENCE-BASED RESEARCH IN AFRICAN PSYCHIATRY

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The introduction of new technologies and medications into clinical psychiatry has resulted in a widening of the gap in the standard of care between developed and developing countries. For example, the considerable advantages of the atypical antipsychotics are likely to make a substantial difference to patients in terms of improved social and vocational functioning and general quality of life. However, the greater acquisition costs of these drugs put them beyond the reach of large sectors of the world's population - their availability in Africa is extremely limited. To make matters worse, in developing countries policy makers usually award low priority to the development of services for people with mental illness, other health issues being perceived as more important. Research findings in the developed world cannot be generalized to developing countries. Cost-effectiveness studies in low-income countries need to be undertaken. Other more affordable treatments need to be researched. The considerable evidence for improved safety and efficacy of low-dose compared to high-dose classical antipsychotics offers an alternative that could be implemented immediately in low-income countries.

ZS2.2.
CONTRIBUTION OF TRADITIONAL HEALERS IN MENTAL HEALTH CARE

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Africa has a small and diminishing number of practicing mental health workers. Most of sub-saharan Africa has less than one psychiatrist per million population. Some African countries do not have a single psychiatrist. The majority of people suffering from psychiatric disorders are in the circumstances seen by traditional healers, who are in most cases the first point of contact with patients. This paper describes a Kenyan project that examines the knowledge, attitude and practices of traditional health workers in a rural setting. More than 90% were male, with an average age of 55 years and a mean duration of practice of 22 years. 50% had primary education (7 years) while a third had no formal education. 70 percent had undergone apprenticeships with a father or grandfather with a mean duration of 17 years. Prayers, herbs and the removal of spirits were the main methods of treatment. Referral systems work in both directions, from the traditional healers to the health centers and back, creating in the region a harmonious working environment with mutual respect for each other's skills. This model holds much promise for the future of mental health in Africa.

ZS2.3.
NON-GOVERNMENTAL ORGANIZATION (NGO) PARTNERSHIPS IN MENTAL HEALTH CARE

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The contribution of mental disorders to the global burden of disease is now known to be significant the world over. The situation is even worse in the developing world, where both human and financial resources are grossly limited amidst the increasing burden of disease caused by the poverty, civil strife and HIV/AIDS. Mental illness is also seen to increase with upcoming industrialization, urbanization and the growing tensions of a rapidly changing society. Access to mental health care in many parts of Africa is quite limited and mainly concentrated in urban areas. In a bid to improving equity and access, it has been found necessary to bring on board other players to back up the traditionally known caregivers. Many countries now have polices to address a multidisciplinary approach to care incorporating private and public sectors. The paper will discuss the various contributions of non-governmental organisations to mental health care delivery in Africa based on the Ugandan experience.

ZS2.4.
MULTIDISPLINARY APPROACH IN MENTAL HEALTH CARE - A MALAWI EXPERIENCE

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University of Blantyre, Malawi

Malawi, a nation with a population of 12 million, currently has no psychiatrists, social workers and psychologists in the government psychiatric services. The backbone of the psychiatric health services are senior enrolled psychiatric nurses who are helped by 4 psychiatric clinical officers, and 10 registered psychiatric nurses. One district, however, receives psychiatric services from a missionary order, The St. John of

God, who provide an excellent needs based multidisciplinary mental health care by a team of clinical officers, psychiatric nurses, counsellors, community health workers and rehabilitation assistants. It will be argued that this model should provide a framework to the government of Malawi for planning and provision of nationwide mental health services.

ZS3.
MENTAL HEALTH AND PSYCHIATRY IN LATIN AMERICA (Organized by the WPA Southern South America Zone)

ZS3.1.
MENTAL HEALTH AND PSYCHIATRY IN LATIN AMERICA: MEXICO AND CENTRAL AMERICA PERSPECTIVES

E. Camarena-Robles
WPA Zonal Representative, Zone 3

The situation of mental health care and psychiatry in Mexico and Central America is very peculiar. The population who lives in this region is close to 200 million people. In the last decade we have seen important advances in their health indicators: increase in life expectancy, high coverage in vaccination, reduction and control of mortality-morbidity by endemic causes. Health systems in these countries consist of three different sectors: private services, social security and public services for the non-insured population and those without access to the private market. The amount of resources aimed to sanitary expenses as a percentage of the gross domestic product is more than 5%, with more than half coming from public resources. The average amount of money expended for people's health care is up to US$ 100 per capita. The available beds for psychiatric patients are more than 1/10,000 people and in most countries the number of psychiatrists is more than 5/100,000 people. The countries have specific legislations for the care for people with mental disorders and in some of them there are resources to give the necessary assistance in primary care, with facilities guaranteeing treatment for poor people.

ZS3.2.
LATIN AMERICAN PSYCHIATRY: A PERSPECTIVE FROM NORTHERN SOUTH AMERICA

E. Belfort
WPA Zonal Representative, Zone 4

The task to evaluate in subjective terms the present situation of mental health and psychiatry in Latin America is an ambitious and complex one, especially when we know, from our experience, that mental health policies in the region are not adequate to the culture and needs of the Latin America population. The increasing demands and the presence of new nosological entities, not described yet in any diagnostic manual require a different understanding and a better approach. On the other hand, the lack of prevention and promotion programs of mental health, as well as the absence of health services for extreme populations, are also important issues to be considered in the evaluation. In this sense, as the WPA Zonal Representative for Zone 4, which includes Bolivia, Colombia, Ecuador, Peru and Venezuela, I will describe some indicators and proposals in order to better address the reality and the needs of the Zone.

ZS3.3.
MERCOSUR REGION PERSPECTIVES

M.R. Jorge
WPA Zonal Representative, Zone 5

The Mercosur is a region in South America officially composed by Argentina, Brazil, Paraguay and Uruguay, but which also includes Chile. Brazil is a Portuguese speaking country and all others are Spanish speaking countries, but they all share a common heritage and culture from the Iberic peninsula. There are some differences in the way health services and policies were and are organized in these countries but they have shared - and continue to do so - some common experiences in the mental health area. Up to recent times, mental health care was provided by governments mostly in large psychiatric hospitals but, after the Caracas Declaration in 1990, a change in this scenario is occurring. Legislation on mental health in some countries has changed since then, with a shift from an emphasis on hospital care to community care and also on protecting the rights of psychiatric patients. As a consequence, a number of large hospitals have been closed and others reduced their number of beds. General hospital units for psychiatric patients are growing in number as well as outpatient services. A considerable number of Universities have training programs in psychiatry and research has increased in the last few years. Advocacy movements are also growing in the region and some users and family associations have been created in large and medium sized cities. But social and economical problems experienced by all countries in the region are still shaping mental health and access to care in those countries. Poverty, violence, substance abuse, stigma and discrimination against mental illness, among other factors, are always present in the daily life of ill or not ill people. Some numbers which illustrate this situation will be provided and some proposals discussed as a way to improve mental health in Latin America.

ZS4.
DEVELOPING THE IDENTITY OF THE CONTEMPORARY EUROPEAN PSYCHIATRIST (Organized by the WPA Western Europe Zone and the WPA Northern Europe Zone)

ZS4.1.
THE IDENTITY OF PSYCHIATRY AS A PROFESSION AND TRAINING AS A TOOL

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Amongst the medical specialities psychiatry is probably the discipline most challenged by stigmatisation. This comes as well from the inside as from the outside of the medical disciplines. Psychiatry is based on natural science as well as other scientific disciplines. This is a fascination and a challenge for the professionals in the field. In a number of European countries recruitment and retention creates problems. Thus, to improve the image of psychiatry, a proper introduction to the broadness of the speciality must take place already at a pregraduate level, emphasising the great scientific advancements seen in the recent years integrated with social and psychological aspects. Training in a broader sense will here be another important tool. The paper will present some work carried out by the Section of Psychiatry of the European Union of Medical Specialists (UEMS) on retention and recruitment and on stigmatisation within the medical disciplines. Also, some results from a survey on psychotherapy training as part of training in psychiatry in Europe will be presented. In most European

countries psychotherapy is seen as a very important psychiatric treatment modality which needs proper assessment of psychopathology. A qualified psychiatrist should always be responsible for an assessment prior to any psychotherapeutic intervention carried out inside the field of mental health services.

ZS4.2.
PROMOTING THE IDENTITY OF THE CONTEMPORARY EUROPEAN PSYCHIATRIST

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The stigma attached to patients suffering from psychiatric disorders has generalized to the whole field of psychiatry. This includes people working in the mental health professions, in particular psychiatrists. The main reasons for this stigma are found in fear (both rational and irrational) and ignorance. As other professions (psychologists, psychotherapists, etc.) are increasingly assuming responsibilities in mental health care, the role of the psychiatrist has become diffuse, both in the perception of health professionals and the lay population. Clarifications as well as corrections of false beliefs must be sought on all levels. Ideally, this will be done in parallel efforts, targeting medical students, residents of all fields of medicine and the general public. Two key messages will support this: firstly, a clear and concise definition of the role of the contemporary psychiatrist (in contrast to the more restricted expertise of psychotherapists and psychologists) and secondly the provision of information with regard to recent achievements in the field (also in quantitative and qualitative comparison to other fields of medicine). As psychiatrists are generally not experts in public relations, professional help from this end must aid this process. In summary, the field needs to proactively deliver clear and positive messages.

ZS5.
ADMINISTRATION OF HEALTH SERVICES AND EDUCATIONAL PROGRAMS IN LATIN AMERICA (Organized by the WPA Northern South America Zone and the WPA Mexico, Central America and the Caribbean Zone)

ZS5.1.
HUMAN DEVELOPMENT, POVERTY AND MENTAL HEALTH IN CENTRAL AMERICA

L. Alemán Neyra
Nicaraguan Association of Psychiatry

The region of Central America has experienced in the last 25 years serious armed conflicts, natural disasters and structural adjustments that have sank this region into poverty, according to the United Nations Development Program (UNDP) Human Development Index, with the exception of the Republic of Costa Rica. This serious economic crisis has been the decisive factor leading to health deterioration of the population and consequently of its mental health component. The main indicators of human development of the region are presented, as well as the investment of the governments in the health area, the mental health programs which have been developed, the training and distribution of specialized human resources dealing with mental health problems, and their relationship to the health profiles of Central American populations. Psychosocial problems related to migration, displacement, violence, alcoholism, drug abuse, accidents and suicidality, among others, contribute to shape the current profile of mental health problems, and they represent a challenge for psychiatrists and other specialists to adopt new modalities of service organization, intersector work, networks and community programs, in the light of the integral concept of health. A further element of this situation is the move of several mental health professionals and specialists from the state institutions to the private sector. The Associations, Societies and Unions have an important role to play in the integration of actions in favor of public policies and programs which may benefit the population.

ZS5.2.
MENTAL HEALTH SERVICES ADMINISTRATION IN MEXICO

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The mental health services administration in Mexico was born in the year 1943, with the establishment of the Health and Assistance Secretariat and the Mexican Institute of Social Security. These institutions complement each other in dealing with the health services for the national population. Public politics for health services and in particular mental health services were for four decades based on a centralized model, which limited the organization of services for both care and education in most of the national territory. In 1983, a new health legislation was established, which promoted a decentralization of the public health services. This policy produced initially not homogeneous results. Thus, the process was strengthened fifteen years after its initial formulation. During the evolution and trajectory of this process, the organization of the mental health services has been directly influenced. There have been both some advances and some delays. Therefore, it was proposed to separate these services from the general decentralized model.

ZS5.3.
CHILD TRAINING PROGRAMS IN MEXICO

E. Camarena-Robles
WPA Zonal Representative, Zone 3

It is very important to emphasize that Mexico is a heterogeneous country, where the level of socio-economic development varies very much from one region to another. There are some highly developed states as for their infrastructure and level of education, and there are some others that are underdeveloped. This has favored a big concentration of resources in large cities and an abandonment in rural areas. This is the reason why the Federal Government Program of Mental Health has been created. Mexico's Child Mental Health Program remains integrated in this latter program, that establishes strategic lines and objectives including the child and adolescent population with mental disorders. The main objectives include the extension of the ambulatory and hospitalization net services for the children with mental health problems. Some more actions derive from these objectives. Among these is the opening of mental health services in highly specialized hospitals, i.e. the regional ones, with a homogeneous geographic distribution due to the complexity of the Mexican territory. We have started training for all primary care physicians in the detection of the main children's mental disorders that should be diagnosed in primary care. Also, an educational plan has been developed for teachers. This will be a long-term project, because there are more than 170,000 teachers in our country. This general program has been complemented with a specific program for fighting attention-deficit/hyperactivity disorder (ADHD). Other activities are those related to the collaboration

with the Public Education Secretariat, aiming to modify the curricula for the education of the teachers, so that they acquire a better knowledge in the area of child psychopathology.

ZS5.4.
CHILDHOOD TRAINING PROGRAMS IN VENEZUELA

E. Belfort
WPA Zonal Representative, Zone 4

The mental health policy in the Latin American region has not been able up to now to keep abreast with recent developments in the region. The ethnic diversity of the population, as well as the social, economic, political, and legal structural difficulties are among the obstacles to the advance of health policies. Mental and behavioural problems related to these difficulties, including domestic violence, anxiety and mood disorders, drugs and alcohol abuse, symptoms associated to nutritional problems, contamination of water and air, etc, are having an increasing impact on the cognitive and emotional development of the child and adolescent population. The analysis of these aspects is of great importance for the development of training programs in childhood psychiatry, and certainly, for the development of a quality of life more adequate to human dignity. A succinct revision of these vicissitudes problems and of their implications for the implementation of childhood training programs in Venezuela will be provided.

ZS5.5.
THE PROFILE OF THE PSYCHIATRIST IN LATIN AMERICA: A SURVEY

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Colombian Psychiatric Association

We performed a randomized survey using e-mail addresses provided by national psychiatric societies, in order to build up a profile of the psychiatrist in Latin America. The survey covered the following countries: Argentina, Brazil, Colombia, Costa Rica, Cuba, Dominicana, Ecuador, Chile, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru, Panama, Paraguay, Uruguay, Venezuela and Bolivia. The sample included 4600 psychiatrists. The questions were 36, and dealt with issues such as education, professional and financial status, level of satisfaction with the specialization and quality of life. The ultimate aim was to explore the worries and wishes of Latin American psychiatrists.

ZS6.
PERSPECTIVES ON PSYCHOTHERAPY FROM THE US (Organized by the WPA United States of America Zone)

ZS6.1.
SOME NEUROBIOLOGICAL ASPECTS OF PSYCHOTHERAPY

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Learning and memory are associated with alterations in synaptic strength. This presentation explores the process of memory consolidation leading to persistent modifications in synaptic plasticity as a mechanism by which psychotherapy facilitates changes in the permanent storage of information acquired throughout the individual's life. The psychobiological inter-relationships of affect, attachment, and memory offer a perspective regarding the treatment of clinical disturbances of affect as well as delineating basic therapeutic concepts such as transference and working through. Imaging studies will be reviewed that demonstrate that psychotherapy changes both brain function and structure.

ZS6.2.
COMPUTER-ASSISTED PSYCHOTHERAPY: ADVANCES AND OPPORTUNITIES

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Recently developed computer programs for psychotherapy have been well received by patients and have been shown to be efficacious in clinical applications. Newer programs use multimedia, virtual reality, and hand-held computers to provide engaging and stimulating learning experiences. Typically, computer-assisted therapy is based on empirically supported interventions such as cognitive-behavior therapy (CBT) or behavior therapy in which learning is considered to be a key component of the treatment process. Some of the advantages of computer-assisted psychotherapy include improved efficiency of treatment, decreased cost, effective delivery of psychoeducation, reduced burden on the clinician to perform repetitive therapy tasks, vivid illustrations of therapy methods, and rehearsal of coping skills. Advances in the development of computer-assisted therapy are detailed. These include virtual reality interventions for the treatment of anxiety disorders, hand-held computer adjuncts, and multimedia programs for depression. Research with a DVD-ROM program for cognitive-behavior therapy has shown that efficacy of CBT for depression can be maintained while substantially reducing the amount of therapist time. In a randomized, controlled trial, computer-assisted treatment with this program was superior to standard CBT in teaching therapy skills and reducing maladaptive cognitions. There are many opportunities for using computer-assisted psychotherapy to aid clinicians in their work with patients, improve access to treatment, and enhance learning.

ZS6.3.
TRAINING REQUIREMENTS IN PSYCHOTHERAPY FOR US PROGRAMS

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The Accreditation Council for Graduate Medical Education (ACGME) sets educational requirements for all residency programs in the United States. In order for a program to be accredited, they must submit comprehensive program information and then open their program for a site visit by a representative from ACGME. In recent years the ACGME has shifted the focus of training requirements by adding core competencies for each specialty. In psychiatry this has included five psychotherapy competencies: brief psychotherapy, cognitive-behavioral therapy, combined psychotherapy and pharmacotherapy, psychodynamic psychotherapy, and supportive psychotherapy. Programs have struggled with how best to teach these therapies and how to measure competence. Most programs continue to use patient logs, audiotape and/or videotape recordings and direct observation as part of the supervisory and assessment process. As best practices evolve, consensus will compel programs to adopt these new training and evaluation measures. While these new competency requirements have been criticized for a variety of reasons, there has,

nevertheless, been a good faith effort by most programs to comply with these new requirements.

ZS6.4.
USING PSYCHOTHERAPEUTIC TECHNIQUES TO IMPROVE PHARMACOTHERAPY OUTCOMES

A. Tasman
Department of Psychiatry and Behavioral Sciences, University of Louisville, KY, USA

It is well known that adherence to recommended medical treatment is improved in the context of an ongoing and trusting doctor-patient relationship. Unfortunately, the clinical approaches advocated within managed care programs, as well as other forces, have led to decreased attention to this important aspect of our clinical encounters. This presentation will review a variety of aspects of the doctor-patient relationship from the perspective of both the patient and the physician. Issues discussed will focus on improvement of compliance with medication treatment. Topics will include the "illness belief system", symbolic meaning of medications, and transference/countertransference issues. Increased attention to these aspects of patient care in both office and hospital setting improves patient adherence with recommended treatment, thus providing higher quality care and greater patient satisfaction.

ZS7.
MENTAL HEALTH SERVICES IN NORTH AFRICA (Organized by the WPA Northern Africa Zone)

ZS7.1.
MENTAL HEALTH SERVICES IN EGYPT

T.A. Okasha
Institute of Psychiatry, Ain Shams University, Cairo, Egypt

Six hundred years ago, before Europe had mental health services in general hospitals, Egypt had such a service in Kalawoon hospital in Cairo. In fact, in that hospital there were four wards: surgery, medicine, ophthalmology and psychiatry. In 1942 Egypt started to implement the concept of psychiatric services in general hospitals. Egypt lies on the Mediterranean Sea; part of it lies in Africa and part of it (Sinai) lies in Asia. Egypt is considered African, Mediterranean, Arab and a Middle Eastern country at the same time. Egypt is one million square kilometers, with a population of 70 million. 97% of Egyptians live on 4% of the land, mainly in the Delta region and the Nile valley. The population density in Egypt is 59/sqKm, while the population in Cairo is about 15-16 million in the daytime, and approximately 12 million during the night. The population density in Cairo is 31,697/sqKm. Cairo is considered one of the most crowded cities in the world. Egypt is divided into 24 governorates and has around 130,000 doctors, 1000 psychiatrists, 250 clinical psychologists and 1355 psychiatric nurses. Psychiatric services are provided through general hospitals, state hospitals, university hospitals and private hospitals, amounting to about 9000 beds. Egypt is moving towards primary care in psychiatry through general practitioners and this has been incorporated into the National Mental Health Program for the past 12 years, rather than community care, which is not feasible because of financial, cultural and religious beliefs. This presentation will review the mental health services in Egypt at the moment together with future plans.

ZS7.2.
MENTAL HEALTH SERVICES IN MOROCCO

D. Moussaoui
Ibn Rushd University Psychiatric Center, Casablanca, Morocco

There are about 300 psychiatrists in Morocco, 620 psychiatric nurses, 75 clinical psychologists. There are very few social workers and no occupational therapist. The three academic departments in Casablanca, Rabat, and Marrakech are in charge of training psychiatrists and psychiatric nurses, as well as undergraduates. Concerning psychiatric institutions, there are 1,900 psychiatric beds in the entire country (30 million inhabitants) divided between psychiatric hospitals and psychiatric wards integrated into general hospitals. This low figure of psychiatric beds is even worse when one considers that there is no psychiatric institution for children and adolescents, and no private clinic in psychiatry. Most of the activities of mental health is done in the outpatient sector. For example, more than 60,000 patients are seen in the ambulatory mental health units of Casablanca every year. A national epidemiological survey will be finalized in the coming months and its results will allow planning for better mental health services.

ZS7.3.
MENTAL HEALTH SERVICES IN SUDAN

A. Abdelrahman
University of Khartoum, Sudan

Sudan is the largest country in Africa, with a million square miles, 33 million people and nine neighboring countries. As many countries in Africa, Sudan suffered much from poverty, illiteracy, drought and civil war. The effects of these problems on the mental health of people are considerable. The objectives of this presentation are to highlight the situation of mental health services in Sudan and share ideas with colleagues from other African countries in the region. Currently there is a great shortage of services, with one psychiatrist for a million population. The majority of facilities are urban based, with over 70% in the capital city Khartoum. Psychologists and psychiatric social workers are very few. Psychiatric medical assistants act as psychiatrists in many regions. A national mental health program has been established recently, with a recognizable effort to improve the situation. Major areas of interest in the program include training of general practitioners, paramedical staff and teachers. Training manuals and other materials are in preparation. Despite many endeavors, the mental health act has not been endorsed yet. There are many constrains and health planners still need to be convinced and encouraged to put more emphasis on this issue. Mental health services at the primary health care level are an important priority. Training is crucial. With expectation of peace in the country soon, the future looks better. Mental health is expected to improve.

ZS7.4.
MENTAL HEALTH SERVICES IN ETHIOPIA

M. Araya
Department of Psychiatry, University of Addis Ababa, Ethiopia

Ethiopia is a country located in the Horn of Africa with a population of about seventy million. It is a federal government consisting of nine states representing over eighty nations and nationalities. The establishment of modern mental health services in Ethiopia dates back to the time of the departure of Italian occupants in 1939 where the general hospital they used for the indigenous people was later turned into a mental asylum. For almost half a century, the psychiatric hospital

remained a place of confinement for the mentally ill and persons with behavior incompatible to the societal as well as political norms of the country. The department of psychiatry was established in 1966 as a unit in the department of medicine by a Dutch psychiatrist, R. Giel, from the University of Groningen. Both the psychiatric hospital with 360 beds and the outpatient department in a general hospital in Addis Ababa, the capital of Ethiopia, serve as treatment, training and research centers for the whole country. The department is run by three full time psychiatrists, while five psychiatrists work in the psychiatric hospital. All the psychiatrists are stationed in Addis Ababa; therefore, most of the psychiatric service throughout the country is given by psychiatric nurses. Besides treatment service, the main activities include teaching clinical psychiatry to medical students, psychiatric nurses and residents in psychiatry. Continuing medical education to general medical practitioners and other specialists is also given on a regular basis. Community oriented mental health research is also an integral part of the general mental health service in the country. Since 1966, over fifty papers were published in reputable journals and several epidemiological surveys and clinical trials are ongoing.

ZS7.5.
MENTAL HEALTH SERVICES IN TUNISIA

S. Douki, F. Nacef, S. Ben Zineb
Hospital Razi, Tunis, Tunisia

Until recently, mental health was given low priority in Tunisia, as in other developing countries faced with major health concerns such as epidemic diseases or infant mortality. Thus, while remarkable progresses were achieved in the field of physical health, psychiatry remained the "Cinderella" of medicine. Nowadays, only 150 psychiatrists (representing 4% of the total specialists) and 800 beds (representing 5% of the total hospital capacity) are available to a population of 10 millions. Consequently, a significant proportion of the population does not have access to mental health facilities, while epidemiological data and many indicators have been highlighting, for years, a huge growth in mental health care needs. The result is a practice of "psychiatry in emergency", providing an immediate solution to severe psychiatric breakdowns but failing to provide sustained care or to deal with the many mental health problems challenging today our societies. But, this shortage gives us the great opportunity to build up a mental health care system more complying with the current knowledge and with our specific context. We have thus the unique chance to skip the deinstitutionalization stage with its significant casualties and to move directly to community care where a strong family support and a dense primary care network are major resources to rely on. This is the aim of the national mental health program adopted in 1992. It appears paradoxical that a lack of traditional services is probably the source of more opportunities than constraints in our countries, providing the possibility to implement the most cost-effective strategy to cope with the modern needs in matters of care.

ZS8.
PSYCHIATRY IN CENTRAL EUROPEAN COUNTRIES WITHIN THE PROCESS OF AFFILIATION TO THE EUROPEAN UNION (Organized by the WPA Central Europe Zone)

ZS8.1.
PSYCHIATRY AND MENTAL HEALTH CARE IN POLAND

J. Bomba
Chair of Psychiatry, Jagiellonian University Collegium Medicum, Kraków, Poland

Psychiatry has been developing in Poland into an independent medical specialty and scientific discipline in a specific context, which resulted in changing connections with German, French and recently English language medicine. The process of deinstitutionalisation started since the 1970s. The mental health care system is based on multiprofessional teamwork. The best developed network of facilities is within the bigger urban centers. Treatment is paid by health insurance, but patients pay themselves (more than 50%) for new psychotropic compounds in outpatient care. The mental health act guarantees free choice of service, treatment in the least oppressive conditions and patient consent. As financing of health care is insufficient, one should expect a movement of young specialists to countries of higher standards. Undergraduate training of physicians includes psychology (behavioral sciences) and psychiatry. A national curriculum adapted to European standards is obligatory for medical schools. Postgraduate training of psychiatrists has been changed in the 1990s into a 5-year residency system. Child and adolescent psychiatry requires additional 2 years of residency training. A national board examination is the final stage of training. A continuous education program is now being organized. Nevertheless, the Polish Psychiatric Association has its own system of credits and sponsors additional training in psychotherapy, forensic psychiatry, and gerontopsychiatry. The main areas of research in psychiatry are neurobiology of cognition, molecular genetics, psychotherapy, family therapy, community psychiatry, epidemiology and psychopharmacology.

ZS8.2.
PSYCHIATRY OF THE 20TH AND 21ST CENTURY IN HUNGARY: A SHORT HISTORICAL OVERVIEW

F. Túry
Institute of Behavioural Sciences, Semmelweis University, Budapest, Hungary

During the first half of the 20th century, Hungarian psychiatry was intensively influenced by German and French literature. A well-known psychoanalytic school, the so-called Budapest School, was established, its main figure being Sándor Ferenczi, one of Sigmund Freud's best pupils. Sándor Radó, Géza Róheim and Mihály Bálint were also excellent analysts. In this period a high-level neuropathological/biological research can also be mentioned, e.g. the work of László Meduna and his cardiazol shock treatment based on neuropathological observations. After the Second World War, psychological sciences were suppressed for several decades. An intensive interest in psychotherapies started in the 1970s, and the most important psychotherapeutic methods became known: behavioural therapy, family therapy, hypnotherapy. From the 1980s an intensive and high-level biological trend appeared in research, with several international collaborations. After the political change at the beginning of the 1990s, the major psychotherapeutic methods became widespread,

with vigorous educational activities. At the same time, pharmacotherapy reached a high level, with the availability of the newest psychotropics. In the last decade an integration of biological and social psychiatry can be observed in Hungary. This can be found also in the education of the residents in a four-year system. In everyday practice, the influence of outpatient care has become strong, and the total number of hospital beds has decreased gradually. Nowadays the main problems may arise from the decreasing prestige of the medical profession, resulting in the emigration of good psychiatrists to West-European countries. The presentation will also address the newest prevention programs in mental health care.

ZS8.3.
BULGARIAN PSYCHIATRY TODAY

L. Jivkov
Municipal Psychiatric Dispensary, Sofia, Bulgaria

We present the current state of psychiatry in Bulgaria after the changes which came into effect in 1990, perceived within the economic and social context of the country. We try to show the relationship between psychiatric tradition and the strategy for changes in psychiatric care, as well as the different points of view for the development of both biological and psychosocial therapeutic approaches. The National Program for Mental Health and the forthcoming changes in the legislation concerning mental health are presented. We also present the current state of the educational system and training process of professionals in psychiatry (psychiatrists and psychiatric nurses), having in mind that the education of nurses has just been evolving. The role of non-governmental organizations like the Bulgarian Psychiatric Association, the Association for Private Psychiatric Practice, the organizations of users of psychiatric care, etc. is discussed. The presentation reviews the existing international relations, including those with the Balkan countries and the conditions for their development.

ZS8.4.
MENTAL HEALTH REFORMS IN MACEDONIA

A. Novotni
University Clinic of Psychiatry, Medical Faculty, Skopje, Republic of Macedonia

The current situation of the Macedonian society is marked by a long-term economical, political and social crisis, unemployment and poverty. The Macedonian family itself is passing through a transitional period: the traditional (multigenerational) family is being disintegrated, but the modern (nuclear) family is still not socially stable. All these factors indicate the increase of the scope and intensity of psychosocial problems and indirectly mental health issues in our country. Evidence-based data and an organized approach concerning various mental health problems are still missing in Macedonia. The mental health reforms are in the initial phase, trying to implement the transition from the "old" system of working within big psychiatric hospitals to community based mental health services. We will report the initial success in establishing a community based mental health centre in Macedonia.

ZS8.5.
CURRENT TRENDS IN CZECH PSYCHIATRY

J. Raboch
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Czech Republic had in the year 2002 10,230,060 inhabitants. The health care budget was 7.4% of the gross domestic product. We estimate that less than 3.9% of the health care budget went into mental health care. 52.2% of this amount went to mental hospitals, 22% was spent for drugs, 15.6% went to out-patient clinics, 9.6% to psychiatric departments of general hospitals. Community care is substantially underfunded. We have 1,154 physicians working in psychiatry (11.5/10,000). Most of them (52.2%) work in out-patients clinics. In the last decade, every year, 50-70 young doctors passed the psychiatric board examination. The system of postgraduate training has recently substantially changed. We have separate training programs for adult psychiatry, child psychiatry, old age psychiatry, drug addiction and sexology. We have 30 psychiatric hospitals with 9,616 beds and 33 psychiatric units in general hospitals with 1,546 beds. The overall number of beds decreased from 14/100,000 in 1990 to 11.1/100,000 in 2002. However, in recent years this trend has stopped. The average length of hospitalisation, despite its decline in the last decade, remains high: 73 days in psychiatric hospitals and 23 days in general hospitals. There are no official statistics regarding community psychiatry. Thanks to the European research project EDEN, we know more about the functioning of the 35 day care centres in our country, which are located mainly in bigger towns and mostly provide psychotherapeutic and rehabilitation activities. Protection of the human rights and dignity of people suffering from mental disorder is a hot topic in our country. The detention process is controlled according to our law by independent courts. Two Prague psychiatric facilities are participating in the European project EUNOMIA, which is mapping coercive treatment measures in psychiatry and is trying to find the best way in clinical practice for this very sensitive part of mental health care.

ZS8.6.
ROMANIAN PSYCHIATRY: THE CHALLENGES OF PRESENT AND FUTURE

T. Udristoiu
University of Medicine and Pharmacy, Craiova, Romania

With an area of 237,500 SqKm and a population of 21.7 million people, Romania is geographically the second biggest country in Central Europe. In 1974 and 1980, two important epidemiological studies have been conducted focusing on psychiatric disorders. These studies have shown a general prevalence of 18.34% and 16.33%, respectively. Several but still rather small scale studies have revealed an almost constant increase of the suicide rate, starting in the early 1980s, but without an accurate evidence concerning the real proportion of this phenomenon at the national level. The offer of psychiatric services – inpatient, day-care and outpatient ones – was and still is modest: about 4 psychiatrists/100,000 people and 0.7 beds/1,000 patients, with very limited possibilities for supporting and supervising the outpatients. The access of people is further reduced by the concentration of this offer in the capital and the major cities. The main problems of the present are the legacy of the communist period, that has pushed psychiatry aside, the economical situation and the mentality of the people, the medical community and the authorities. Somatic medicine still dominates to the prejudice of our specialty. In 2000, psychiatric care consumed only 3% of the health care expenses. The hegemony of somatic medicine is reflected also in undergraduate and

postgraduate psychiatric training. Currently, postgraduate training consists of 28 months of training in psychiatry and 32 months in other specialties. Psychiatric care is currently limited to secondary prevention, which is almost fully based on biological therapy. There is a national rehabilitation program, but it is underfunded, small scale and with almost null results. Also, "by tradition", the quality of the patients' life is practically not taken into consideration. Scientific research is addressed mainly to the clinical and therapeutic level and scarcely to the epidemiological level. After 1990, some progress has been made: the informational opportunities, the establishment of associations and publications, the appearence of second generation antipsychotics and antidepressants, the law for mental health and for the protection of the persons with psychiatric disorders, the participation in international multicenter trials. The most important priorities are primary prevention and rehabilitation, the life standards in the psychiatric facilities, the care of chronic and forensic patients, suicide prevention and the institutional management. In order to reach the psychiatric standards of the countries in the European Community, we need a clear policy, based on a realistic strategy of implementing the experience of the developed countries and adapting it to our culture with decent financial means.

ZS8.7.
THE NATIONAL MENTAL HEALTH PROGRAMME IN SLOVAKIA

L. Vavrusova, A. Mayer, P. Breier, P. Nawka, J. Vranova
Department of Psychiatry, University Hospital Ruzinov, Bratislava, Slovak Republic

The National Mental Health Programme, a complex and multisegment programme, has been developed according to the recognition of the situation of mental health care in Slovakia and with the help of the Report of Assessment mission of the World Health Organization (WHO). The WHO performed an audit in Slovakia in June 2003 and pointed out some most important topics. Expenditures on mental health are at present only 2% of health budget, a large proportion of the funding goes into psychotropic drug prescription; there is a lack of substantial communication, cooperation and cofunding from health and social services at ministerial, regional and local levels; there is an absence of community-based mental health care; mental health care delivery is heavily influenced by health insurance companies and this imposes limitations on multi-disciplinary cooperation; there is no adequate implementation of the biopsychosocial approach in medical training programmes; there is no credible professional psychiatric nurse training; there is a severe lack of nursing staff in inpatient mental health care; day hospital functioning is limited by system restrains and shortage of funding. In the National Mental Health Programme detailed plans with time span are proposed. This includes planning of mental health delivery, promotion and prevention strategies. This programme was formulated in collaboration with representatives of mental health professionals, user and family representatives and other relevant non-governmental organizations. The National Mental Health Programme includes national-regional-local participation. It includes a clear description of tasks to be taken by involved ministries and local governments. It includes a timetable of actions for implementation and a statement on resources required for programme implementation. Special attention is given to needs of children and adolescents and of the elderly with mental disorders. A community psychiatry based approach will be developed. The National Mental Health Programme raises awareness, strengths tolerance, pluralism and equity for people with mental disorders.

ZS8.8.
MENTAL HEALTH CARE IN SERBIA AND MONTENEGRO: THE PROBLEM OF REFUGEES

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War in the region of ex-Yugoslavia has caused the forced migration of a huge number of people. At present, there are 702,000 refugees living in Serbia and Montenegro. Most of them have experienced multiple traumas, which caused significant distress. According to our studies 29.2% of refugees manifest chronic post-traumatic stress disorder, while 40% of them have an adjustment disorder. 1.300 refugee families do not know the destiny of their members. This severe trauma prevents them from completing the process of mourning. In addition to post-traumatic stress disorder, refugees suffer from other mental and somatic disorders, which represent a huge burden for health services of the country. The organization of mental health care has to adjust to specific needs of the refugee population. In a first stage, programs of psychosocial assistance were undertaken by many governmental and non-governmental organizations. Future programs of mental health care for refugees should take care of demographic and cultural specificities of this population, originating from various regions of ex-Yugoslavia. The National Committee for Mental Health has identified the mental health care of refugees in the community as one of the targets, with their social integration as one of the objectives.

ZS9.
MENTAL HEALTH AND PRIMARY CARE SERVICES WORKING TOGETHER: THE CANADIAN EXPERIENCE (Organized by the WPA Canada Zone)

ZS9.1.
COLLABORATION BETWEEN FAMILY MEDICINE AND MENTAL HEALTH SERVICES: PROBLEMS AND SOLUTIONS

N. Kates, M. Craven
Hamilton HSO Mental Health and Nutrition Program and McMaster University Department of Psychiatry and Behavioural Neurosciences, Hamilton, Ontario, Canada

We discuss the challenges Canada faces in the delivery of mental health services to diverse and often isolated communities and the key role family physicians play in managing mental health problems in almost every Canadian community. Moreover, we review problems that can arise in the relationship between mental health and primary care services. We examine the consequences of these problems and the significant changes that have taken place over the last seven years to strengthen the working relationship between the two areas. The presentation discusses the Canadian concept of shared mental health care and provides examples of innovative projects that have implemented these principles and addressed significant problems facing the Canadian Health Care system.

ZS9.2.
SHARED MENTAL HEALTH CARE: THE CANADIAN PSYCHIATRIC ASSOCIATION AND COLLEGE OF FAMILY PHYSICIANS OF CANADA COLLABORATIVE PROJECT

M. Craven, N. Kates
Hamilton HSO Mental Health and Nutrition Program and McMaster University Department of Psychiatry and Behavioural Neurosciences, Hamilton, Ontario, Canada

We describe a major initiative of the Canadian Psychiatric Association and the College of Family Physicians of Canada to improve collaboration between the two specialties. In 1997 the two organisations produced a joint position paper on shared mental health care and then set up a working group to implement its recommendations. This presentation summarises the recommendations of the position paper and the major activities and impact of the collaborative working group on clinicians, health planners and funders. It highlights the importance of the strong support both sponsoring bodies have provided.

ZS9.3.
THE COLLABORATIVE MENTAL HEALTH CARE PROJECT: DEVELOPING A NATIONAL STRATEGY

N. Kates, M. Craven
Hamilton HSO Mental Health and Nutrition Program and McMaster University Department of Psychiatry and Behavioural Neurosciences, Hamilton, Ontario, Canada

We describe a two year project, recently funded by the Canadian Federal Ministry of Health as part of the renewal of primary health care in Canada, to develop a national strategy for collaborative mental health care. The project is sponsored by twelve national organizations representing psychiatrists, family physicians, nurses, social workers, occupational therapists, psychologists, pharmacists, dietitians, psychiatric nurses, consumers, family members and community advocacy groups. Its goals are to identify and analyze the current state of collaborative care in Canada; to develop a joint declaration committing partner organizations and their members to working together; to develop and disseminate strategies for implementing shared care and adapting it to the needs of particular communities or populations. The activities and expected outcomes of the project will be described.

ZS10.
MODERN AND TRADITIONAL TREATMENTS IN THE CONTEXT OF A DEVELOPING COUNTRY (Organized by the WPA Western and Central Africa Zone)

ZS10.1
MODERN AND TRADITIONAL TREATMENT IN THE CONTEXT OF A DEVELOPING COUNTRY

M. Olatawura
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The African, and unsophisticated people of all races, believe in supernatural phenomena. Saint Paul, writing to the Ephesians, stated: "For we are not fighting against people made of flesh and blood, but against persons without bodies - the evil rulers of the unseen world, those mighty Satanic beings and great princes of darkness who rule this world, and against huge numbers of wicked spirits in the spirit world". Issues raised above explain the prominence accorded to alternative remedies like roots, herbs, incantations and faith-healing. Faith-healing impact of the Born-Again Crusade is spreading like prairie fire all over the world, the Western World inclusive. Aloe Vera tea, Mistletoe (Viscum album) tea, etc, are now packaged like Lipton tea to treat human maladies like arthritis, diabetes, hypertension, etc.

ZS10.2.
BARRIERS TO TREATMENT IN A DEVELOPING COUNTRY

O. Gureje
Department of Psychiatry, University of Ibadan, Nigeria

The treatments of psychotic and affective disorders have undergone major developments in the past two or three decades. Newer medications have become available and treatment guidelines have been suggested. However, for patients living in many developing countries, significant barriers remain in the receipt of adequate treatment. Many still do not believe that orthodox medical care offers a credible source of relief for mental health problems. Stigmatization of mental disorders is rife and presents an impediment to the receipt of care. Newer medications are expensive and unaffordable to most as payment for mental health service is often out-of-pocket, thus imposing a significant financial burden on patients and their relatives. Also, large sections of the community do not have access to mental health service and the filters for mental health problems at the various nodes of the health service may be almost impermeable. In this presentation, data will be reviewed that highlight the barriers to treatment for patients with mental disorders in Nigeria, a resource-rich but economically poor country.

ZS11.
COMMUNITY PSYCHIATRY IN THE MEDITERRANEAN REGION AND THE ROLE OF PSYCHIATRIC ASSOCIATIONS (Organized by the WPA Southern Europe Zone)

ZS11.1.
INTRODUCTION TO PSYCHIATRY AND COMMUNITY PSYCHIATRY IN THE MEDITERRANEAN REGION

L. Küey
WPA Zonal Representative, Zone 8

This presentation aims to outline the main issues to be discussed by the representatives of some of the member societies of the WPA Southern European Zone in this symposium. To provide a contextual framework, the socio-cultural characteristics of the region and the situation of psychiatry in these countries will be reviewed. Practice of psychiatry, especially community psychiatry, has been passing through serious changes in the Mediterranean countries. These countries in transition had witnessed many psychiatric reformist movements in the last couple decades, and the psychiatric associations are trying to develop new policies to promote community mental health in the region; so, the role of the psychiatric societies will also be another issue of concern.

ZS11.2.
WHO ARE THE PATIENTS IN RESIDENTIAL FACILITIES? A NATIONAL SURVEY IN ITALY

G. de Girolamo[1], A. Picardi[2], G. Santone[3], R. Micciolo[4], A. Fioritti[5], I. Falloon[6] for the PROGRES group
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In Italy, residential facilities (RFs) have completely replaced mental hospitals for the residential care of mentally ill patients. We studied all patients resident in 265 randomly sampled Italian RFs (20% of the total). Structured interviews focusing on each patient were conducted with the manager of each RF and with staff; patients were rated with the Health of the Nations Outcome Scales (HoNOS) and Global Assessment of Functioning (GAF), and their physical disabilities were evaluated. Of the 2,962 patients living in the sampled facilities, most were males (63.2%) who had never been married, more than 70% over 40 years of age; 85% had a pension, most commonly because of a psychiatric disability. A substantial proportion (39.8%) had never worked and very few were currently employed (2.5%); 45% of the sample was totally inactive, and was not involved in domestic activities in the facility. Two-thirds had a diagnosis of schizophrenia; dual diagnoses and primary substance abuse were uncommon. Twenty-one percent had a history of severe interpersonal violence, but episodes of violent behaviours in the RFs were infrequent. The managers judged almost three-quarters appropriately placed in the facilities and considered that only few had prospects of discharge. In conclusion, Italian RFs provide care to a large patient population of severely mentally ill requiring residential care. Discharge to independent accommodation is uncommon. Future studies should try to identify the best match between RF programs and patients' disabilities.

ZS11.3.
TOWARDS COMMUNITY PSYCHIATRY IN ISRAEL: DIRECTIONS, HOPES AND OBSTACLES

Z. Zemishlany
Israeli Psychiatric Association

We are living in an era of rapid changes, which do not spare the health care system, including mental health. The world has become much more interconnected, leading to developments which frequently are global in nature. Therefore, when considering directions for mental health care in the Mediterranean Region and Israel, we should be aware of processes worldwide. The yearly World Health Organization (WHO) report released in 2001 contains, for the first time, an extensive section devoted to mental health. The report's consensus was that there is no health without mental health. It is recommended that mental health services should be based on community care close to home, including admission to general hospitals. In the Israeli mental health system of 2004, the WHO recommendations are far from being implemented. Body and mind are still separated as the national insurance act does not include mental health yet. Mental health care is under the responsibility of the government (Ministry of Health). The mental health system is not integrated in the primary care system and the proportion of psychiatric beds located in general hospitals is only 4.8%. The rest are located in psychiatric hospitals. This discrimination between the general health system and the mental health system contributes to the stigmatization of mental patients. The Israeli Psychiatric Association (IPA) is committed to promote psychiatric care in line with the global changes and directions. The IPA is currently highly involved in two reforms in order to promote community psychiatry. The first is the health insurance reform: mental health should be included in the National Health Insurance Law and the Health Funds should take responsibility for mental health as in other medical fields. This may enable the psychiatric patients to be under the care of the general practitioner in continuity with the psychiatric hospital. The obstacles for the initiation of this reform are budget issues and disagreements between the Ministry of Health and the Health Funds. The second reform is the "structural" one: resources should be transferred from the psychiatric hospitals to the community. This includes a 50% reduction of psychiatric beds (to 0.45 beds per 1000), shortening of hospitalization days to 33 days in average and developing a network of hostels, rehabilitation centers and outpatient clinics in the community. This reform is on its way. We believe that these two reforms are linked and should be performed in parallel. The availability of the psychiatric community services and their links to the general health care system would increase compliance and reduce recurrence, readmissions and the stigma of patients suffering from psychiatric disorders.

ZS11.4.
PSYCHIATRY IN GREECE: ADVANCES, PROBLEMS AND PERSPECTIVES

G.N. Christodoulou, V. Alevizos, D. Anagnostopoulos, V. Kontaxakis
Hellenic Psychiatric Association

Public psychiatry in Greece is currently in a transitional period from the traditional inpatient management to community psychiatry. Attempts aiming at this transformation have occurred in the 1950s with, for instance, the establishment of the mental health center (which later has developed into the most extensive service facility for outpatients in Greece), but the most systematic interventions have been carried out since the 1980s, with an extensive reform implemented with local and European Union funding. As a result of these interventions, the total number of inpatients in Greek public mental hospitals from 1984 to 2004 has decreased and this has been associated with increase in extramural facilities. Much remains to be done with respect to primary care, creation of alliances in the community, mental health promotion and qualitative improvement of extramural services.

ZS11.5.
PSYCHIATRY, COMMUNITY PSYCHIATRY AND THE ROLE OF PSYCHIATRIC ASSOCIATIONS IN TURKEY

P. Gökalp[1], B. Ulug[2], L. Küey[3]
[1]Turkish Neuropsychiatric Society; [2]Psychiatric Association of Turkey; [3]WPA Zonal Representative, Zone 8

In this presentation, the mental health profile of Turkey, a country which is not only a geographical bridge between Asia and Europe, but also faces the challenge of belonging to east and west at the same time, will be reviewed. After outlining the socio-demographic, socio-economic, and cultural characteristics of the society, basic data reflecting the general health status of the population will be provided. The epidemiology of psychiatric disorders, and the financial, institutional and human resources in the mental health field, along with the relevant policies, research and training activities, will be discussed.

The negative effects of the lack of a national mental health program, particularly on the issues of community psychiatry, will be underlined. As a conclusion, the psychiatric associations, in respect to their roles in the development of mental health policy and programs, the improvement of professional collaboration, and the promotion of mental health, will be discussed.

ZS11.6.
PSYCHIATRY IN SPAIN: THE REAL MANAGEMENT OF THE CHRONIC DISORDERS

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Is there any evidence of a new approach in the Mediterranean psychiatry after the implementation of community psychiatry? To discuss this question we studied the clinical management of chronic mental disorders in Spain, a Mediterranean country with a public health system that covers 98% of the population. We conducted a descriptive, cross-sectional, multi-centered study in outpatient mental health centers and private offices. A total of 500 psychiatrists recruited 1969 patients with a primary diagnosis of schizophrenia. Our objective was to find the real provided care of a large population sample of schizophrenic patients in order to identify actual needs and future directions to provide an adequate health care.

ZS11.7.
COMMUNITY PSYCHIATRY IN CYPRUS

Y. Kalakoutas
Psychiatric Association of Cyprus

In Cyprus, psychiatric reform was introduced in an organised form in 1996. The objective was to move from the medical asylum model of therapy to the biopsychosocial one and the provision of services from the mental hospital to the community. During these years the number of inpatients has decreased from 436 in 1992 to 130 in 2003. A network of community mental health services has been developed all over the island for the management and follow-up of patients in the community securing the continuity of management. Day centres have been established and multidisciplinary teams are actively involved both in the management of cases and in the introduction of mental health promoting programs.

WORKSHOPS

WO1.
DISASTERS, TERRORISM AND TRAUMA

WO1.1.
PREPARATION FOR PSYCHIATRIC TREATMENT IN DISASTERS AND TERRORISM

F.J. Stoddard
Harvard Medical School, Boston, MA, USA

Treatments in disaster psychiatry have grown initially to respond to natural disasters and airplane crashes. Since worldwide terrorist attacks, the Oklahoma City bombing, and September 11, 2001, the field has applied lessons learned to plan interventions. Both the course of symptoms and preparations for prevention and optimal treatment in adult and child mental health and rescue teams involved in disaster response will be described.

WO1.2.
TERRORISM AND PUBLIC HEALTH

R. Ursano, C.S. Fullerton, N. Vineburgh, M. Hall
Uniformed Services Medical School, Bethesda, MD, USA

Mental health is the target of terrorist events. Because the psychological impact of terrorism is so pervasive, large populations are affected by distress, psychiatric disease, and behavioral responses that may be adaptive or maladaptive. The Institute of Medicine endorses a public health approach to managing the impact of terrorism that includes prevention, health promotion and treatment. Interventions integrating mental health and public health are needed pre-event, during the event and post-event that address the agent, the vector, and populations at risk. Disaster behavior is an important new concept to inform interventions, and includes evacuation, shelter-in-place, and quarantine. For biological terrorist agents the only countermeasures early in an outbreak, and for an extended time for a new disease agent, are behavioral interventions. The behavioral issues of compliance and adherence are critical factors in protecting public health. Prevention and treatment of mental disorders are also critical. While the majority will experience only transitory distress, many individuals increase use of alcohol, tobacco, and other drugs, especially those with pre-existing disorders. People exposed to terrorism are at increased risk for depression, generalized anxiety disorder and panic disorder. Planning for the psychological responses to terrorism requires an integrated response across medical, emergency and public health authorities.

WO1.3.
TREATMENT OF THE CONSEQUENCES OF TRAUMA, DISASTER AND TERRORISM

R.J. Ursano[1], F. Stoddard[2], R. Daniore-Quierci[1], M. Hall[1]
[1]Uniformed Services Medical School, Bethesda, MD; [2]Harvard Medical School, Boston, MA, USA

Trauma, disaster and terrorism share many aspects of possible psychiatric consequences. The evaluation and treatment of distress as well as psychiatric illness are important parts of intervention. A recent consensus conference of National Institutes of Mental Health, Department of Defense, Veterans Administration and the Red Cross has outlined early intervention – psychological first aid – for most exposed to mass casualty events. The American Psychiatric Association is finalizing treatment guidelines for acute stress disorder (ASD), post-traumat-

ic stress disorder (PTSD), and other disaster-related mental disorders. Both of these sets of recommendations will be reviewed to present up to date information on early treatment, the status of debriefing as a treatment and evidence based psychological and psychopharmacological treatments of ASD, PTSD and other disorders.

WO1.4.
WORKPLACE INTERVENTIONS TO MANAGE AND PREPARE FOR THE CONSEQUENCES OF TERRORISM

N. Vineburgh, R. Ursano, C.S. Fullerton
Uniformed Services Medical School, Bethesda, MD, USA

The Institute of Medicine identifies the workplace as an important environment for addressing the psychological impact of terrorism. Worksite health promotion can play a critical role in offering public health interventions for the pre-event, event and post-event phases. Terrorism may have the highest rates of psychiatric disorders and broadest distress responses. Disaster and terrorism can increase distress, lead to altered health and risk behaviors, and increase social disruption and psychiatric illness in exposed populations. Pre-event interventions can educate employees about evacuation and shelter-in-place, life-saving disaster behaviors, and raise awareness of maladaptive behaviors such as increased substance abuse and domestic violence. During an event, risk communication is essential to manage high stress. Post-event programs can foster information and help-seeking, leading to early identification and triage of psychological disorders that can impair health and productivity. Reluctant employers fearful of raising undue anxiety pose a challenge to workplace preparedness. Resiliency, the expected outcome of terrorism, is a current and relevant topic of interest in worksite health promotion. We will describe key public health interventions for workplace disaster response and how a resiliency model can engage employer and employee interest to help prevent, mitigate and foster recovery from terrorism.

WO2.
TRAINING IN PSYCHIATRIC TREATMENT IN DIFFERENT EUROPEAN COUNTRIES (Special Workshop organized by the European Federation of Psychiatric Trainees)

WO2.1.
TRAINING IN PSYCHIATRIC TREATMENT IN EUROPE: THE VIEW FROM THE EUROPEAN FEDERATION OF PSYCHIATRIC TRAINEES

J. Beezhold
European Federation of Psychiatric Trainees; Norfolk Mental Health Care NHS Trust, UK

The European Federation of Psychiatric Trainees (EFPT) is an independent federation of national psychiatric trainee organizations from across Europe. It was founded by trainees in 1993, at which time only four countries had national trainee organizations. Today it has 16 member countries, all of which have national trainee organizations, and represents over 12000 psychiatric trainees. The EFPT holds an annual Forum in the host country of the current President, at which all trainees are welcome. This presentation examines the role that the EFPT plays in promoting high quality postgraduate training in psychiatry throughout Europe. A brief overview of the origin and history of the EFPT will be given. The structure, function and achievements of the EFPT will be reviewed. The way in which the EFPT relates to other organizations will be described. Particular emphasis will be placed on the views of the EFPT regarding different aspects of psychiatric training. The way in which the EFPT has developed and promoted these views will be explored. Some of the difficulties, problems and solutions to working across various national and international boundaries will be discussed.

WO2.2.
MODERN AND CLASSICAL STRATEGIES CONVERGE: TREATMENT ISSUES IN TURKISH PSYCHIATRIC TRAINING

D. Eraslan
European Federation of Psychiatric Trainees; Department of Psychiatry, Ege University Medical School, Izmir, Turkey

In developing countries, such as Turkey, psychiatry is a growing discipline and is gaining more and more attention. Psychiatry training is becoming very popular among young doctors, especially with the growing awareness of the general public that psychiatric disorders can be successfully treated. Anyway, the number of psychiatrists is still not sufficient for the population, so there is still need for young psychiatrists, trained in newer treatment techniques. Psychiatric training takes place in vary different settings, including university hospitals, where more time and investigation can be devoted to patients, state hospitals and long-stay hospitals. When trainees become specialists, they need to know both the modern psychopharmacology and psychotherapy methods, and the old techniques like electroconvulsive therapy to handle all the problems they face. However, the different characteristics of the patients admitted to the different educational settings may cause several problems to trainees in learning methods that are uncommon in one's workplace. These problems may be overcome by organizing common educational programs, eventually in cooperation with national and/or international associations, spending part of the training in rotations in the different hospitals, and improving contacts among national institutions and organizations. With such a training organization, after having completed their training the new residents should be able to make a synthesis between the therapeutic techniques of the old neuropsychiatrists and the new treatment strategies, which, hopefully, will result in a successful generation of new psychiatrists.

WO2.3.
AN OVERVIEW OF PSYCHIATRIC TRAINING IN ROMANIA AND EASTERN EUROPE

A. Mihai
University of Medicine and Pharmacy, Tg. Mures, Romania

Training in psychiatry and research work changed a lot in Romania after 1989. Post-graduate education in psychiatry is organized at national level in five university centres. Now training in psychiatry lasts 5 years, the log/book is similar to other European countries, training in psychotherapy is highly recommended, and basic knowledge of psychotherapy is included in our training. Training in psychiatric treatment is all the time updated and the Romanian Association of Psychiatrists has elaborated guidelines for treatment of affective disorders and schizophrenia. Post-training education and continuing medical education, which have been recently developed in Romania, include several courses about different themes in psychiatry and in psychotherapy, both for specialists and general practitioners. Moreover, books, translations, internet access, participation to international meetings have all contributed to develop scientific and

research work. Under these circumstances, a special training for young psychiatrists has been organized in Romania in the last years. Young psychiatrists are now involved in international networks of different kinds of psychiatric research. In this presentation, I will underline the similarities and differences between psychiatric training in Romania and other Eastern European countries.

WO2.4.
TRAINING IN PSYCHIATRIC TREATMENTS: CURRENT PERSPECTIVES AND SPECIFICITIES IN FRANCE

C. Hanon[1], D. Mathis[2]
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Training in psychiatric treatments in France is an important issue at a time of serious decreasing in the number of trainees. This year, a reform of training schemes is in discussion, and in the next months current organisation of training may change. Currently, training lasts 4 years and its global framework is nationally defined. Each region of France has however its specificities and theoretical references that offer an important diversity. Community psychiatry has a long history in France and represents the basis of the psychiatric healthcare system. Community departments are often non-universitary, but nonetheless they are considered as training centres. Full training in psychotherapy is not compulsory, and most universities do not provide it. Therefore, private psychotherapic institutes have a particular role in training, especially those with a psychodynamic orientation. Since 1998, trainees in psychiatry are organised in a national association, the Association pour la Formation Française et Européenne en Psychiatrie (AFFEP), and are getting more and more involved in training issues. The most important aim of this association is to improve the quality of initial training by providing information to trainees and participating in the evaluation of the medical practical and theoretical training. In this contribution, we will describe the current training scheme and we will discuss the project of the French reform.

WO2.5.
LEARNING HOW TO TREAT PSYCHIATRIC PATIENTS: PSYCHIATRIC TRAINING IN ITALY

U. Volpe, A. Fiorillo
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In Italy, the training in psychiatry lasts 4 years. During this period, trainees have to acquire evidence-based notions and practical skills in the three main areas of psychiatric treatment: psychopharmacology, psychosocial interventions and psychotherapies. The learning process of how to treat patients is accomplished by an integration of theoretical knowledge and practical activities within several areas such as biological psychiatry and neuropsychopharmacology, psychopathology and psychiatric methodology, clinical psychiatry, psychotherapy, and social psychiatry. At the end of every year, residents have to demonstrate the acquisition of such skills. At the end of the training, they get the diploma of specialist in psychiatry and psychotherapy by discussing a thesis on clinical or research work. In this presentation, we will describe the structure and scope of both medical and psychiatric training in Italy, and we will review the current needs of Italian psychiatric trainees. Specific issues concerning psychotherapeutic, pharmacological and community mental health training, as well as practicalities about how supervision is provided to Italian psychiatric trainees, are more broadly discussed, also in reference to other European models of psychiatric training. Finally, we will present new proposals and recent activities in the field of psychiatric training in Italy.

WO3.
DIAGNOSIS AND TREATMENT OF CATATONIA

WO3.1.
RELEVANCE OF THE CATATONIC SYNDROME TO THE MIXED MANIC EPISODE

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Catatonic symptoms have been associated with mixed mania in the older psychiatric literature; however, to date no systematic studies have been performed to assess their frequency in these patients. This presentation will focus on a study performed to assess the frequency and clinical relevance of the catatonic syndrome in mixed mania. Ninety-nine patients with bipolar disorder manic or mixed episode were assessed for the presence of catatonia using the Bräunig Catatonia Rating Scale (BCRS). Severity of mixed symptoms and associated comorbidity were also systematically assessed. Thirty-nine patients fulfilled criteria for mixed mania, of whom 24 were catatonic. Among the patients with pure mania, only 3 were catatonic. Eighteen catatonic patients with mixed mania required admission to the acute care unit (ACU) because of the severity of the acute episode. Treatments between the two groups differed significantly in that catatonic patients required higher dosages of benzodiazepines and atypical antipsychotics. These data suggest that catatonia is frequent in mania and linked to the mixed episode. Catatonia in mixed mania is likely to be found among the severely ill group of patients with mixed mania, who require emergency treatment. The likelihood of overlooking catatonia in less severely ill patients with mixed mania is low and it does not need to be routinely assessed in a general ward. Catatonic mixed mania requires adjustment of treatment strategies in order not to worsen the catatonic syndrome.

WO3.2.
MALIGNANT CATATONIA

S.C. Mann, S.N. Caroff
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Malignant catatonia (MC) is a life-threatening neuropsychiatric disorder characterized by hyperthermia, catatonic stupor or excitement, altered consciousness and autonomic dysfunction. Prior to the introduction of modern psychopharmacologic agents, MC was widely recognized as a possible complication of acute psychotic illness. Although the incidence of MC may now have declined, it remains the subject of frequent case reports. Based on a comprehensive review of the literature, we propose that MC continues to occur and represents a syndrome rather than a specific disease. While most often an outgrowth of the major psychoses, MC may also develop in association with diverse neurologic and medical conditions. From this perspective, neuroleptic malignant syndrome (NMS), a potentially fatal complication of antipsychotic drug treatment, may be viewed as a drug-induced form of

MC. Our review also supports a conceptualization of catatonia as a continuum, with milder forms at one end (simple catatonia) and more severe forms involving hyperthermia (MC) at the other end. In addition, findings from our review suggest that simple catatonia, MC and NMS share a common pathophysiology involving reduced dopaminergic neurotransmission within the basal ganglia-thalamocortical circuits. Electroconvulsive therapy is an effective and practical treatment for MC resulting from psychiatric and neuromedical conditions, including NMS. Antipsychotic drugs should be withheld whenever MC is suspected.

WO3.3.
CATATONIC SCHIZOPHRENIA REVISITED. DEMOGRAPHIC AND CLINICAL CORRELATES

G.S. Ungvari[1], S.K. Leung[2], F.S. Ng[2], H.K. Cheung[2], T. Leung[1]
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This study aimed to determine the frequency of catatonic syndrome in chronic schizophrenia and its association with socio-demographic and clinical variables. Cross-sectional assessment of 225 randomly selected patients (age 42±7 yrs; length of illness 20.4±7.5 yrs) with DSM-IV schizophrenia was conducted using standard rating instruments for catatonia, extrapyramidal symptoms (EPS) and psychotic, depressive and obsessive-compulsive symptoms. Using a narrow definition of catatonia (the presence of 4 or more signs/symptoms with at least one having a score of 2 or above on the Bush-Francis Catatonia Rating Scale, BFCRS), 72 subjects (32%) met criteria for the catatonia group (number of catatonic signs 5.9±2.0; BFCRS sum score 8.7±3.4). Mannerisms, grimacing, stereotypes, posturing and mutism were the most frequent symptoms both in the catatonic group and the whole sample. Catatonic subjects had significantly earlier age of onset, more negative symptoms, and were more likely to receive benzodiazepines than their non-catatonic counterparts. The severity of catatonia was predicted only by earlier age of onset and more negative symptoms. This study confirms that, if methodically assessed, catatonic signs and symptoms are prevalent in patients with chronic schizophrenia. Catatonia could be differentiated from EPS. Catatonic features indicate a generally poor prognosis in the chronic phase of schizophrenia.

WO4.
HIV/AIDS AND PSYCHIATRIC DISORDERS

WO4.1.
DIFFERENTIAL DIAGNOSIS AND COMMON PSYCHIATRIC DISORDERS IN HIV POSITIVE PATIENTS

F. Fernandez
University of South Florida, Miami, FL, USA

It is vital for clinicians to successfully evaluate cognitive, affective, and behavioral dysfunction in HIV-infected patients. Diagnosing cognitive impairment is increasingly complex. Studies indicate that neurological illnesses are the initial manifestation of AIDS in 7% to 20% of patients. Furthermore, frequency of neuropsychiatric complications increases over the course of the illness. HIV infection of the central nervous system can lead to a range of neurological and neuropsychiatric symptoms, including but not limited to minor cognitive-motor disorder. We will discuss useful, practical skills and tools for effectively assessing cognitive impairment associated with HIV infection. The paper will include information on how to successfully work with cognitively impaired populations with minor cognitive-motor disorder, HIV associated dementia, and mood disorders.

WO4.2.
THE MULTIPLY DIAGNOSED HIV PATIENT: SEVERE MENTAL ILLNESS, SUBSTANCE USE, AND HIV

F. Cournos
Columbia University, New York, NY, USA

The need for multiple diagnoses is becoming increasingly common as HIV-infected patients live longer because of antiretroviral treatments. A number of surveys of persons with HIV infection have shown an elevated premorbid rate of psychiatric disorders when compared to rates in the general population. Psychiatric treatment of patients living with HIV infection should include active monitoring of substance abuse, since it is often associated with risk behaviors that can lead to further transmission of HIV and treatment nonadherence. This paper will offer guidelines for the differential diagnosis of the HIV-infected patient, more specifically the patient diagnosed with a severe mental illness, as well as offer treatment strategies for the multiply diagnosed patient.

WO4.3.
INCORPORATING PRIMARY AND SECONDARY PREVENTION STRATEGIES INTO PSYCHIATRIC PRACTICE

M. Wainberg
Columbia University, New York, NY, USA

As psychiatrists continue to work more with patients infected with and affected by HIV/AIDS, it will become increasingly more necessary to introduce primary and secondary prevention strategies in psychiatric practice. This paper will relay proven and practical methods of primary prevention. Successful intervention strategies at the secondary prevention level will also be addressed. The methods introduced transfer across cultures and are effective tools for working with a diverse patient population, including those individuals with multiple diagnoses.

WO5.
METHODOLOGICAL CHALLENGES IN NON-INDUSTRY-SPONSORED MULTICENTER CLINICAL TRIALS

WO5.1.
RECRUITMENT PROBLEMS IN NON-INDUSTRY SPONSORED CLINICAL TRIALS

J. Peuskens, M. De Hert
University Centre St. Jozef, Katholieke Universiteit, Leuven, Belgium

In the last 10 to 15 years, an increasing number of new antipsychotic drugs have been developed and have become available for the treatment of psychotic disorders. However, the methodology and the results of industry-initiated and sponsored randomised clinical trials (RCT), as well as their relevance for every day clinical practice, are being questioned. Industry-initiated and sponsored trials frequently focus on the efficacy and safety of new drugs and are performed in selected, narrowly defined patient groups and under controlled con-

ditions, thus offering only partial information on the effectiveness of a drug in real life clinical practice. Non-industry sponsored clinical trials (NISCT) try to reproduce results of RCT in larger or more "natural" patient populations or to address specific, clinically relevant questions using a controlled and less controlled, more exploratory or even open study design. Although NISCT have to respond to the same methodological requirements as industry sponsored trials, they will be confronted with difficulties, often due to limited funding. The more personal interest and engagement of the investigator may raise specific problems. As NISCT are often performed later in the "life" of a drug, these trials can build on previously obtained information, which may facilitate the definition of inclusion and exclusion criteria, the prediction of effects and power analysis. Also, a more "naturalistic" design may appeal more to investigators and patients, simplifying recruitment. However, problems arise if larger patient groups are included and (consequently) different centres are participating, and interventions to reduce heterogeneity and to secure correct and timely patient enrolment are needed. Investigator-initiated trials may demand for control of non-interactional effects and for interactional (specifically expectancy) effects.

WO5.2.
THE EUROPEAN FIRST EPISODE SCHIZOPHRENIA TRIAL (EUFEST)

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Second-generation antipsychotics have been shown to be at least as effective as the earlier antipsychotics in treating schizophrenia and preventing recurrence of psychosis. Clinical trials have also persistently shown a lower incidence of extrapyramidal side effects (EPS) with the newer agents. However, most of the studies comparing the second-generation with the older antipsychotics have been conducted in more or less chronic patients with schizophrenia. Another problem is even more pervasive: studies examining drug effects are usually conducted in highly selected samples, for instance excluding patients with concomitant drug abuse or aggressive or suicidal patients. Thus, the generalizability of the studies assessing the efficacy of the newer antipsychotics is limited at best. Indeed, it has been argued that the EPS advantages of the new antipsychotics would fail to materialize when compared with lower doses of traditional antipsychotics. This issue, however, has not been tested in first-episode schizophrenia patients. The European First Episode Schizophrenia Trial (EUFEST) is set up to provide an answer to these problems: the study compares the one year outcomes of an unselected group of first episode patients after treatment with various second-generation antipsychotic medications (amisulpride, quetiapine, olanzapine and ziprasidone) to that of a low dose of haloperidol, as measured by duration of retention to allocated treatment in 500 patients. This is an open clinical trial with random treatment allocation. The study is currently running in 13 European countries involving 32 sites.

WO5.3.
CHALLENGES FOR THE EUROPEAN FIRST EPISODE SCHIZOPHRENIA TRIAL (EUFEST)

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Most studies comparing second-generation antipsychotics with classical neuroleptics have been conducted in patients with chronic schizophrenia or used high doses of classical antipsychotics. Therefore, the European First Episode Schizophrenia Trial (EUFEST) was developed to assess the effectiveness of low doses of haloperidol and regular doses of amisulpride, olanzapine, quetiapine, and ziprasidone in first-episode patients. This investigator-driven - instead of industry-sponsored - clinical trial in 16 European countries has its own challenges. For example, in industry-sponsored trials the pharmaceutical industry will often co-ordinate the trial and arrange permission from the local and national ethics committees to start the study, organize the translation of forms, distribute investigator manuals and other equipment, etc. In contrast, participants in this investigator-driven study have to perform these mostly time-consuming tasks themselves. Another problem is that legislation differs between countries. A few countries require that the randomized drugs are still recognizable as study drugs even though they are registered. Sometimes it is also obligatory that the insurance company - that covers for potential harm caused by the study protocol - has a local office. Furthermore, in most countries one or more of the study drugs are still not registered, which prohibits randomization of these drugs. Finally, in some countries health insurance companies do not reimburse the costs of all the study drugs. We conclude that we are doing this study together: all participating investigators need to put a lot of effort in EUFEST to make it a successful trial.

WO5.4.
CURRENT STATUS AND CONTROVERSIES IN ANTIPSYCHOTIC DRUG EFFECTIVENESS: UPDATE FROM THE CATIE STUDY

J. Lieberman
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The Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) project is a National Institute of Mental Health-sponsored research project to evaluate the clinical effectiveness of atypical antipsychotics in the treatment of schizophrenia and Alzheimer's disease. Although they were first developed for schizophrenia, antipsychotic drugs are now broadly used for other disorders, including behavioral signs and symptoms associated with Alzheimer's disease. Despite their widespread use in these conditions, the overall effectiveness and safety of these drugs remain unclear. In recent years clinical psychopharmacology research has been dominated by the pharmaceutical industry. While industry-sponsored research is critical to new product development, its emphasis is on meeting regulatory and marketing requirements rather than the effectiveness of the drugs at the general population level. As a result, industry-sponsored research does not address broad public health needs or the needs of individual practitioners seeking to make good clinical decisions for individual patients. The CATIE trials are examples of practical clinical trials - they are meant to produce results that are generalizable to typical treatment settings and to generate information that is useful to clinical and policy decision-makers. The trials have been underway since 2001 and will be complete by the end of 2004. Information on the safety and

effectiveness of the drugs that has become available since the trails began has only increased the importance of the two CATIE trials.

WO6.
DIAGNOSING AND TREATING SOCIAL PHOBIA

WO6.1.
SOCIAL PHOBIA: DIAGNOSTIC CONSIDERATIONS

P. Ruiz
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Social phobia is one of the most frequently observed types of anxiety disorders. In the United States, approximately 5.3 million people suffer from social phobia in a given year. In general, women suffer more than men do from social phobia, at an approximate rate of 2 to 1. However, men tend to seek help for social phobia more frequently than women. Social phobia tends to develop during childhood or early adolescence; rarely does it develop after age 25. With respect to functional risk factors, persons suffering from social phobia are less likely to marry, they suffer from a marked increase of academic and occupational problems, and they have an increased incidence of substance use problems. Additionally, there is a clear comorbidity risk between social phobia and depressive disorders, as well as an increased incidence of suicide among persons suffering from this disorder. Within this context, it is also important to discuss the unique and specific clinical cues that could help psychiatrists and primary care practitioners to differentiate social phobia from other types of anxiety disorders. Additionally, specific attention needs to be given to relevant comorbidity factors such as substance-related disorders, alcohol use disorders and panic disorder.

WO6.2.
PSYCHOPHARMACOLOGICAL TREATMENT OF SOCIAL PHOBIA

J. Raboch
First Medical School, Charles University, Prague, Czech Republic

Social phobia has received much attention and priority in recent years in the field of psychiatry. In many ways, this focus is the result of the current treatment techniques that have proven to be helpful in the management of this psychiatric condition. In particular, antidepressant medications. This has brought light and hope for those who suffer from this type of disorder. In the past benzodiazepines were the only psychopharmacological option to treat this disorder. As expected, fear and resistance were always present when using benzodiazepines in the management of this psychiatric illness as a result of the possibility of patients' developing addiction to these psychopharmacologic agents. Nowadays, this situation has changed a great deal. In this presentation, focus and attention will be given to the most appropriate approaches in the psychopharmacological treatment of social phobia, with emphasis on the use of selective serotonin reuptake inhibitors (SSRIs).

WO6.3.
PSYCHOTHERAPY IN SOCIAL PHOBIA

M.I. López-Ibor
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Faculty of Medicine, Complutense University of Madrid, Spain

There is large scientific evidence of efficacy of cognitive-behavioural psychotherapy for the treatment of social phobia, either alone or in combination with psychotropic drugs. On the contrary, there is not enough available information on the efficacy of psychodynamic oriented therapy for this disorder, nor the data is conclusive on the efficacy of interpersonal therapy in comparison to other treatments. Among the various methods of cognitive-behavioural therapy, the "exposure" techniques, preferably "in vivo", especially those associated to behaviour restructuring techniques, are key elements of an efficient psychological treatment. Relaxation or the training in social abilities have proved their usefulness when associated to the above mentioned techniques. In those cases in which social phobia is the first diagnosis, the response to cognitive-behavioural therapy is positive, even in the presence of other disorders. However, comorbidity with other psychiatric disorders and the clinical subtype of generalised social phobia tend to predict a worse response with respect to global functioning. Although many efficacy studies at short and medium term have been carried out, more research on the effectiveness and long-term efficacy of the treatments is necessary. Furthermore, there is a need for further knowledge about the differences of therapeutic responses in the different clinical forms of social phobia.

WO6.4.
CHILD AND ADOLESCENT ISSUES IN SOCIAL PHOBIA

E. Belfort
Universidad Central de Venezuela, Caracas, Venezuela

Anxiety disorders in children and adolescents are a group of frequent psychiatric disorders that tend to continue in the adult life and often leave psychological, social, familiar and academic consequences. Nevertheless, these disorders frequently are not perceived, for the following reasons: a) children with anxiety do not have severe behavior problems; b) frequently these disorders are accompanied by other psychiatric disorders (e.g., depression), that hide the anxiety symptoms; c) often these disorders manifest themselves with somatic symptoms, leading to physical and laboratory evaluations, sometimes unnecessary; d) a denial of the symptoms frequently occurs. The general features of anxiety disorders in children and adolescents, specially the social phobia, are visible in a wide spectrum, from feeling humiliated or ashamed facing social situations, to experiencing somatic and neurovegetative changes. In children the disorder can sometimes take the form of selective mutism.

WO6.5. SOCIAL PHOBIA: RESEARCH PERSPECTIVES

F.T. Antun
WPA Zonal Representative, Zone 12, Beirut, Lebanon

Nowadays, social phobia has become a psychiatric disorder where evidence-based treatments have shown beneficial responses. Up to recently, benzodiazepines were the most commonly used treatment approach in the management of social phobia. Currently, however, new treatment approaches are being considered as a result of the research efforts that have been applied vis-à-vis this psychiatric disorder. These research approaches have focused not only on the psy-

chopharmacotherapy but also on the behavioral techniques. These research efforts have led to the current use of selective serotonin reuptake inhibitors (SSRIs), monoamine oxidase inhibitors (MAOIs), beta-blockers, and also cognitive-behavioral therapy. In view of these new discoveries, social phobia is nowadays more accessible to treatment, offers a better prognosis, and is much better understood. In this presentation a review of the most current and promising research efforts will be undertaken. Additionally, potential future research efforts will also be addressed and discussed.

WO7.
COMPARING MENTAL HEALTH AND RISK FACTORS ACROSS EUROPEAN UNION COUNTRIES

WO7.1.
PSYCHOSOCIAL WELL-BEING AND PSYCHIATRIC CARE IN THE EUROPEAN COMMUNITIES: ANALYSIS OF MACRO INDICATORS

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The study aimed to investigate the well-being in European countries and the availability of psychiatric care by means of available macro indicators. A review of macro indicators capable of providing a synthetic description concerning the mental health status and the availability of psychiatric care and collected routinely from sources such as the World Health Organization, the Organization for Economic Co-operation and Development, the Statistical Office of the European Communities (EUROSTAT) and the Intercontinental Marketing Services (IMS) was carried out. The evaluation of temporal trends in each nation permits the carrying out of a subsequent comparison between countries. In all European countries a decreasing trend of suicides was observed in the period 1980-2000, with the exception of Ireland and partially of Spain. In Ireland the increase was of 130%, with a particularly high risk in young people and adults. Portugal and Greece presented respectively the highest and the lowest rates of undetermined causes of death. A general increase during the mid 1980s in mental disorder mortality was shown. Psychiatrists per 100,000 inhabitants ranged from 3.6 in Spain to 17.5 in Finland, child psychiatrists from 0.9 in Germany to 5.1 in Portugal. Psychiatric beds ranged from 0.4 per 1000 inhabitants in Italy and Spain to 1.3 in Ireland. IMS data indicated a trend towards an increase of consumption for antidepressants and antipsychotics in all European countries. A better coordination in the collection of data concerning mental health status in the European Union and an improvement of the quality of services available is necessary.

Supported by the Project "The status of mental health in Europe".

WO7.2.
RISK FACTOR COMPARISONS ACROSS SOME EU COUNTRIES: ESEMED AND EUROBAROMETER COMPARISONS

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Mental health comparisons between countries are quite hard to conduct. Most European Union (EU) countries have some epidemiological data, but methodologies, specially design and instruments, are too diverse to make comparisons. However, two recent EU surveys have been conducted in diverse countries using identical instruments (the Composite International Diagnostic Interview and the Short Form-12 for the first one and the Mental Health 5 Item Scale for the second) and the same design in national representative samples: the European Study of Epidemiology of Mental Disorders (ESEMeD) and the Eurobarometer. These studies collected sociodemographic variables, thus allowing to compare at least the relative risk for the major risk factors, such as gender, age living arrangement, foreigner/native and employment status. The presentation will compare relative risk (odd ratios) for these risk factors across the diverse countries as well as care utilisation. The presentation will for example show that South European women have a higher relative risk than their male counterparts, while in Northern countries there is no higher risk for females. In some of the countries the youngest (those less than 25 years) have more problems than the adults. French young people have a higher risk for mood disorders and German and Spanish young people for anxiety disorders; taking any disorders French and German young people have a higher risk than their adult counterparts in their own country. In most of the countries, people aged over 65 years have some lower rates than adults, except for Italy where this never happens. Concerning mood disorders, in all countries except Italy and Netherlands those who are unemployed have a higher risk than those who are in paid employment (corrected by sex and age). In most of the countries people who live with a partner have a lower risk for mood disorders than those living in other situations; however, in France, Germany and Netherlands there is a higher risk. The results will be discussed as well as their implications for fostering prevention policies.

WO7.3.
COMPARING THE POSITIVE MENTAL HEALTH IN EUROPE

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The Eurobarometer survey 58.2, conducted in Autumn 2002, included items to measure the state of positive and negative mental health as well as social support and help seeking behaviour due to mental ill-health. The main aim of this paper is to compare aspects of positive mental health across the 15 'old' European Union (EU) member States. The dependent variables analysed in this paper are the following: the mean Energy and Vitality Index (EVI) from the Short Form-36 (SF-36) questionnaire and the perceived social support measured by the 3-item Oslo scale. The Eurobarometer survey covers the population of the EU member States aged 15 years and over. The sample sizes are about 1000 per country/region, except Luxembourg (about 600) and Northern Ireland (about 300). The response rates varied from 23% to 84%. Countries where the response rate was lower than 45% are excluded from the present analyses. The mean EVI for the 11 selected countries together was 62.4, with the score ranging from 58.8 (Italy) to 66.3 (Spain). The mean EVI was generally higher for men (65.3) than for women (60.0). The percentage of people experiencing strong social support varied similarly between countries (from 9.1% for Italy to 35.1% for Spain). High EVI score (indicating good mental health) was also associated with younger age, being single or married, and being employed.

WO7.4.
SOCIAL INEQUALITIES AND THE COMMON MENTAL DISORDERS

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This paper discusses the evidence for associations between markers of social position and the prevalence of the 'common mental disorders' (mostly non-psychotic depression and anxiety, separately or together). It presents a recent major systematic review of the published evidence for general populations in developed countries, and an extended analysis of the British National Psychiatric Survey of 1993. Additional evidence is drawn from surveys using the General Health Questionnaire, the Composite International Diagnostic Interview or the Short Form-36 from the 'Survey of Surveys' undertaken for the European Union (EU) project The Mental Health Status of Europe. Issues of causation are addressed, including evidence from the limited longitudinal studies available. In Western European and similar populations, people of lower social position are generally disadvantaged in health and illness. This includes the common mental disorders, higher frequencies of which are associated with poor education, material disadvantage and unemployment. Their large contribution to morbidity and disability, and their social consequences in working age adults, would justify substantial priority being given to addressing mental health inequalities within social and economic policy in Europe. Disadvantaged people tend to live in communities and cultures that are disadvantaged by noxious environments, poor human services, high levels of smoking, drinking, drug taking, and violence. These are almost certainly causally associated with high levels of psychiatric morbidity found in these populations, probably mediated or enhanced by individual disadvantages. They may affect duration as well as onset and thus increase prevalence. There are well known policy implications relating to social exclusion and deleterious social environments. It does not need population surveys to show that poverty, deprivation, environmental degradation and social stress should be high on the political agenda.

WO7.5.
THE STATE OF MENTAL HEALTH IN OLD AGE ACROSS THE "OLD" EUROPEAN UNION

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Aging and the special circumstances of older people are taking an increasingly central place in public health across Europe. The paper provides the first syllabus on the occurrence of mental disorders in old age focusing on surveys conducted in the 15 countries which comprised the "old" European Union. A systematic search of the literature on the prevalence of mental disorders in old age in English and German was conducted, using Medline and Psyndex databases. Mental disorders in old age are common. However, the pattern differs from that in younger cohorts. The most serious threats to mental health in old age are posed by dementia and depression. It is a clear cut finding that dementia exponentially increases with age. The basic issue whether depression increases or decreases with age remains unsolved. Databases on other mental disorders in old age are much smaller. Although among the most prevalent conditions across the life span, decreasing rates of anxiety disorders and alcoholism have been found with increasing age. No firm conclusion can be drawn about the occurrence of drug-related disorders and somatoform disorders with increasing age. Psychotic syndromes in late life appear to increase with age. Unfortunately, variation among studies conducted in different European regions seems to reflect mainly methodological differences rather than real differences. A concerted action in improving the methodology of epidemiological research in old age, producing comparable data across Europe, is needed to meet the challenges of an aging population.

WO7.6.
IMMIGRATION AND MENTAL HEALTH IN THE EU

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Migration during the 1990s in Europe has been high. Besides the migration from developing to developed countries, there has been a rise of new migrations, especially from the Eastern and Central European countries and from the Commonwealth of Independent States. Some countries in Europe, like Spain, Italy or Portugal, that have been traditionally exporters of migrants, have shifted to become importers. Political and socio-economic instability in and around Europe has significantly increased the number of refugees and asylum seekers arriving in European countries. The presence of undocumented immigrants is a well-established fact in most European countries. Among all the changes a human being must face throughout his live, few are so wide and complex as those which take place during migration. Practically everything that surrounds the person who emigrates changes. The singularity of the migratory experience lies in the fact that it is a psycho-social process of loss and change, which is known in the psychiatry of migration as a grief process. In the case of refugees, who have to flee their country for fear of being persecuted, the grief process is even more complex. In Spain, research has been carried out about conditions which points to mental and psychosomatic disorders in the immigrant population. This research came up with the following factors affecting the mental health of immigrants: labour and economic instability, cultural and social marginalisation, family estrangement, pressures to send money to their families, racial discrimination and lack of statutory documentation. The particularly hard conditions of today's migration seem to be propitiating a worsening in the mental health of the newcomers. Current situations are making of the migratory experience an extremely hard and unbearable process. An example of this is the situation in the South of Europe, particularly Spain and Italy. Psychiatrists from the Psycho-pathological and Psycho-social Assistance Service (SAPPIR) team, located in Barcelona, have described a common syndrome called chronic and multiple stress syndrome in immigrants (or Ulysses syndrome). Despite migrants represent a vulnerable population with respect to health problems, in many European countries there are migrants who fall outside the existing health and social services, something which is particularly true for asylum seekers and undocumented immigrants. They are usually only entitled to emergency health services. Some states have done efforts to universalise the right to access national health care services, therefore including undocumented migrants. Nevertheless, the health care gaps that are being left by the authorities are being covered by the informal work of doctors at the health system and by non-governmental organizations, which provide medical and, specially, mental health assistance together with health promotion and prevention programs among other services. Our aim should be to provide specific mental health care services for migrants. It is necessary to highlight the importance of adopting an integrated approach to mental health care that moves away from psychiatric care only, as it has been stressed in a recent report of the World Health Organization in collaboration with Red Cross and Red Crescent organizations.

WO8.
INTERNATIONAL PERSPECTIVES ON COERCIVE TREATMENT IN PSYCHIATRY

WO8.1. INTERNATIONAL RESEARCH ON COERCION IN MENTAL HEALTH CARE

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Coercion in psychiatric care has been subjected to an increasing international research interest during the last decades. In the first studies, formally legally involuntarily admitted patients were regarded as exposed to coercive measures, while formally legally voluntarily admitted patients were not. Legally committed and voluntary patients were compared with regard to socio-demographic and clinical characteristics. Great variations in civil commitment rates were found between countries, as well as between regions within jurisdictions with the same mental health legislation. In later studies, a wider concept of coercion has been used, since several studies had shown a lack of congruence between the formal legal status of the patients and the patients' perceptions of being coerced to admission and exposed to coercive measures during care. Instruments to assess perceived coercion have been developed, and perceived coercion has been studied. Ethical conflicts in the use of coercion from the perspectives of different actors involved have been studied empirically, the situation of the patients' relatives has been given attention as well as experiences and attitudes of staff and people in the community. Ongoing studies focus on international comparisons of civil commitment legislation, the use of coercive measures, perceived coercion in psychiatric inpatient care and pressures to adhere to outpatient treatment, as well as on the outcome of coercive care. However, knowledge is still missing regarding under what conditions and in what way the use of coercion in psychiatric care may produce a more positive outcome of care than if coercion had not been used.

WO8.2.
CIVIL DETENTION AND FORENSIC PLACEMENT OR TREATMENT LEGISLATION FOR MENTALLY ILL – ARE THERE COMMON APPROACHES IN THE EUROPEAN UNION?

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Two recent European Commission-funded studies analysed the legal frameworks for compulsory admission of mentally ill persons (civil detention) as well as for the placement and treatment of mentally ill offenders across the former 15 European Union (EU) Member States. Major results from both studies will be presented. Rules and regulations for civil detention as well as the actual practice in caring for mentally ill patients on an involuntary basis differ widely across the EU Member States. Time series on civil detention quotes or rates which could be assessed for most of the 15 Member States confirm a wide variety (e.g. ranging in 2000 from 218 involuntary placed mentally ill per 100,000 population in Finland down to 6 per 100,000 population in Portugal) and suggest that differing legal traditions, national mental health care systems or other factors determine strongly the current practice. The legislation in the field of placement and treatment of mentally ill offenders, which in some Member States partly overlaps civil detention law, is similarly divergent, constituting a major obstacle for a future European harmonization to overcome.

WO8.3.
MANDATED COMMUNITY TREATMENT IN THE UNITED STATES

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A growing array of legal tools is being used to mandate adherence to mental health treatment in American community settings. In the social welfare system, benefits disbursed by money managers and the provision of subsidized housing have both been used as leverage to assure treatment adherence. Similarly, in the judicial system, adherence to mental health treatment may be made a condition of probation, and favorable disposition of a criminal case by a newly-created mental health court may be tied to treatment participation. In addition, under outpatient commitment statutes, judges have the authority to order patients to comply with treatment in the community. In response to these uses of leverage, a patient may attempt to maximize personal control over treatment in the event of later deterioration by executing an advance directive that specifies his or her treatment preferences. In this presentation, the Director of the MacArthur Foundation's Research Network on Mandated Community Treatment will present the first data from a five-site study of 1,000 patients on how often given forms of leverage - singly or in combination - are imposed on people with mental disorder to get them to adhere to treatment in the community.

WO8.4.
FIRST RESULTS ON LEGALLY INVOLUNTARILY ADMITTED PATIENTS IN 12 EUROPEAN STUDY CENTRES PARTICIPATING IN THE EUNOMIA PROJECT

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Previous (mostly national) research has shown significant variation of different aspects of coercive treatment measures. Therefore, clinical practise and outcome of these measures should be assessed at an international level facilitating cross-national comparisons. This is the general research objective of the European Commission-funded ongoing EUNOMIA project, whose naturalistic and epidemiological study design has been implemented in 12 regions in 12 European countries. Using a standardized battery of instruments (e.g. covering psychopathology, perceived coercion, satisfaction with treatment, quality of life), each centre assesses two groups of patients for a three-month follow-up period (time-points of assessments: within the first week after hospital admission, 4 weeks and 3 months after hospital admission): legally involuntarily admitted patients (aimed at figure of complete cases in each centre: n=140) and legally voluntarily admitted patients who – according to a screening procedure – feel coerced to admission (aimed at figure in each centre: n=40). This preliminary analysis will include the subgroup constituted in the first 12 months of the recruitment period (ca. 800 – 1000 patients) and focus on the initial assessment of these patients (within the first week after hospital admission) covering their socio-demographic and clinical characteristics, legal status, perceived coercion and satisfaction with treatment. The results will be embedded in standardized information on the organization of mental health care in the participating catchment areas. In particular, consequences for the clinical practice of involuntary hospital admissions across Europe will be demonstrated.

WO8.5.
CULTURES OF PSYCHIATRY AND THE PROFESSIONAL SOCIALIZATION PROCESS: THE CASE OF CONTAINMENT METHODS FOR DISTURBED PATIENTS

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Acute mental disorder necessitating admission to hospital is often accompanied by disturbed behaviour that threatens the health of the person concerned or that of those around them. A range of containment methods are used by psychiatric professionals to keep patients and staff safe. These strategies are strongly emotive and attract strong moral valuations, yet differ sharply between countries. This paper reports a study to investigate the relationship between attitudes to these containment methods, and exposure to psychiatric education and practice. It was hypothesized that the culture of psychiatry in the study country would socialise students' views towards the locally dominant pattern of relative evaluations. Nine cohorts of student psychiatric nurses at different stages of their training at one UK University were asked to complete ratings on 11 containment methods. Containment methods fell into five groups, with mechanical restraint and net beds attracting the most severe disapproval. Neither the relative evaluation of methods, nor the intensity of those evaluations, changed systematically with duration of training. The findings support the interpretation that the relative evaluations of psychiatric containment methods are a property of wider national cultures, rather than an isolated tradition of professional psychiatric practice.

WO9.
RECENT ADVANCES IN BRAIN IMAGING OF DRUG ABUSE

WO9.1.
MAGNETIC RESONANCE SPECTROSCOPY STUDIES OF COCAINE DEPENDENCE: IMPLICATIONS FOR NEUROBIOLOGY AND TREATMENT

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Magnetic resonance spectroscopy (MRS) provides a non-invasive window on human brain chemistry. Over the last five years, we have completed several hydrogen (proton, 1H) and phosphorus (31P) MRS studies of cocaine dependent (CD) subjects. Using 1H MRS, we have demonstrated that there are no reductions in the neuronal marker N-acetylaspartate (NAA) in CD but that there are changes in the transverse relaxation time (T2) of NAA in frontal cortex. This reduction in T2, which tends to normalize with treatment, is most consistent with a reduction in neuronal volume and may reflect changes in dopaminergic transmission as dopamine is a critical modulator of Na/K ATPase activity. We have also noted 15-20% reductions in frontal lobe GABA levels. GABA levels are elevated in CD subjects who are treated with adjunctive pharmacotherapy. Using 31P MRS, we have demonstrated increases in brain phosphomonoesters (PME; phospholipids precursors) and decreases in brain nucleoside triphosphates (beta-NTP; primarily adenosine triphosphate) in CD subjects. Based on these observations of stimulant-induced alterations in brain chemistry, we have completed preliminary studies on the efficacy of cytidine diphosphocholine (CDP-choline) as a potential treatment for CD. CDP-choline administration stimulates phospholipid synthesis. Initial clinical trials suggest that CDP-choline can reduce not only cocaine use, but also nicotine, alcohol, and marijuana use in CD subjects during early abstinence.

WO9.2.
FUNCTIONAL MAGNETIC RESONANCE IMAGING AND DIFFUSION TENSOR IMAGING IN COCAINE DEPENDENCE

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Previous studies report changes in brain function and structure in cocaine-dependent individuals compared with healthy controls using positron emission tomography (PET), single photon emission computed tomography (SPECT), and structural magnetic resonance imaging (MRI). Functional magnetic resonance imaging (fMRI) is a widely accepted technique to measure brain function that few studies have used to date to compare cocaine dependent subjects and non-drug using controls. In the present study, subjects with current cocaine dependence were compared to non-drug using controls on blood oxygen level dependent (BOLD) fMRI activation while performing a delayed matching to sample task (Delayed Memory Task, DMT), relative to a continuous performance baseline (Immediate Memory Task, IMT). Subjects also underwent diffusion tensor imaging, from which a measurement of fractional anisotropy (FA) can be calculated that provides information regarding neuronal white matter tract integrity in the brain. In a preliminary analysis, cocaine dependent subjects showed differences in BOLD activation compared to controls in the prefrontal cortex, and differences in FA. Results of these studies will be discussed in light of what is known about FA and the BOLD effect in relation to cocaine dependence.

WO9.3.
CORTICAL CHANGES AFTER A 28-DAY WASHOUT PERIOD IN CHRONIC MARIJUANA SMOKERS: A BOLD fMRI STUDY

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To examine the underlying neurobiological substrates related to marijuana smoking and abstinence, we measured relative changes in cortical activation using blood oxygen level dependent (BOLD) magnetic resonance imaging (MRI) techniques on twelve current, long-term adult marijuana users before and after a supervised 28-day abstinence period. Imaging data was also acquired in 12 healthy comparison subjects. Marijuana smokers were scanned on days 1 and 28 of the study using a 1.5 Tesla scanner retrofitted with a whole body echo-planar coil and a quadrature head coil. A combined protocol, applying conventional MRI and functional MRI, was used to assess changes in cortical signal intensity. BOLD images were acquired every three seconds using a gradient echo pulse sequence (TE = 40 msec, flip angle = 75 deg.). Subjects completed three subtests of the Stroop Color Word Test while being scanned. Compared to control subjects, smok-

ers demonstrated decreased anterior cingulate activation and increased dorsolateral prefrontal activation during the interference task at Day 1. At Day 28, smokers continued to display reduced activation in the anterior cingulate, although activation in the dorsolateral prefrontal cortex approached levels similar to control subjects. These findings are consistent with the hypothesis that, in some subjects with a history of chronic heavy marijuana use, there is an alteration of frontal cortical function associated with attentional processing ability. Moreover, our results indicate that changes in BOLD signal in heavy marijuana smokers extend beyond an acute washout phase, raising the possibility that functional deficits are the result of either neurodevelopmental or neurotoxic effects.

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WO9.4.
SEROTONIN, IMPULSIVITY, AND FUNCTIONAL MAGNETIC RESONANCE IMAGING IN ECSTASY ABUSE

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Methylene-dioxymethamphetamine (MDMA) is known to cause degeneration of serotonin nerve terminals after acute doses in animals, and behavioral studies in human MDMA users regularly find abnormalities in memory, mood, and impulse control. The purpose of this study was to determine whether individuals with a self-reported history of MDMA use would differ from non-MDMA using controls on blood oxygen level dependent (BOLD) functional magnetic resonance imaging (fMRI) activation while performing a working memory task. Fifteen MDMA using subjects and 19 non-MDMA using controls underwent an fMRI scan while performing the immediate and delayed memory task (IMT/DMT). The study was a block design in which the Delayed Memory Task (DMT) alternated with the Immediate Memory Task (IMT), which served as a control condition. Random effects SPM99 analysis showed a significant increase in activation on fMRI in the MDMA subjects compared to the control subjects in the medial superior frontal gyrus in vicinity of Broadman's areas 9,10, the pulvinar in the thalamus extending into putamen, and the hippocampus. These results will be discussed in light of behavioral problems which have been found in MDMA users, such as increased impulsivity and memory impairments.

WO10.
SUCCESSFUL IMPLEMENTATION OF EVIDENCE-BASED FAMILY TREATMENT FOR MENTAL DISORDERS

WO10.1.
EVIDENCE-BASED FAMILY TREATMENT IN PRACTICE: THE AGONY AND THE ECSTASY

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Despite strong scientific support for the routine implementation of "evidence-based" cognitive-behavioural family strategies, few services provide more than brief education, mainly focused on pharmacotherapy. An international collaborative group, the Optimal Treatment Project (OTP), has been developed to promote the routine use of evidence-based strategies for mental disorders. A field trial was started to evaluate the benefits and costs of applying evidence-based biomedical and psychosocial strategies for schizophrenic and other major disorders over a 5-year period. The cognitive-behavioural family approach has been a core component of this project. More than 80 centres have attempted to implement these methods in more than 20 countries. Unfortunately all but 13 centres either failed to complete the initial phase of the implementation programme, or abandoned the project within two years. The main feature that distinguished successful implementation was assertive and committed management that considered evidence-based approaches as the basis for all treatment and ensured that continued supervision and quality improvement audits and annual training updates were conducted routinely within the services. More recent developments of consumer guidebooks have facilitated the training and fidelity of application of these methods. Preliminary results will be presented that suggest that the continued application of these methods may have a major impact on the rates of clinical and social recovery of schizophrenic disorders, particularly in those cases who have received family-based treatment from their first episodes.

WO10.2.
FAMILY INTERVENTION IN SEVERE PSYCHIATRIC DISORDERS: RECENT OUTCOMES, NEW MODELS AND FUTURE PROSPECTS

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Family interventions that are based on educational principles have emerged as a front-line indicated treatment for schizophrenia and other major psychiatric disorders. Over twenty controlled clinical trials of long-term treatment have documented an unprecedented consistency and scale of effectiveness. The effect sizes achieved are equivalent to those for antipsychotic medication: relapse risk and intensive hospital care is reduced by at least 50% in almost all studies to date. Psychoeducational family treatments are one of the most cost-effective treatments in psychiatry. Yet, this approach is still relatively unknown and not applied in routine practice in the US. We review the evidence that underlies this new status, focusing mainly on new applications and promising outcomes. Outcomes from new studies and especially those showing greatly improved outcomes in employment, social functioning and family health and well-being are presented. In particular, methods for combining family psychoeducation with evidence-based practices, such as supported employment and assertive community treatment, are described and illustrated with new evidence for effectiveness. Also included are brief descriptions and outcomes for new versions for bipolar disorder and major depression. The more comprehensive applications of family strategies appear to have advantages over those that have focused only on a narrow range of select cases, and have been poorly integrated within the mainstream services.

WO10.3.
FAMILIES AS PARTNERS IN MENTAL HEALTH SERVICES

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Training courses, controlled research trials and implementation projects have been conducted for more than ten years throughout Italy. More recently cognitive-behavioural family approaches have been included in many University training programmes for psychiatrists, psychologists, rehabilitation technicians, social workers, and more recently for nurses. The University of L'Aquila and the University of Naples SUN have been the two centres that have contributed substantially to this important development. One important factor in the development and maintenance of family treatment strategies is the support of local family associations and consumer groups. A successful experience was conducted in Molise, a region of Central Italy: a one-year psychoeducational intervention training that included members of the local family association as well as professionals from the mental health services. Relatives expressed great satisfaction with the training and their own application of the interventions. They reported improved quality of life and enhanced ability in achieving their individual goals, as well as improved interpersonal communication skills and problem-solving abilities. They established a better relationship with the mental professionals and they were able to collaborate with them in the planning of innovative rehabilitation services and other developments, e.g. organization of a congress, creation of a cooperative work programme and developing a sheltered work laboratory. It is apparent that the flexibility of treatment that is possible when the interventions are conducted not only in "experimental" protocols and research settings may provide better engagement and cooperation with families and possibly better clinical and social outcomes.

WO10.4.
NEVER GIVE UP! PERSISTENCE IN THE FACE OF OBSTACLES TO THE IMPLEMENTATION OF FAMILY WORK

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The focus in recent years in relation to family interventions is to ensure their implementation in routine services. Various obstacles have been identified consistently, including lack of management support, service systems that do not facilitate the provision of family-sensitive services, lack of training for staff, attitudes of clinicians and heavy workloads. Faced with such a wide range of diverse obstacles, a similarly wide range of imaginative strategies must be employed in order to progress the implementation of family work. These include policy, training, and strategies aimed at organisational change. Often these strategies have to be repeated over time as key individuals change and move into different roles. The author will draw on experiences from a large-scale programme, which has been underway since 1997 in the West Midlands of England, called the Meriden Programme. It covers a population of 5 million. It has two main components. The first element is staff training, with 1,500 therapists having been trained to work with families since its inception. The second element is employing a range of strategies to bring about organisational change, including training for managers, integrating family work into existing policies, and ensuring that audit and performance management strategies are in place to ensure implementation in practice. Four key strategies emerge as being significant: persistence; establishing close and trusting relationships with managers; identifying champions at local level; and working closely with carer and family organisations. Of these, persistence and recognising that change takes time is probably the most important. This presentation addresses the issue of how those charged with ensuring the implementation of family work can persist in the face of opposition and disappointment, and can continue to come back 'to fight another day'.

WO11.
SUICIDE PREVENTION IN MAJOR PSYCHOSES: RISK FACTORS AND ROLE OF LONG-TERM TREATMENT

WO11.1.
CAN GENETIC FACTORS PREDICT SUICIDAL BEHAVIOR IN MAJOR PSYCHOSES?

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Suicide remains a major public health challenge. Worldwide, nearly one million people die of suicide each year. Suicide accounts for about 10% of deaths among psychiatric patients and up to 15% among bipolar patients. Besides the diagnosis itself, different environmental risk factors have been identified, including age, gender, life events, climate and societal attitudes. These factors could explain, in part, wide national and regional variations in the rate of suicide and suicidal attempts. It has been demonstrated for decades, in familial, twin and adoption studies, that suicide may cluster in families, suggesting a genetic vulnerability in the occurrence of suicidal behavior. In particular, different studies involved a familial pattern in violent suicide behavior. This observation is consistent with several neurobiology studies showing a specific biological pattern in violent suicide behavior, including a hypothalamo-pituitary axis hyperactivity and a low serotonergic activity, independent of underlying psychiatric diagnosis. Recent progress in molecular genetics and genomics has identified promising candidate genes possibly linked to suicidal behavior. Genes from the serotonergic pathway have been targeted in case-control association studies. Tryptophan hydroxylase (TPH) gene, coding for the rate-limiting enzyme in the synthesis of serotonin, and serotonin transporter (5-HTT) gene have been largely studied and showed association with violent suicide attempt in different reports. Conflicting results have been found with monoamine oxidase gene and serotonin receptor genes. More recent studies have focused on the link between genetics and aggression, impulsivity and borderline personality disorder. These traits have been related to a higher rate of suicidal behavior and suicide attempt but also to a low serotonergic activity, as demonstrated by a 5-hydroxyindolacetic acid (5HIAA, main serotonin metabolite) decrease in cerebrospinal fluid. It becomes thus more and more obvious that suicidal behavior is related to a constellation of biological, including genetic, environmental but also personality factors. It could be hypothesized that a serotonergic genetic dysfunction might lead to low cerebral serotonergic activity, underlying personality and temperament characteristics, predictors of future potential suicidal behavior. Further studies are needed to elucidate the direct or indirect links between neurobiological disturbances, temperament traits and suicidal behavior, in order to comprehend the vulnerability factors of this complex behavior and to early detect high-risk patients.

WO11.2.
PSYCHOTIC SYMPTOMS AND SUICIDAL BEHAVIOR IN MAJOR PSYCHOSES

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It is well known that functional psychiatric disorders are one of the main causes of suicidal behavior. Epidemiology and risk factors for suicidal behavior in functional disorders as well as prevention strategies will be presented. For example, about 60-70% of patient with acute depression experience suicidal ideas. There is a high incidence of suicide (10-15%) in depressive patients. There are some predictors of the risk of suicide, among others the severity of depression, a family history of suicide behavior, a high score in the hopelessness scale. The complex causation of suicidality has to be borne in mind when considering methods of suicide prevention. In order to obtain the best results, psychosocial, psychotherapeutic and psychopharmacological approaches should be combined, depending on the risk factors of each individual patient.

WO11.3.
DEPRESSION, COGNITIVE DETERIORATION AND SUICIDAL BEHAVIOR IN THE ELDERLY

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Depression and more specifically depressive symptoms are the most common mental health problem of later life. Apathy is not depression, but the two types of symptoms can commonly co-occur. Apathy, defined as a lack of motivation, is also very frequent in elderly subjects with mild cognitive disorders, Alzheimer's disease and related disorders. Even if not all older depressed patients are suicidal, the great majority of older patients who report suicidal ideation or who commit suicide experienced depression. This is an important information because, among adults who attempt suicide, the elderly are most likely to die as a result. This paper will stress the relation between the cognitive, behavioral, and emotional aspects of the problem in order to give some therapeutic recommendation.

WO11.4.
IS DURATION OF UNTREATED PSYCHOSIS A RISK FACTOR FOR SUICIDE ATTEMPTS IN SCHIZOPHRENIA?

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Chair of Psychiatry, Department of Clinical Sciences Luigi Sacco, University of Milan, Italy

The duration of untreated psychosis (DUP) has been considered one of the major outcome determinants in schizophrenia, particularly because the latency between the onset of psychotic symptoms and the first antipsychotic treatment is a potentially modifiable factor. Results from previous studies associated a longer DUP to a worse outcome, but to our knowledge no studies were performed to investigate the effect of DUP in influencing suicidal behavior. In this retrospective study we investigated the possible association between different clinical variables, including DUP, and suicidal behavior in a sample of 103 chronic schizophrenic or schizoaffective disorder patients. The sample was subdivided in two subsamples according to the presence/absence of suicidal attempts lifetime. The main demographic and clinical variables were analyzed and compared between the two groups. Interestingly, we found a significant association between a DUP ≥ 1 year and the presence of suicide attempts ($p<0.05$). In addition, attempters had a significantly higher rate of nicotine abuse or dependence ($p<0.02$ and $p<0.05$), were more likely to have or have had lifetime major depressive episodes ($p<0.002$) and were more likely prescribed typical antipsychotics ($p<0.05$) than non-attempters. Further investigations on larger samples and with prospective designs are warranted, particularly with respect to the role of an early detection of schizophrenic symptoms and an early intervention.

WO12.
THE GABA NEURON AND SCHIZOPHRENIA MORBIDITY: TREATMENT IMPLICATIONS

WO12.1.
SYSTEMIC CORTICAL GABAERGIC NEURONAL DYSFUNCTION IN SCHIZOPHRENIA

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GABAergic cortical function orchestrates the intermittent synchronous population firing of pyramidal neurons underpinning cortical function. In schizophrenia, a downregulation of glutamic acid decarboxylase 67 (GAD67) mRNA and protein expression is a finding replicated in multiple laboratories. Such a deficit allows the inference that schizophrenia may reflect a GABAergic deficit-related alteration of cortical function. A pathological finding reported by several laboratories is that in schizophrenia there is a reduction of cortical dendritic spine expression. Hence, the reduction of cortical dendritic spines in schizophrenia pyramidal neurons gives an indication of the signal transduction deficit operative in cortical function of schizophrenia patients. Very likely the extent of this deficit underpins the severity of the negative and positive symptoms of schizophrenia. The brain is built to acquire a functional and structural individuality utilizing neuronal and synaptic plasticity. Plastic modifications of neuronal circuits are modulated by GABAergic transmission and this GABAergic dysfunction needs to be addressed by therapeutic intervention. Unfortunately, antipsychotic treatments address monoaminergic transmission mechanisms. A possible avenue for the treatment of schizophrenia would be to address the GABAergic functional deficit operative in this disease by positive allosterically modulating GABA-A receptors. Benzodiazepines, such as diazepam, positively modulate GABA-A receptors expressing alpha1 subunits. However, allosteric positive modulation of the alpha1 subunit causes sedation and tolerance. In contrast, full allosteric modulators of GABA-A receptors expressing alpha5 subunits, such as imidazenil, may reduce psychotic symptomatology. Hence, the pharmacological profile of imidazenil should be studied with attention as a prospective candidate drug to be used in the treatment of schizophrenia.

WO12.2.
EPIGENETIC PROMOTER HYPERMETHYLATION IN GABAERGIC NEURONS IN SCHIZOPHRENIA

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Evidence is accumulating that in schizophrenia cognitive deficits and defects of pyramidal neuron firing appear to relate to a GABAergic neuronal pathology. The Reln and GAD67 mRNA down-regulation

in GABAergic neurons of post mortem brains of patients with schizophrenia and bipolar disorder with psychosis is firmly established. We have shown that methionine injection into mice decreases reelin expression through a mechanism that likely involves methylation of the Reln promoter. Among DNA methyltransferases (Dnmt), Dnmt1 is highly expressed in post-mitotic neurons. Along with reduced expression of Reln, Dnmt1 mRNA is increased in GABAergic neurons of the prefrontal cortex of patients with schizophrenia. This suggests the possibility that Dnmt1 may possess functions in regulating DNA methylation patterns in post-mitotic neurons. To examine this in more detail, we are using a mouse cortical interneuron preparation. We have used an antisense oligonucleotide to block Dnmt1 mRNA expression and translation in these cortical neuron cultures. Dnmt1 antisense transfection is accompanied by an increase in Reln mRNA and an attenuation of the methionine-induced down-regulation. Our findings are consistent with the hypothesis that one target of Dnmt1 may be the reelin promoter. This is likely related to a change in promoter methylation or to the recruitment of co-repressors to this region by Dnmt1. Recently, we have been able to show site selective increases in methylation of cytosines in the Reln promoter in genomic DNA isolated from patients, indicating that the down-regulation of genes in GABAergic neurons of schizophrenia brain may be the result of promoter hypermethylation.

WO12.3.
THE CLINICAL EFFECTS OF ANXIOLYTICS AND MOOD STABILIZERS ON SCHIZOPHRENIA

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The dominant transmitters postulated to be involved in the therapeutic action of antipsychotics are dopamine and serotonin. The neuropathological evidence indicates that a GABAergic defect is present in schizophrenia. Anxiolytics or mood stabilizers effect GABAergic mechanisms directly or indirectly through epigenetic control via gene silencing mechanisms. Therefore, it is pertinent to examine their clinical efficacy. Drugs with these mechanisms may also aggravate schizophrenia. We will present a systematic review and meta-analysis of the efficacy or negative effects of benzodiazepines, other minor tranquilizers, and the mood stabilizers as treatment for schizophrenia both as monotherapy and in augmentation. We will integrate this clinical evidence with what is known about the biology of schizophrenia through postmortem studies and what is known about the mechanism of action of the benzodiazepines and mood stabilizers.

WO12.4.
SIMILARITIES AND DIFFERENCES IN NEURAL CIRCUITRY CHANGES IN THE LIMBIC LOBE OF SCHIZOPHRENIC AND BIPOLAR SUBJECTS

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A compilation of results from postmortem studies of the anterior cingulate cortex over the past 12 years revealed both similarities and differences when schizophrenic and bipolar groups have been compared. For markers of the GABA system, there is a great deal of overlap in the findings for the two patient groups when compared to normal controls. On the other hand, results obtained from analyses of the glutamate system and apoptosis have suggested that intracellular signaling and metabolic pathways may behave differently in schizophrenic and bipolar subjects. Taken together, these results are consistent with a "two factor model" of psychotic disorders in which environmental factors common to schizophrenia and bipolar disorder may affect the GABA system, while specific susceptibility gene(s) for the respective diagnostic groups may be reflected in the differences observed for the regulation of apoptotic cascades. Overall, these findings raise the possibility that the development of novel pharmacologic treatments that are uniquely effective in the treatment of schizophrenic versus bipolar disorder may find a basis in the transcriptional regulation of complex intracellular signaling that mediate the response to oxidative stress.

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WO12.5.
IMIDAZENIL, AN IDEAL PHARMACOLOGICAL PROFILE FOR AN ANTIPSYCHOTIC DRUG

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GABAergic inhibition is increasingly considered one of the most important factors in controlling the mode of operation of telencephalic glutamatergic pathways that are substrates for the regulation of complex brain function. It is now well established that schizophrenia (SZ) patients express a downregulation of telencephalic GABAergic circuits. This GABAergic dysfunction may act as a vulnerability factor in the etiopathogenesis of psychosis and may contribute to the cognitive/attention deficits and social withdrawal signs characteristic of SZ morbidity. As a general strategy, our studies on SZ are directed at testing whether drugs that normalize a deficient telencephalic GABAergic system may also be beneficial in correcting SZ symptomatology. To this end we are proposing the use of imidazenil, a new generation of benzodiazepine recognition site ligands, that is a partial agonist at alpha1 containing GABA-A receptors but acts as a full agonist specifically at alpha5 subunit containing GABA-A receptors. Differently from the classically used benzodiazepines, imidazenil is devoid of sedative and amnestic actions and of tolerance and dependence liabilities. In rodent models of GABAergic deficiency, imidazenil ameliorates anxiety, seizures, and behavioral defects (prepulse inhibition deficit, social interaction deficit) related to SZ without having a detrimental effect on attention, cognition, muscle tone and locomotor activity. The unique pharmacological properties of imidazenil may prove a superior efficacy of this drug over full allosteric modulators such as diazepam, alprazolam or triazolam, which are sedative, amnestic and induce tolerance and dependence, in the treatment of psychosis.

WO13.
INTERNATIONAL PERSPECTIVES ON MENTAL HEALTH SERVICES FOR YOUTH IN PRISON

WO13.1.
QUALITY OF JUVENILE FORENSIC DIAGNOSTIC ASSESSMENT IN THE NETHERLANDS

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Forensic Psychiatric Service, Juvenile Department, Ministry of Justice, Amsterdam, The Netherlands

Juvenile forensic diagnostic assessment and decisions of the court can have far reaching consequences for juvenile delinquents and Dutch society. Improvement of quality and guidelines are therefore needed. Quality management is only possible if one has considered the concepts of quality and the organizational framework of the juvenile forensic diagnostic system. In the Netherlands we developed a unique quality framework for the juvenile forensic diagnostic assessment. It has typical 'polder model' characteristics, such as cooperation and networking with forensic partners. Organizational and practical aspects will be presented in the light of the Dutch juvenile juridical context. Empirical research stood at the basis of this unique quality framework. The concept of quality has been investigated by means of a concept mapping among 'users' and 'makers' of juvenile forensic diagnostic assessment in the perspective of Dutch juvenile penal law. Methodology and results will be presented and consequences on quality management will be discussed.

WO13.2.
MEETING THE MENTAL HEALTH NEEDS OF "HARD TO REACH" YOUNG OFFENDERS

S. Bailey
Bolton Salford and Trafford Mental Health NHS Trust, Manchester, UK

We discuss the development, validation and implementation of a semi-structured interview to help identify key mental health symptoms (SIFA) for all young people entering the Youth Justice System in England and Wales. Based on the Salford Needs Assessment Schedule for Adolescents (SNASA), the screen covers alcohol misuse, substance misuse, depressed mood, deliberate self-harm, anxiety symptoms, post traumatic stress problems, hallucinations, delusions and paranoid beliefs and hyperactivity. This screen has from November 2003 been incorporated into the universal screening interview for all young offenders, carried out by all professionals working with this group. We also introduce the Mental Health Provision for young offenders, a study of 300 young people in order to establish: a) the level of mental health needs among this population and b) the current models and effectiveness of service delivery and the comparative needs of young offenders in the community and those in custody. Implications for practice parameters, service delivery and an integrated multiagency approach to young offenders by health, education, social care and justice will be discussed in the context of long-term costs to this group as they present to adult services in the future, bridging the transition of service delivery.

WO13.3.
PRACTICE PARAMETER FOR THE ASSESSMENT AND TREATMENT OF YOUTH IN JUVENILE DETENTION AND CORRECTIONAL FACILITIES

C. Thomas
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Over the past decade, the number of youth held in correctional facilities in the United States has grown considerably. Up to 75% of these youth have a diagnosable mental disorder according to some estimates, but many do not have adequate mental health services. In addition, psychiatrists providing treatment for these youth face a myriad of challenges and pitfalls: potential role conflicts; confidentiality issues; working with families, social services, law enforcement and courts; negative perceptions of delinquents; and the complex, multiple needs of these youth. In response to the lack of standards and guidance in addressing these problems, the American Academy of Child and Adolescent Psychiatry developed a practice parameter concerning mental health services for youth held in correctional facilities. The parameter sets forth 14 specific recommendations on the organization and delivery of mental health care, including initial evaluation, ongoing monitoring of mental health problems, assessment of violent or suicidal youth, and use of medications. Particular attention is focused on the difficulties encountered in treatment planning and implementation for these youth. The research on which the recommendations are based, the process of creating the parameter and the implications for policy and practice will be reviewed. The parameter will serve as a guide to individual practitioners as well as a model for policy makers and leaders.

WO13.4. EXAMINING THE EFFECTS OF MATERNAL INCARCERATION

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Women are entering prisons at unprecedented rates. The number of women in prisons increased 500% from 1980 to 1999. In 1998 there were 3.2 million arrests of women (22% of all arrests). Approximately 950,000 women (1% of the adult female population) were under correctional supervision. With fewer diversionary programs available to women, they are more likely to be confined than men with a similar charge. The majority (78%) of women in state prisons are mothers and more women than men are custodial parents at the time of arrest. Over one million children are impacted by the incarceration of a parent. In addition to feeling abandoned, children of incarcerated mothers experience changes in care providers, residence, and schools leaving them vulnerable to social isolation, inattentiveness, and behavioral difficulties. Once incarcerated, rehabilitation opportunities for women are meager compare to those available to incarcerated men. Women enter incarceration with more medical and mental health problems, and receive fewer services. The lack of equivalent employment and educational programs in women's prisons leaves women unprepared to enter the work force upon release. Social services programming in women's prisons is limited and often does not address important issues concerning family life. For example, when counseling and legal advice are available, a woman has a lesser chance of automatically re-entering an abusive relationship. We will describe issues unique to incarcerated women and their children, explicate the ethical and legal issues related to maternal-child contact during incarceration, and will review model programming.

WO14.
EUROPEAN GUIDELINES ON PRIVACY AND CONFIDENTIALITY IN HEALTHCARE

WO14.1.
TOWARDS EUROPEAN STANDARDS ON PRIVACY AND CONFIDENTIALITY

R. McClelland
Queen's University, Belfast, UK

The need to safeguard the confidentiality of information that patients share with clinicians is as fundamental as the principle of consent. This issue has come to the fore in the context of the rapid developments and applications of information and communication technologies within society in general and within the health sector in particular. In addition to the impact of new technologies, consideration also needs to be given to the impact of changes in health care organisation and practice, for example multi-disciplinary and multi-agency working. Mental health services are in many respects at the vanguard of these changes where the ideals of community care, shared care and seamless care depend fundamentally on good communication and information sharing. There is a tension between the needs for patient information to optimise the quality of care and the expectation of patients that information about them will be kept confidential. Confidentiality and privacy are also legal concepts and the relationship between healthcare professionals and their patients carries with it legal obligations of confidence as well as moral ones. In addition, doctors have a professional duty for maintaining confidence and the misuse of confidential medical information is likely to be regarded as serious professional misconduct. Medical consultants have responsibility for the confidentiality of patient information and a vested interest therefore in both the culture and the processes, both human and technical, which ensure the security of the information held on our patients. In this paper the present ethical and legal framework will be reviewed and principles for good practice presented.

WO14.2.
IS THE DOCTOR ONLINE? HEALTH INFORMATICS AND RESPECT FOR CONFIDENTIALITY IN PSYCHIATRY

E. Mordini
Centre for Science, Society and Citizenship, Rome, Italy

The rapid growth of computer-based information technology is transforming the delivery of health care. Not only does the new technology affect clinical practices and the delivery of health services, but it also enables consumers to assume more responsibility for their own health care. This development represents a cultural change in psychiatry. The importance of electronically collecting, storing, analysing and using psychiatric information is undisputed. Patients need information to make informed choices; psychiatrists need evidence to provide quality care; health systems need data to assess outcomes, control costs, and assure quality. Yet, while info technologies in psychiatry hold considerable promise, they raise ethical concerns. How can we provide the required data while at the same time protecting the privacy of patients? Unless a policy framework is developed, future developments and private investments in information technology will deepen the conflict between individual privacy concerns and the need for more effective health care in psychiatry. Especially difficult debates accompany the use of unique identifiers to track the patients, the secondary uses of health information and the so-called "function creep", violation of security by authorised users and conflict of interest. The first challenge we are going to face is thus to set the agenda for future discussion.

WO14.3.
VALUES-BASED PRACTICE (VBP)

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University of Warwick, UK

Values-based practice (VBP) is the theory and skills-base of balanced health care decision making for situations in which legitimately different (and hence potentially conflicting) values are "in play". VBP is similar to evidence-based practice (EBP) to the extent that both are responses to complexity: EBP is a response to the growing complexity of the evidence bearing on clinical decisions; VBP is a response to the growing complexity of the corresponding values. VBP differs from the dominant quasi-legal form of bio-ethics in emphasising the importance of good process in clinical decision making rather than seeking to prescribe right outcomes. This paper will explore VBP in relation to confidentiality.

WO15.
COURT-ORDERED PSYCHIATRIC TREATMENT IN NEW YORK CITY

WO15.1.
OUTPATIENT COMMITMENT IN MANHATTAN: DIAGNOSIS AND HOSPITAL RECIDIVISM

G.R. Collins, A.M. Kleiman, M. Magera
Manhattan Assisted Outpatient Treatment Program; Department of Psychiatry, Bellevue Hospital; Department of Psychiatry, New York University School of Medicine, New York, NY, USA

The purpose of this study was to evaluate the effectiveness of Manhattan's Assisted Outpatient Treatment (AOT) program, an involuntary outpatient commitment program, in reducing number of hospital admissions, and total number of inpatient hospital days, from New York City's mentally ill population, with a focus on the impact of psychiatric diagnosis. The authors examined the first 46 clients alphabetically court ordered in Manhattan under AOT. Of the forty complete charts, twenty one clients were diagnosed with schizophrenia, ten with schizoaffective disorder, and nine with bipolar disorder. AOT clients, regardless of DSM-IV diagnosis, were significantly less likely to be hospitalized and were hospitalized for significantly fewer days in the year following AOT enrollment compared to the year prior to AOT enrollment. AOT was effective in patients with schizophrenia, schizoaffective disorder, and bipolar disorder. This initial study suggests that the court ordered AOT program was clinically beneficial to its clients, across a range of DSM-IV diagnoses.

WO15.2.
COURT-ORDERED TREATMENT FOR PSYCHIATRIC PATIENTS: A NEW YORK LAWYER'S EXPERIENCE

J. Correale
Assisted Outpatient Treatment Program, Bellevue Hospital Center, New York, NY, USA

Section 9.60 of the New York State Mental Hygiene Law establishes a procedure for obtaining court orders for assisted outpatient treatment (AOT) for those mentally ill individuals who meet certain criteria. The

statute, enacted in 1999, is commonly referred to as "Kendra's Law" - named after Kendra Webdale, a woman pushed to her death in front of a New York City subway by Andrew Goldstein, a mentally ill individual who had deteriorated after failing to take prescribed psychiatric medications. The law, amongst other things, calls for monitoring those individuals who, like Andrew Goldstein, have a history of failing to comply with outpatient treatment, becoming a danger to themselves and/or others. The goal of the AOT program is to help keep the patients, and members of the community, safe. At the same time, we hope that, through the intervention of structured services and monitoring, the patients will develop insight into their condition and need for treatment, such that they can one day function safely in the community without our assistance. Besides obvious benefits to the non-compliant patient population, Kendra's Law has provided benefits to those physicians treating non-compliant patients. And, as the program gains momentum, physicians have, at least in the New York City area, become expected to refer their non-compliant and potentially dangerous patients to the AOT program. The notion is that such referral will likely lessen physician liability in the event a patient commits a violent action toward himself or another. This presentation will share with the audience the impact of AOT on the practice of psychiatry in New York City. Court-ordered treatment in the context of medical malpractice issues will, amongst other things, be discussed.

WO15.3. MANHATTAN'S OUTPATIENT COMMITMENT: PSYCHOPHARMACOLOGICAL TRENDS

G.R. Collins, A.M. Kleiman, M. Magera
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The purpose of this study was to evaluate the most common psychopharmacological agents prescribed to mentally ill clients under an outpatient commitment order in the Manhattan's Assisted Outpatient Treatment (AOT) program. The authors randomly examined charts of 50 clients receiving intensive psychiatric services under a court order and calculated total numbers and proportion of medications prescribed by class and type. The largest proportion of AOT clients, 80%, were prescribed atypical antipsychotic medication. Traditional antipsychotics were prescribed to 61% of clients, and decanoate preparations were prescribed to 40% of clients. 59% of clients received mood stabilizing medication. Antidepressants and anxiolytics were prescribed to 8% and 3% of clients surveyed, and antiparkinsonian agents were prescribed in 39% of cases. Thus, the vast majority of the client sample in an urban outpatient commitment program in New York City were prescribed antipsychotic medication, with a significant number of clients being treated with mood stabilizing and antiparkinsonian agents.

WO15.4. SUBSTANCE USE DISORDERS AND MANHATTAN'S ASSISTED OUTPATIENT TREATMENT PROGRAM

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This study evaluates the effectiveness of outpatient commitment in reducing the frequency and duration of hospitalizations of chronically mentally ill patients with and without co-morbid substance disorders. The authors examined a random sample of 48 clients treated in Manhattan under an assisted outpatient treatment (AOT) order. Complete data for forty charts revealed twenty-two dually diagnosed clients and eighteen clients with a major Axis I disorder and no substance-related illness. Data for the year prior to and one year following initiation of court-mandated treatment indicated a substantial reduction in the number and duration of hospitalizations for both groups. A more pronounced decrease in overall frequency of hospitalizations occurred in those without a co-morbid substance disorder, while a greater decrease in the total number of hospital days was found among dually diagnosed clients. Further investigation will explore the differential effectiveness of court-mandated treatment in both groups.

WO16. THE PREVALENCE OF MENTAL DISORDERS IN EUROPE AND ITALY: RESULTS OF THE EUROPEAN STUDY OF EPIDEMIOLOGY OF MENTAL DISORDERS (ESEMeD)

WO16.1. THE PREVALENCE OF MENTAL DISORDERS IN EUROPE: RESULTS FROM THE EUROPEAN STUDY OF EPIDEMIOLOGY OF MENTAL DISORDERS (ESEMeD)

G. de Girolamo
Department of Mental Health, Local Health Unit, Bologna, Italy

The study aimed to assess the 12-month and lifetime prevalence rates of mood, anxiety and alcohol disorders in six European countries. A representative random sample of non-institutionalized inhabitants from Belgium, France, Germany, Italy, the Netherlands and Spain aged 18 or older (n=21185) were interviewed between January 2001 and July 2003. DSM-IV disorders were assessed by lay interviewers using a revised version of the Composite International Diagnostic Interview (CIDI-2000). Fourteen percent reported a lifetime history of any mood disorder, 13.7% any anxiety disorder, and 5.2% a lifetime history of any alcohol disorder. More than 6% reported any anxiety disorder, 4.3% any mood disorder, and 1.0% any alcohol disorder in the last year. Major depression and specific phobia were the most common individual mental disorders. Women were twice as likely to suffer 12-month mood and anxiety disorders as men, while men were more likely to suffer alcohol abuse disorders. ESEMeD is the first study to highlight the magnitude of mental disorders in the six European countries studied. Psychiatric disorders were frequent, more common in female, younger, single, or divorced subjects, indicating an early age of onset for mood, anxiety, and alcohol disorders.

WO16.2. THE PREVALENCE OF MENTAL DISORDERS IN ITALY: RESULTS FROM THE EUROPEAN STUDY OF EPIDEMIOLOGY OF MENTAL DISORDERS (ESEMeD)

P. Morosini[1], G. de Girolamo[2]
[1]National Institute of Health, Rome; [2]Department of Mental Health, Local Health Unit, Bologna, Italy

This study aims to present 12-month and lifetime prevalence rates of mood, anxiety and alcohol disorders in Italy. A representative random sample of the general population of Italy, aged 18 or older (n=4712), was interviewed using a revised version of the Composite International Diagnostic Interview (CIDI-2000). In the interviewed sample, about one in six met DSM-IV lifetime criteria for any mental

disorder, while in the past year one in ten subjects met the same criteria. Eleven percent reported a lifetime history of any mood disorder, 10.3% of any anxiety disorder, and 1.2% of any alcohol disorder. In the last year about 6% of the sample met criteria for any anxiety disorder, 3.3% for any mood disorder, and 0.2% for any alcohol disorder. Major depression and specific phobia were the most common individual mental disorders. Women were respectively twice and three times as likely to suffer from 12-month mood and anxiety disorders as compared to men, while men were more likely to suffer from alcohol abuse disorders. Compared to other European countries involved in the same project, Italian prevalence rates for any mental disorders were lower, and this finding is consistent with the few previous studies realized in Italy. The ESEMeD is the first study which has evaluated the magnitude of mental disorders in Italy. Psychiatric disorders were frequent, more common in female, younger, single, unemployed or housewives. Moreover, this study seems to confirm for Italy a lower prevalence rate of any mental disorders as compared to other European countries. The reasons of this lower prevalence rate warrant further investigations.

WO16.3.
USE OF MENTAL HEALTH SERVICES IN ITALY: RESULTS FROM THE EUROPEAN STUDY OF EPIDEMIOLOGY OF MENTAL DISORDERS (ESEMeD)

G. Polidori, P. Morosini
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Comprehensive information about access and patterns of use of mental health services in Italy is lacking. We present data about the use of health services for mental disorders in Italy drawn from the ESEMeD project. Individuals aged 18 years and over who were not institutionalised were eligible for an in-home computer-assisted interview. The 4,712 participants were asked to report how frequently they consulted formal health services due to their emotions or mental health problems, the type of professionals they consulted and the treatment they received as a result of their consultation in the previous year. An average 3.0% of the total sample consulted formal health services in the previous 12 months because of their mental health problems. Among those who met criteria for a mental disorder, the percentage rose to 17%; this proportion was higher for individuals with a mood disorder (20.9%, 95% CI 14.3-27.4) than for those with anxiety disorders (17.5%, 95% CI 12.1-22.8). Among individuals with a mental disorder who had contacted any health services in the previous 12 months, approximately half had contacted a mental health professional. Among those subjects with a 12-month mental disorder consulting formal health services, 14.9% received no treatment. The ESEMeD results suggest that the use of health services is limited among people with mental disorders in Italy. Moreover, rates of service use are lower in Italy as compared to other European countries involved in the ESEMeD project. The factors associated with this limited access and their implications deserve further research.

WO16.4.
THE CLINICAL REAPPRAISAL STUDY IN THE EUROPEAN STUDY OF EPIDEMIOLOGY OF MENTAL DISORDERS (ESEMeD)

F. Mazzi, G.P. Guaraldi
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In three of the countries involved in the ESEMeD project (France, Italy and Spain), a sub-sample of subjects assessed by the Composite International Diagnostic Interview (CIDI) has been re-evaluated with the Structured Clinical Interview for DSM-IV (SCID) by experienced clinicians. The clinical reappraisal study has two objectives: a) to calibrate the diagnostic thresholds in the CIDI and in the SCID interviews; and b) to assess the inter-rater reliability among SCID interviewers. In this presentation we report the data obtained in the Italian sample of re-interviewed subjects (n=192). The Cohen's kappa concordance values between the CIDI and the SCID are: major depression: 0.36 (C.I. 0.13-0.58); any mood disorder: 0.27 (C.I. 0.07-0.47); panic disorder: 0.34 (C.I. 0.2-0.9): any anxiety disorder: 0.5 (C.I. 0.33-0.66); any disorder: 0.39 (C.I. 0.23-0.54). The sensitivity and specificity values are: major depression .33 and .96; any mood disorder .25 and .96; panic disorder .24 and .99; any anxiety disorder .48 and .95; any disorder .42 and .91. In general terms, CIDI interviews generally under-diagnosed milder forms of disorders. These preliminary data suggest that the CIDI generally underdiagnoses disorders and can produce false negatives in milder cases of mental disorders.

WO17.
PSYCHIATRIC THERAPIES IN MOVIES

WO17.1.
HEALING MOVIES

I. Senatore
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Hollywood cinema is one of surfaces and deceptions. It is a cinema of strong emotions, pregnant with blood, violence, fantastic and sweaty sex. A cinema of those who do not shiver, do not stutter and never stop before danger. A cinema made up of held back words, hidden sobs and tears in handkerchiefs. A cinema of denied love, of broken dreams and of whispers in silence. A regressive, placental and uterine cinema bringing us back in time. An introspective cinema (it makes us cry, laugh, become sad or cheerful) which leads us to reflect on who we are and who we were. A cinema that makes us sick suffering and hurting. A cinema of illusions and disillusions, a cinema for those who believe in stories told and imagined. A cinema that digs deep into you and scratches your body and soul. A cinema that takes care of us. A cinema for those who want to nourish their eyes for the dreams of the night. A cinema that has sherazade as its ispiring muse.

WO17.2.
WHAT EUROPEAN MOVIES MAY TEACH ABOUT PSYCHIATRIC THERAPEUTIC RELATIONSHIPS

R. Dalle Luche
Department of Mental Health, Local Health Unit, Massa and Carrara, Italy

Unlike the majority of hollywoodian filmography, some high-quality continental movies offer less conventional representations of deep psychotherapeutic interactions. Some filmmakers are able intuitively to enlighten how the involvement of the therapists in the therapeutic processes, often outside well defined clinical settings, develops necessarily into a mutual transformation of both members of the relationship (the best example is Ingmar Bergman's "Persona", 1966). In other cases the same processes are staged with more abstract, metaphorical or theatrical modalities, without any reference to psyinstitutions (a very recent example is Lars von Trier's "Dogville", 2003). An Italian filmmaker, Marco Bellocchio, used both kinds of representations of psychotherapeutic processes in about ten of his

movies. These continental movies reveal strong links with some early twentieth century dramas (Strinberg, Cechov, Pirandello, Schnitzler etc.), as if they were a natural extension of them in the direction of an "inner (dreamed) world theatre". In order to correctly understand what the filmmaker wants to say, a member of the audience who possesses psychopathologic and psychotherapeutic competences has to develop specific interpretations which involve him/herself in the dynamic represented on the screen: he/she becomes part of the movie, being embraced in a sort of "hermeneutic circle" which may increase and improve his/her own professional abilities. Therefore a confrontation with this high-quality European filmography may be greatly recommended for didactic and training purposes.

WO17.3.
PILLS OR WORDS? PSYCHIATRIC THERAPIES IN THE MOVIES

E. Marchiori, M. De Mari
Psyche ad Image Association, Padova, Italy

Psychiatric disorders, therapies, therapists and their relationships with patients have been variously represented in movies, from the well known "Spellbound" (Alfred Hitchcock, 1945) to the recent "The soul keeper" (Roberto Faenza, 2002). The authors emphasize, on one side, the risk of excessive simplifications, stereotypes or amusing effects, and, on the other, how the movies can show in a realistic and convincing way the mental disorders and the different ways to treat them. This work offers a starting point for discussion about the various effects of this kind of representations on the audience.

WO17.4.
MOVIES: STIGMA; COMPLIANCE AND NON-COMPLIANCE; PHARMACOPHILIA AND PHARMACOPHOBIA IN PSYCHIATRIC THERAPIES

V. Volterra
Section on Arts, Movies and Mass Media of the Italian Psychiatric Association, Bologna, Italy

Part of the "stigma" against psychiatry is related to the cruel and emarginating conditions of mental hospitals; the perverse, aggressive, sometimes criminal behaviour of some psychiatrists; and the dramatic and violent therapies sometimes implemented in the past. The exasperated representation of such aspects in movies may rise this stigma and generate suspicion and hostility in the general public, patients and their families about psychiatric therapies. This may contribute to produce non-compliance to psychiatric treatments or, on the contrary, an excessive and incorrect pharmacophilia.

WO18.
THE ATYPICAL PSYCHOSES: FROM PSYCHOPATHOLOGY TO NEUROBIOLOGY

WO18.1.
THE CONCEPT OF ATYPICAL PSYCHOSES IN VIEW OF DIFFERENTIATED PSYCHOPATHOLOGY

E. Franzek
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The concept of "atypical" psychoses dates from Kraepelin´s dichotomy and refers to endogenous psychoses which could be assigned neither to schizophrenic psychoses nor to manic depressive illness due to their atypical clinical pictures. Within the differentiated psychopathology along the lines of Karl Leonhard the problem of "atypical" psychoses was accommodated by the idea that there might be an independent group of endogenous psychoses in addition to schizophrenias and manic-depressive illness, i.e. the cycloid psychoses. Main features of cycloid psychoses are a phasic remittent course without residual states and a bipolarity of the polymorphous clinical syndromes, which occur in three characteristic subforms, the anxiety-happiness psychosis, confusion psychosis and motility psychosis. The cycloid psychoses have to be differentiated mainly from the unsystematic schizophrenias, which also show bipolarly structured polymorphous clinical syndromes, but run a progressive course with exacerbations and incomplete remissions leading to residual states of varying degrees of severity. Clinical studies have shown that a reliable clinical differentiation of cycloid psychoses and unsystematic schizophrenias is possible if a comprehensive exploration is carried out by a sufficiently trained examiner.

WO18.2.
THE GENETICS OF CYCLOID PSYCHOSES. RESULTS OF A CONTROLLED FAMILY AND TWIN STUDY

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Cycloid psychoses represent a clinical category which can be reliably differentiated from schizophrenic and affective psychoses regarding symptomatology and course. To further clarify aetiological and nosological questions concerning cycloid psychoses, a controlled family study and a systematic twin study were undertaken. In the family study, all living and traceable adult first-degree relatives of 45 cycloid psychotic, 32 manic-depressive and 27 control probands were personally examined by an experienced psychiatrist blind to the index proband´s diagnosis. Information about not traceable relatives was obtained by the family history method. Age-corrected morbidity risks were calculated using the life-table method. Relatives of cycloid psychotic patients showed a significantly lower morbidity risk of endogenous psychoses than relatives of patients with manic-depressive illness. The familial morbidity in cycloid psychoses, however, did not differ significantly from the familial morbidity observed among controls. In the twin study, 22 twin pairs with cycloid psychotic index twins were systematically recruited in the psychiatric hospitals of Lower Franconia. After establishing the diagnoses of the respective co-twins by an independent experienced psychiatrist, concordance rates were compared. Pairwise as well as probandwise rates did not differ significantly between the 11 monozygotic and the 11 dizygotic pairs. In this regard the cycloid psychotic twins differed from twins with unsystematic schizophrenias, who showed significantly higher concordance rates among monozygotic pairs. Both studies suggest a subordinate role of hereditary influences in the aetiology of cycloid psychoses. The results point out that cycloid psychoses have to be distinguished from manic-depressive illness as well as from schizophrenic psychoses regarding clinical genetic aspects, and that cycloid psychoses therefore could be integrated neither into a spectrum of schizophrenic psychoses nor into a spectrum of affective disorders.

WO18.3.
SCHIZOPHASIA: AN ATYPICAL PSYCHOSIS WITH STRONG GENETIC BACKGROUND

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The term schizophasia was used by Kraepelin for a psychosis with accelerated and incoherent speech. Leonhard discovered the bipolar structure of this disease, which he termed cataphasia, characterizing it as an unsystematic type of schizophrenia. He clarified the nature of the thought disorder as incoherent, with logical, semantical and syntactical faults. With the design of a controlled family study, we aimed to examine personally all living first degree relatives of 30 patients with cataphasia. Therefore, a semistructured interview on their history was used as well as a set of blindly analysed verbal tasks to detect formal thought disorder. We personally examined more than 70% of the living and accessible relatives. We found a very high risk for these relatives for need of psychiatric treatment in the life-time course, a high risk for endogenous psychoses and considerable risk for cataphasia. Interestingly, some healthy relatives exhibited clear thought disorder without other psychic or social disturbances. Upon these results, we can confirm the diagnostic validity of cataphasia, which shows a substantial homologous familial loading, but a wide variability in course and severity of the disease. Thus, cataphasia might be an interesting object for molecular genetics in the future.

WO18.4.
PERIODIC CATATONIA: AN ATYPICAL SCHIZOPHRENIC SUBTYPE WITH A MAJOR DISEASE LOCUS ON CHROMOSOME 15q15

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Periodic catatonia is characterized by qualitative hyperkinetic and akinetic psychomotor disturbances through acute psychotic episodes, and debilitating psychomotor symptoms in the long term. In genome-wide linkage studies on multiplex pedigrees segregating for periodic catatonia, we recently identified a major disease locus on chromosome 15q15, and replicated the chromosomal locus in an independent set of pedigrees. The results satisfied Lander and Kruglyak's rigorous criteria for "significant and confirmed evidence for linkage". Linkage and haplotype analysis in three exceptionally large pedigrees linked to chromosome 15q15 disclosed an 11 cM critical region between markers D15S1042 and D15S659. In our efforts in revealing the disease gene we perform linkage disequilibrium mapping and haplotype analyses in multiplex pedigrees and parent-offspring trios in new sets of microsatellite markers, and concurrently complete systematic mutation scans of candidate genes annotated in that region. The single nucleotide polymorphisms are included in ongoing linkage-disequilibrium mapping and family-based and case-control association studies.

WO19.
EPIDEMIOLOGY, CLINICAL PICTURE AND TREATMENT OF CHILDHOOD DEPRESSION

WO19.1.
EPIDEMIOLOGY, CLINICAL PICTURE AND TREATMENT OF CHILDHOOD DEPRESSION

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Case reports on despondency in children date to the early 17th century. Melancholia was reported in the middle of the 19th century. A 1970 meeting of European pedopsychiatrists concluded that childhood depression represented a significant proportion of mental disorders in children and adolescents. In 1976 Eist reported on 248 consecutive child and adolescent consultations done in a Washington inner city clinic. The incidence of depressive disorders was 15%. In 1999 Harrington in the UK reported that 1 in 4 referrals to child psychiatrists suffer from depression. Epidemiological studies indicate that both incidence and severity of childhood depression are increasing and that care is urgently required. Adult DSM-IV diagnostic criteria apply to children and adolescents, though there are some differences. For example weight loss when not dieting can be an adult symptom of major depression. This could be expressed in childhood as a failure to thrive. Crying, whining, sulking and irritability are commoner in children than in adolescents and adults, and somatic symptoms are commoner in children. Suicide attempts are common in children and are often violent. There is a high rate of nonfatal suicidal behavior in children aged 6-12, with 1/2 of attempters making multiple attempts. While suicide ideation is common in depressed youngsters, the frequency of attempts increases with age. There is a strong family history of major depression or other mood disorders in first degree relatives of depressed children and adolescents. Twin studies document a significant genetic element. Depression commonly co-occurs with generalized anxiety disorder and childhood medical conditions such as diabetes and rheumatoid arthritis. Generally, the younger the age of onset, the worse the disorder. Biopsychosocial treatments with early intervention and sufficient duration are critical for recovery and prevention across the life span. Treatment focuses on relief of symptoms, prevention of suicide and the fostering of normal development. Given the long duration of depressive disorders, the high recurrence rates, the profound morbidity and high mortality, treatment must be of adequate duration and intensity. There is a high risk of relapse with short term treatments, with potentially tragic consequences. Studies tracking selective serotonin reuptake inhibitors usage in children and adolescents through the 1990s indicate that for every 1% increase in the prescription of antidepressants there is a 0.27% reduction in suicides.

WO20.
HOW TO ORGANIZE A SCIENTIFIC CONGRESS

WO20.1.
HOW TO ORGANIZE A SCIENTIFIC CONGRESS

P. Ruiz
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The organization of scientific meetings such as congresses, conventions, conferences and annual meetings has become quite difficult

and challenging. This is particularly true for scientific meetings that are directed to international and regional audiences. The globalization process that has taken place in recent years has certainly increased the demands for global and international communication processes, including scientific events. This situation, however, has greatly impacted the organization of these scientific events. For instance, scientific presentations need to be translated in several languages, the venue of these scientific events needs to offer airline transportation to several key cities and countries at a worldwide level, the official language of these scientific events sometimes is different than the native language, and the like. From a different point of view, the financial support from industry no longer comes from the local or regional representatives but from the international headquarters of these corporate organizations. Additionally, these types of mega-scientific meetings often require the contractual services of a professional congress organizer (PCO). Undoubtedly, the current demands for the organization of scientific meetings have become more complex. Moreover, the lack of skills and expertise in this respect can lead to financial disasters. Thus, as a service to the field, and particularly to WPA Member Societies and WPA Sections, the members of the WPA Operational Committee on Scientific Meetings are offering their assistance to the organizers in the development of the necessary skills and tools to successfully design and implement scientific congresses.

WO20.2. THE ROLE OF THE PROFESSIONAL CONGRESS ORGANIZER

F.T. Antun
WPA Zonal Representative, Zone 12, Beirut, Lebanon

In the organization of scientific meetings, especially congresses, the role of the professional congress organizer (PCO) is a critical and significant one. In every scientific congress, the financial aspects are essential for the successful planning, design and operation of such an event. In this respect, it is the PCO the one that provides the initial financial support that is required to start all the necessary activities related to the congress. Likewise, the PCO is the one that prepares the congress' budget and monitors all the revenues and expenses of the congress. Additionally, the PCO is the one that negotiates with industry as a way of generating revenues for the congress. Besides, it is the PCO the one that assists the scientific committee with the processing of all the abstract proposals. At the end of the congress, the PCO is the one that prepares the final financial report and analysis of the congress. In this presentation all of the factors pertaining to the functions of the PCO will be addressed and fully discussed.

WO20.3. THE EVALUATION PROCESS IN SCIENTIFIC MEETINGS

E. Belfort
Universidad Central de Venezuela, Caracas, Venezuela

The number of psychiatric conferences, congresses and meetings is increasing everywhere in the world, as well as the complexity of their organization. Better knowledge, expertise and technology are therefore required. A very important aspect is how to evaluate a meeting, in order to achieve all projected and expected objectives. In this context, we will address a series of evaluation features, including needs and gaps in the scientific program, gaps in the financial support and issues concerning continuing medical education. Various parameters are required, in a continuing process, to successfully plan and organize scientific meetings.

WO20.4. THE ROLE OF THE SCIENTIFIC COMMITTEE

M.I. López-Ibor
Department of Psychiatry and Psychological Medicine, Faculty of Medicine, Complutense University of Madrid, Spain

One of the key factors in the organization of scientific meetings is the role and functions of the scientific committee. This committee is the one that plans and designs all scientific presentations and, thus, the entire scientific program of the meeting. In this respect, the success or failure of a given congress depends in many ways on the successful planning and implementation of the scientific program. A scientific program is composed of a series of presentations with different formats. For instance, lectures, symposiums, workshops, posters, forums, satellite symposiums, plenaries, and others. Appropriate balance among all of these scientific formats is essential in every congress. Likewise, the selection of the faculty and/or presenters in every congress is also crucial, as well as the balance of the topics selected for presentation. In many ways, the attendance and participation in congresses depend on the quality and balance of the scientific program. Similarly, the overall theme of the congress is also of major importance with respect to the goals and objectives being pursued for this purpose. In this presentation, all of the aspects related to the role and functions of the scientific committee in congresses will be addressed and fully discussed.

WO20.5. HOW TO ORGANIZE A CONGRESS - ROLE OF FELLOWSHIPS

J. Raboch
Psychiatric Department, First Medical School, Charles University, Prague, Czech Republic

Many WPA member societies have expressed interest in promoting the professional development of their young members and in being centrally involved in WPA initiatives. WPA shares this view as the top institutional commitment to the future of our field. In August 1999 the WPA General Assembly established the Institutional Program to Promote the Professional Development of Young Psychiatrists (WPA-IPYP). Young psychiatrists in this context include psychiatrists in training and those less than 40 years of age or practicing less than five years since completion of residency training. Since the World Congress in Hamburg in 1999, the WPA has been running the WPA Congress Fellows Network to stimulate participation, personal contacts and scientific contributions from young psychiatrists. As the first contact with a psychiatric congress will impact on the use of congresses by young psychiatrists in the future, it is essential that this experience be a good one. A well-prepared fellowship program is one of the possibilities. The executive committee of member societies, considering the regional economic and geographical aspects as well as the professional career of the applicants, should do the selection of candidates. It is necessary to raise adequate funds to be able to cover travel expenses, unexpensive accommodation and the conference fee. The program of participants should be as structured as possible, including a get-together session before the opening of the conference, special scientific sessions, meetings with experts, social events, etc. A congress guide should be printed. Final evaluation of the program by the young psychiatrists is a valuable source of information.

WO21.
TREATMENTS IN PSYCHIATRY: YOUNG PSYCHIATRISTS' KNOWLEDGE AND ATTITUDES IN VARIOUS COUNTRIES

WO21.1
TRAINING IN PSYCHIATRIC TREATMENTS: THE AUSTRALASIAN EXPERIENCE

R. Tanna
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The aim of this presentation is to give an overview of the structure and process of psychiatric training in Australasia taking a broad approach to psychiatric treatments. Specifics of both basic and advanced training are expanded upon, and the author uses his own path through training to illustrate the aimed acquisition of eclectic skills in specialisation. Australasian training in psychiatry aims at development of multimodal skills to treat mental health problems/illness, to decrease distress experienced by individuals, carers and communities, utilising a broad biopsychosociocultural model which appreciates the diversity of each person's experience. In basic training, trainees acquire skills to assess and manage a wide range of mental health problems and illnesses in adult, child and adolescent, old age, consultation-liaison and addiction psychiatry. Learning to implement treatments using psychosocial and biomedical approaches is undertaken under a clear process of supervision. Additional experiences include completion of a range of psychological therapies, involvement with carers, general practitioners, community organizations and non-governmental organizations, and training in the specific needs of a multicultural population, including indigenous people and communities. Examinations complete basic training after a minimum of 3 years. Advanced training involves 2 years of supervised subspecialty training with a greater emphasis on adult, self-directed learning and processes used in continuous medical education. Mandatory experiences include psychological, biological, social and cultural aspects of management in psychiatry. In addition, trainees must demonstrate development and experience in application of consultative skills, leadership and management. Participation in an approved ethical activity for each training year aims at a sophisticated appreciation of the potential ethical complexities within psychiatric treatments.

WO21.2.
NEW TREATMENTS IN PSYCHIATRY: A SURVEY FROM NON-EU EUROPEAN COUNTRIES

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Because of huge political, social, economical and cultural differences among non-EU European countries, we believe that it is important to have not only a continental overview of training in psychiatric treatments, but also to have some specific reports from different European countries. We tried to receive and present information about psychiatric treatment from these countries. We have developed and used a questionnaire about the new treatments in psychiatry, and we have sent it to 50 psychiatrists from different non-EU countries. We received data about treatments and prescriptions in some of the former Soviet Union republics, such as Armenia, Moldavia and Belarus, and also in other non-EU countries like Romania, Albania, Croatia, Montenegro, Macedonia, Serbia, Turkey, Switzerland. We present a comparison among these countries, underlining the access to training in new therapeutic approaches. Moreover, we present some country specific reports; in particular, in the former Soviet Union republics, particularly in Armenia, many psychiatrists are still prescribing only tricyclics and typical antipsychotics, since the patients cannot afford the costs of selective serotonin reuptake inhibitors or of atypicals. In countries closer to the border with EU, the governments are making several efforts to support the implementation of these new treatments into clinical practice.

WO21.3.
PSYCHIATRIC TRAINING AND PRACTICE: PERSPECTIVES OF YOUNG INDIAN PSYCHIATRISTS

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Psychiatry, as a medical discipline in India, has seen a rise in recent years in the backdrop of significant developments in psychiatric training over the last 5 decades. Psychiatric training is provided to medical students at undergraduate and postgraduate (specialist training) levels. The latter includes structured and rigorous involvement in clinical, academic and research activities. The training incorporates management of a variety of psychiatric disorders across a range of population choosing from a range of treatment modalities best suited for the patient. International classificatory systems and guidelines are followed. Being a developing country with a rich culture and a large population, there is a need to balance psychiatric services with available resources in a rational and acceptable way. Also, there is a need to balance the growth in biological developments and availability of a range of new psychopharmacological drugs with the role of psychotherapies and traditional practices. There is a need to spread psychiatric awareness amongst population and psychiatric training amongst the undergraduate medical students. The presentation shall additionally focus on perspectives of trainees towards liaison psychiatry and highlight the need-based recommendations for the future. Alongside their respective regional learning, a global view of psychiatry through improving communication, collaborations, travel and short term courses shall help in broadening the horizons and aid in the overall understanding and growth of young psychiatrists world over.

WO21.4
PSYCHIATRY TRAINING IN IRAN

M.R. Sargolzaee
University of Medicine, Mashad, Iran

The duration of psychiatry training in Iran is 3 years. General physicians participate in an examination for entering the specialty course. In the last decade, in Iran the interest for psychiatry has increased enormously, therefore the scientific threshold of psychiatry training and practice has been elevated in the last years. The specialty training course in Iran is governmental. Residents spend their courses in the hospitals. In some universities psychiatric wards are placed in general hospitals, in other universities the psychiatry department is in a psychiatry hospital. Consultations from different wards about general medicine patients with psychiatric problems are more common in general hospitals. Daily works are participation in lectures, morning

reports, case reports, case problems and free discussion sessions, visit of in-patients and out-patients and night-shift works. Usually trainees spend some time in other wards, such as child and adolescent psychiatry, neurology and electroencephalography, clinical psychology. Every year all the residents participate in a national examination, which contains 150 four-level questions. Trainees have to answer to 90 questions correctly at first year, 100 at second year and 110 at third year. After having passed all the exams and having discussed their thesis, trainees are approved for clinical practice in Iran (so called "pre-board graduation"). For academic places or for going to subspecialty in Iran, the graduated psychiatrists should participate in the National Board of Psychiatry, which is constituted of a theoretical exam, similar to the pre-board examination but more difficult, and a practical exam (an interview with a patient followed by a discussion). Some obstacles reported by trainees are the following. First, since they spend most of their time in hospital settings, they are usually expert in the treatment of patients with severe disorders, such as psychotic disorders and mood disorders, but they are not well trained in anxiety disorders, somatoform disorders, dissociative disorders and personality disorders. This problem is even more significant in the field of addiction; substance abuse is very common in Iran and addicted patients are usually treated in out-patient clinics. Second, psychiatric residents do not receive enough training in psychotherapy. Due to the inability of most people to pay psychotherapy fees, this is limited to relatively rare cases of Iranian rich people. Therefore in most cases the only available treatment is the prescription of psychotropic drugs. This is causing the growth of non-professional consultants working in the field of consultation, spirituality and alternative medicine.

WO21.5.
PSYCHIATRIC CHALLENGES IN NORTH AFRICA: AN ARAB EGYPTIAN PERSPECTIVE

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In Egypt, depression is the most frequent neuropsychiatric disorder, according to a recent World Health Organization (WHO) epidemiological survey in the Middle East. About 5% of the Egyptian population suffers of depression, and the numbers are expected to increase by year 2020. Schizophrenia is estimated to involve about 2% of the Egyptian population. Medical universities, psychiatric departments and hospitals are located in Cairo and in other Egyptian cities like Alexandria, Mansoura, Tanta, Menoufia, Assiout, El Menia, Banha, Bani Soueif. Still in some Egyptian cities, like Oasis and New Valley, there are no psychiatric wards, mental health hospitals or trained psychiatric professionals. The population living in these cities benefit a lot from medical troops' visits, which usually comprise a psychiatrist. In Cairo, there are four public medical universities with a psychiatric department/institute: Ain Shams University, Azhar University (girls), Azhar University (boys), and Cairo University. There is also one private medical school. Training in psychiatry differs from one school to another, both at undergraduate and postgraduate levels. As regards the postgraduate level, some schools rely on pharmacotherapy and electroconvulsive therapy (ECT) more than psychotherapy, others stress all kinds of psychotherapy training more than pharmacotherapy and ECT, while the integration of the different modalities is the trend in Cairo University Hospital. In public hospital, conventional neuroleptics like haloperidol and tryciclics like imipramine and amtriptyline are widely used along with the new generation drugs (both atypical antipsychotics and serotonin selective reuptake inhibitors, SSRIs), whenever these are available. Until recently, there was no substantial communication among Egyptian young psychiatrists. In March 2004, the Egyptian Psychiatric Association has acknowledged the Egyptian young psychiatrists' section as part of its growing structure, and in this presentation I will bring the achievements of this promising section among the other above highlighted topics.

WO21.6.
TRAINING IN PSYCHIATRIC TREATMENT IN AN EXPANDED EUROPE: TOWARDS HARMONIZATION

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Despite the attempts of the main European psychiatric organizations, such as the Association of European Psychiatrists (AEP), the Board of Psychiatry of the European Union of Medical Specialties (UEMS), and the European Federation of Psychiatric Trainees (EFPT) to harmonize European psychiatric training, the delivery of training still varies in the different European countries in terms of length, content and style. In particular, length of training varies from 2 years (Armenia) to over 6 years (UK). In most European training courses psychiatric trainees have to spend a rotation period in other branches such as child and adolescent psychiatry and other specialties such as neurology, internal medicine and endocrinology. Selection criteria for entry to postgraduate specialist training vary between countries, and include national examination, local examination, university selection, and waiting list. In some countries, there is no selection – training is available to all doctors. As regards training in psychiatric treatments, psychotherapy is not part of training everywhere; in fact, it is voluntary in most European countries and trainees often have to acquire such skills in free time and at very high cost. Other differences involve biological treatments. Some new psychotropic drugs are not available everywhere, in particular in Eastern European countries. Moreover, some somatic interventions (e.g., electroconvulsive therapy) are the mainstay in some contexts, while they are almost frowned upon in others. Of course, this reflects great variability in training programs for young European psychiatrists. In view of the enlargement of the European Union, the harmonization of training in Europe must be a priority at a decision-making level both nationally and at European level. In this presentation, we will provide updated information on European postgraduate psychiatry training, as well as an overview of the current strategies for harmonization.

WO22.
STRATEGIES FOR PSYCHOTROPIC DRUGS OF THE FUTURE

WO22.1.
TRANSCRIPTIONAL FACTORS AS A TARGET FOR THE ANTIDEPRESSANTS OF THE FUTURE

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Current treatments for depression, although effective, often produce partial symptomatic improvement, rather than symptom resolution and remission. Currently available antidepressants target monoaminergic systems, however different symptoms of depression may have a

distinct neurobiological basis and other neurobiological systems are likely involved in the pathogenesis of depression. Recent work has shown that monoamines and other neurotransmitters initiate a cascade of events within the post-synaptic neuron. This cascade can include effects on a variety of second messenger systems, that in turn can trigger a wide range of biochemical events within the stimulated cell. Stimulation of some of these pathways is necessary for the action of currently available antidepressants. Consequently, medications that act directly on second messenger systems may be effective antidepressants. Chronic antidepressant treatment increases the activity of the cyclic adenosine monophosphate (cAMP) cascade in the hippocampus and cerebral cortex, suggesting that agents that activate this pathway could be useful for the treatment of depression. One enzyme – cAMP-specific phosphodiesterase (PDE4) – degrades cAMP in the brain, raising the possibility that inhibitors of this enzyme might have antidepressant efficacy. Another important intracellular signaling pathway that may be involved in depression is the mitogen activated protein (MAP) kinase cascade. Antidepressants appear to interact with brain derived neurotrophic factor (BDNF), an important molecule in the brain that activates MAP kinase and other intracellular cascades. Stress reduces BDNF expression in the hippocampus, whereas chronic antidepressant treatments cause neurons to increase their expression of BDNF genes. Antidepressant therapy also appears to prevent the stress-induced reductions of BDNF in nerve cells. In addition, BDNF has antidepressant efficacy in certain behavioral models of depression, suggesting that the BDNF-MAP kinase pathway may play an important role in some of the deleterious effects of stress on the hippocampus and that one mechanism by which antidepressants work may include increasing the activity of this pathway. Although speculative, this hypothesis forms the framework of preclinical antidepressant discovery efforts aimed at identifying small molecules that might promote the activity of BDNF and the MAP kinase pathway. Corticotropin releasing hormone (CRH) is a major neuropeptide mediator of stress responses in the central nervous system. Preclinical studies indicate that CRH plays an important role in a variety of behaviors relevant to anxiety and depression. Levels of CRH are increased in the cerebrospinal fluid of individuals with depression. Neuroendocrine studies are suggestive of increased CRH drive in the hypothalamus, and postmortem investigations have reported an increase in CRH neurons and a likely compensatory down-regulation in CRH receptors. This evidence suggests that a CRH antagonist might be useful for the treatment of depression or anxiety. CRH antagonists capable of reaching the brain have been developed, thereby allowing in the near future for an adequate investigation of their clinical utility in the treatment of depression and anxiety.

WO22.2. DOPAMINE D3 RECEPTORS AS A TARGET FOR NOVEL TREATMENT OF DRUG ADDICTION

B.J. Everitt
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Dopamine D3 receptors have a restricted distribution in the brain, being especially prevalent in the nucleus accumbens core and shell and the amygdala. These areas have been implicated not only in mediating the reinforcing effects of drugs of abuse, but also in reward-related learning, including the associations between envirnmental stimuli and self-administered drugs. Using a model of cocaine-seeking behaviour, in which the contingent presentation of drug-associated stimuli acting as conditioned reinforcers are critical, we have studied the impact of manipulating dopamine D3 receptors. Administration of the selective D3 receptor antagonist SB-277011-A dose-dependently and selectively decreased cocaine-seeking behaviour. The drug had no effect on food-seeking behaviour, nor did it affect the primary reinforcing effects of cocaine. Infusions of SB-277011-A also had no effect on the locomotor activity. These data indicate that drugs with antagonist efficacy at the D3 dopamine receptor may have therapeutic potential in the treatment of addictive behaviour. In human drug addicts, cocaine-associated stimuli induce drug-craving and precipitate relapse. Treatments that minimise or even prevent these behaviourally activating effects of drug cues may aid abstinence and effectively prevent or reduce the risk of relapse.

WO22.3. NEUROPEPTIDES IN MENTAL ILLNESS

T. Hökfelt
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Neuropeptides represent a large group of putative messenger molecules in the nervous system. They range in size from a few up to more than 40 amino acids. Over the last fifteen years at least one, sometimes five or even more receptors have been cloned for each neuropeptide, and they are almost exclusively of the seven transmembrane, G-protein coupled type (GPCRs). Thus several hundred such receptors are potential targets for drug development. The neuropeptides and their receptors are distributed in all parts of the nervous system, primarily in neurons, but various types of glial cells can also produce neuropeptides and express neuropeptide receptors. The neuropeptides differ from classic transmitters in several respects, for example they are exclusively stored in so called large dense core vesicles and are in some systems released when neurons are firing at high rates or are burst firing, and only into the extrasynaptic space. It is therefore likely that neuropeptide antagonists mainly act on strongly activated and deranged systems, which should minimize the side effects. Animal experiments suggest involvement of neuropeptides in several mental and neurological diseases, including depression, anxiety, schizophrenia, eating disorders and neurodegenerative diseases such as Alzheimer's and prion diseases. Also, distinct changes in neuropeptide expression have been demonstrated in post mortem brains from patients afflicted by several mental diseases. Numerous drugs acting on neuropeptide receptors have been developed, mainly by the pharmaceutical companies. They have been tested in animal experiments as well as in human trials of various disorders such as depression (substance P and corticotropin releasing factor antagonists), schizophrenia (cholecystokinin and substance P antagonists), eating disorders (melanocortin, neuropeptide Y and orexin antagonists) and sleep disorders (orexin agonists). However, up till now none of these compounds have been approved for treatment of any of these diseases, although an NK1 (substance P) antagonist is now in use for treatment of chemotherapy-induced emesis. Moreover, many of these drugs are in various stages of clinical trials, and the future will show if they have efficacy in diseases such as those mentioned above.

WO22.4.
ROLE OF CB1 CANNABINOID RECEPTOR IN THE REGULATION OF ANXIETY-RELATED BEHAVIOURS AND THE EFFICACY OF ANXIOLYTIC DRUGS

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Recent reports suggest that cannabinoid CB1 receptors, through their balanced interaction with opioids, the hypothalamic-pituitary adrenal axis (HPA), gonadal steroids and GABAergic neurotransmission, may represent a key element in the control of emotional behaviours. However, the role of the endogenous cannabinoid system in the action of anxiolytic drugs such as benzodiazepines is still unknown. By using mice deficient in cannabinoid CB1 receptors, the aim of this study was to determine the role of this receptor in anxiety-like behaviours and the anxiolytic efficacy of benzodiazepines. To examine the mechanisms underlying the anxiety-like behaviours related to cannabinoid CB1 receptors, a number of behavioural assays (open-field, light dark box, elevated plus maze, social interaction test, forced swimming test) were carried out in wild type and mutant animals. The results revealed that deletion of CB1 receptors induced a profound spontaneous anxiety-like state. Interestingly, behavioural studies carried out in intact and gonadectomized male and female wild type and mutant mice suggest that this anxiety-like behaviour occurs only in male rats and appears to be independent of the presence of testosterone. Corticosterone levels and stress responses were also studied in wild type and mutant intact male mice. Under basal conditions, CB1 mutant mice exhibit low basal corticosterone plasma concentrations and low proopiomelanocortin gene expression in the anterior lobe of the pituitary gland. When mice were submitted to 10 minutes of restraint stress, a hypersensitive response was detected in mutant mice compared to wild type. Pharmacological blockade of CB1 receptors with SR141,716A increased anxiety-like behaviours in wild type animals. Low and high doses of bromazepam produced a significant anxiolytic response in wild type animals in the light/dark box test whereas neither dose was effective in CB1 mutant mice. To explore whether the lack of anxiolytic effect of bromazepam in these mice was related to alterations in GABA receptor function, we examined, using in situ hybridisation, GABA-A alpha2 receptor gene expression in areas of the hippocampus. The results revealed that mutant mice display higher GABA-A alpha2 receptor gene expression in CA1 (70%), CA2 and CA3 (30%) fields of the hippocampus than wild type mice. In summary, our findings revealed that CB1 receptors play a pivotal role in the regulation of emotional responses. Interestingly, it appears that the presence of cannabinoid receptors is necessary for bromazepam to achieve complete anxiolytic action. Overall, these findings strongly suggest that functional alterations in cannabinoid receptors may affect the efficacy of anxiolytic drugs in the treatment of mood-related disorders.

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WO22.5.
ROLE OF NEUROSTEROIDS IN ETHANOL DEPENDENCE AND GABA-A RECEPTOR PLASTICITY

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Prolonged exposure to and subsequent withdrawal of ethanol are associated with marked, specific, and opposite changes in GABA-A receptor subunit gene expression as well as in receptor function and pharmacological sensitivity in cultured rat hippocampal neurons. Downregulation of GABA-A receptor and a reduction in the efficacy of various benzodiazepine receptor ligands induced by prolonged ethanol treatment are associated with a reduced expression of alpha1, alpha3, gamma2L, and gamma2S subunits. In contrast, an increase in alpha4-containing receptors induced by ethanol withdrawal may be an important determinant of withdrawal syndrome and is blocked by drugs that are effective in the treatment of ethanol dependence. We now show that, in isolated rat hippocampal tissue, ethanol increases the concentration of allopregnanolone as well as the amplitude of gamma GABA-A receptor-mediated inhibitory postsynaptic currents recorded from CA1 pyramidal neurons. This latter action is biphasic, consisting of rapid, finasteride-insensitive and delayed, finasteride-sensitive components. These observations suggest the ethanol may modulate GABA-A receptor function through an increase in de novo neurosteroid synthesis in the brain that is independent from hypothalamic-pituitary-adrenal (HPA) axis. This novel mechanism may have a crucial role in mediating the short and long term effects of ethanol on GABA-A receptor and brain function.

WO23.
CURRENT APPROACHES TO SEVERE PERSONALITY DISORDERS

WO23.1.
BEYOND THE ICD AND DSM: DIAGNOSIS, CO-MORBIDITY, AND THE THERAPEUTIC ALLIANCE IN SEVERE PERSONALITY DISORDERS

A. Tasman
Department of Psychiatry and Behavioral Sciences, School of Medicine, University of Louisville, KY, USA

In recent years there has been substantial criticism of symptom cluster systems of diagnosis of personality disorders. A more comprehensive approach would include a more dimensional analysis of personality traits such as neuroticism, introversion, conscentiousness, antagonism, and openness to experience. Negative aspects of such an approach include the length of time it takes a skilled clinician to assess these factors, which would be difficult in most settings. Further, diagnosis is complicated by substantial co-morbidity with other major psychiatric disorders. Once a diagnosis is made, difficulties in establishing an early therapeutic alliance, and maintaining it throughout treatment, are significant in this patient population. Modifications of usual approaches are often necessary to engage and maintain a treatment relationship.

WO23.2.
ACUTE AND LONG-TERM TREATMENT OF THE SEVERE PERSONALITY DISORDERS

A. Andreoli
Service d'Accueil, d'Urgences et de Liaison Psychiatriques, Geneva, Switzerland

This presentation will summarize the different ways and the different levels of care for severe personality disorder patients: acute and long-term treatment in the outpatient clinic, in the partial hospital, in the hospital ward, in the residential facility. The first goal of the treatment, with outpatient or inpatient clinical management programs, is the containment and care of the affective instability and impulsiveness. The tools for this goal are individual and group psychotherapy (dialectical behavioural therapy), work with the families, medication focused on the symptoms at the moment. The staff should be working every time on the assertive case management guidelines. The second goal is the risk management and the tools for this goal are the emergency interventions in the community mental health or in the general hospital setting, the crisis units or the temporary intensive programs in the residential facility setting. The particular value of intensive outpatient care and the effects of psychotherapy will be highlighted.

WO23.3
SEVERE PERSONALITY DISORDERS: HOW TO ORGANIZE THE CLINICAL FRAMEWORK FOR COMMUNITY MENTAL HEALTH CENTERS

M. Bassi
Department of Mental Health, Local Health Unit, Bologna, Italy

Italian psychiatrists are finding on an increasingly more frequent basis that they must diagnose and treat a particular type of patients. These are not the traditional patients of public mental health services, such as people with psychotic, severe and persistent mental disorders, which these structures have by now been able to pinpoint and to whom they have been able to offer a series of solutions to the problem, having to become "responsible" for their care on an intensive or prolonged basis, both in terms of pharmacological and psychosocial treatment. These patients meet with psychiatrists when they are urgently admitted or in the emergency room, whether they are examined at a community mental health center or in the emergency room of a general hospital in a big city. More frequently, psychiatrists encounter these "new patients" while providing psychiatric consulting services at so-called "borderline areas". These are patients which have been examined for the first time by services for substance-related disorders, social services for homeless people or health services which are responsible for treating prisoners. The health and social workers which come into contact with these "new patients" soon realize that the difficulties in establishing a relationship in order to help the patient, the impulsivity with frequent return to the negative behavior, and the disturbed, aggressive or frankly antisocial behavior suggest that these patients should undergo a psychiatric evaluation. In many of these cases, when a request is made for a timely evaluation, psychiatrists find themselves faced with young people, prevalently male, affected by an "impulsive cluster" personality disorder (in the majority of cases a borderline personality disorder or an antisocial personality disorder, which are alone or in comorbidity), with a history of various duration of substance dependence or abuse, with previous episodes of clear antisocial behavior and consequent problems of a legal or penal nature.

WO24.
TARGETED COMBINATION OF DRUGS OR POLYPHARMACY? EVIDENCE FOR AND AGAINST COMBINED DRUG TREATMENT

WO24.1.
THE CARE-STUDY: INITIAL DATA FROM A DOUBLE-BLIND RANDOMISED CONTROLLED STUDY OF AUGMENTING CLOZAPINE WITH RISPERIDONE

W.G. Honer
Centre for Complex Disorders, Vancouver, Canada

Poor response to clozapine remains a considerable clinical problem in a substantial number of patients. One response is to attempt augmentation of clozapine with another antipsychotic drug. Case reports and open-label studies support the efficacy of this approach. However, there is only one double-blind study, which demonstrated reduced symptoms following addition of sulpiride to clozapine. We have carried out a placebo-controlled, double-blind study of risperidone augmentation of incomplete response to clozapine. A total of 72 subjects enrolled, with 90% completion of the 8 week double-blind phase. The minimum clozapine dose was 400 mg/day for 12 weeks prior to study entry. Risperidone 3 mg/day was used for augmentation. At present, results from the open-label extension phase suggest reduction in total Positive and Negative Syndrome Scale scores of approximately 15%, from a mean of 97 to 83. The results of the double-blind phase will be presented.

WO24.2.
COMBINING ANTIPSYCHOTICS WITH A NEUROPROTECTIVE AGENT: A CAUSAL WAY OF TREATING SCHIZOPHRENIA?

H. Ehrenreich
Max-Planck-Institute for Experimental Medicine, Göttingen, Germany

Erythropoietin (EPO) is a candidate compound for neuroprotection in human brain, capable of combating a spectrum of pathophysiological processes that operate during the progression of neuropsychiatric disorders. Over the last years we have been preparing the ground for its application in a first neuroprotective add-on strategy in schizophrenia, aiming at improvement of cognitive brain function as well as prevention/slowing of degenerative processes. Using rodent studies, immunohistochemical analysis of human post mortem brain tissue and nuclear imaging technology in man, we demonstrate that: a) peripherally applied recombinant human (rh) EPO efficiently penetrates into the brain; b) rhEPO is enriched intracranially in healthy men and more distinctly in schizophrenic patients; c) EPO receptors are densely expressed in hippocampus and cortex of schizophrenic patients but distinctly less in healthy controls; d) rhEPO attenuates the haloperidol-induced neuronal death in vitro, and e) peripherally administered rhEPO enhances cognitive functioning in mice in the context of an aversion task involving cortical and subcortical pathways believed to be affected in schizophrenia. These observations, together with the known safety of EPO, render it an interesting compound for neuroprotective add-on strategies in schizophrenia and other human diseases characterized by a progressive decline in cognitive performance. A multicenter proof-of-principle trial on EPO in chronic schizophrenia has been started in April 2003.

WO24.3.
COMBINATION TREATMENT IN BIPOLAR DISORDER

G.M. Goodwin
Warneford Hospital, Oxford, UK

Relapse is a frequent event in the course of bipolar disorder. For that reason, its prevention is a primary goal for treatment. Optimizing our approach to this problem requires relevant clinical evidence. In fact, I will argue that it is currently limited by the quality of that clinical evidence. While we must be guided by the evidence we do have – mainly monotherapy data – and the inferences we can draw by extrapolation and experience, there is a pressing need for more pragmatic data from large simple trials. Lithium still provides the gold standard for long term treatment of bipolar disorder. The placebo-controlled evidence to support its use has been superior to that for the alternatives. However, we must now distinguish between its efficacy against manic relapse and its weaker, although probably still significant, effect against depressive relapse. Alternative monotherapies include valproate, olanzapine, carbamazepine and lamotrigine. Their use, alone or in combination with each other, and perhaps earlier in the illness course, are the subject of current debate. The need for further long term studies of prophylaxis, to compare new drugs head to head with lithium and in combination with it, is increasingly pressing. To be useful such studies will have to be large and if they are to be large they must be designed in a way that makes them extremely user friendly for busy clinicians. A culture needs to be established in ordinary clinical practice to facilitate the entry of patients with bipolar disorder into simple trials that can determine moderate but worthwhile benefits for one treatment or treatment combination. A relatively neglected route to optimal effectiveness is also suggested by formal trials of psychological intervention. These studies all demonstrate important advantages over 'treatment as usual', except where the comparator treatment is, itself, enhanced. In other words, we can improve outcomes independent of pharmacological innovation by better structuring and directing routine care – a further example of a combination treatment.

WO24.4.
IS THE COMBINATION OF ANTIPSYCHOTICS OR ANTIDEPRESSANTS WITH BENZODIAZEPINES SUPPORTED BY EVIDENCE? WHAT ARE THE BENEFITS AND RISKS?

J. Kane
Zucker Hillside Hospital, Glen Oaks, NY, USA

Combining antipsychotics and antidepressants with benzodiazepines has a long-standing tradition, but is done in a somewhat unreflective manner. Studies are quoted in which the combination with a benzodiazepine has a beneficial effect on the short-term outcome in psychotic disorders and severe depression. Furthermore, some studies seem to suggest that the long-term outcome in both conditions is improved if benzodiazepines are added in the early phase of treatment. A meta-analysis was performed aiming to verify these assumptions. It was found that adding a benzodiazepine to antidepressant or antipsychotic treatment is not beneficial compared to the addition of a low-potency antipsychotic. The meaning of this study has to be discussed on the background of our current clinical practice.

WO25.
PERSPECTIVES IN PSYCHIATRIC TRAINING: IMPLICATIONS FOR TREATMENT

WO25.1.
PSYCHIATRIC TRAINING FROM A CULTURAL PERSPECTIVE

M. Kastrup
Centre for Transcultural Psychiatry, Copenhagen, Denmark

Psychiatric services in the Northern European region are faced with new challenges related to the immigrant population. In Denmark, persons of a non-Danish background comprise about 8-10% of patients in psychiatric care. This proportion varies greatly, as community mental health services in certain areas of Copenhagen have about 25% immigrant patients, and in forensic services the proportion may amount to 40%. No explicit health policy has been formulated with respect to immigrants. They have access to the same health services as the rest of the population once they have been granted a residency permission, implying that psychiatrists will meet patients from other ethnic background in their daily clinical practice. Till now undergraduates receive little training on cultural issues in psychiatry. On a post-graduate level, the curriculum comprises training in transcultural aspects of psychiatry. With increased globalization there is however a need to pay more attention to cultural aspects at all levels and develop strategies to increase the cultural competence of mental health professionals. The paper will discuss the content of a culture sensitive curriculum and strategies to implement it.

WO25.2.
CLASSIFICATION SYSTEMS AND PSYCHIATRIC TRAINING

L. Küey
Psychiatry Department, Beyoglu Training Hospital; Psychology Department, Istanbul Bilgi University, Istanbul, Turkey

The current categorically based classification systems had a great impact on diagnostic practice, research and training in psychiatry. These "atheoretical" systems, by increasing reliability of diagnosis, proved to be "user friendly" tools mainly in research. In clinical practice, these descriptive and syndrome based approaches to diagnosis have contributed to correct the chaotic terminology of the past, while generating an ongoing debate, especially on the issues of validity and diversity. Their effect on psychiatric training has been of mixed benefit. These systems give too little attention to deep meaning of the diversity of the subjective experiences as well as to the life history of the patient, in the sake of objectivity. Although classification systems classify disorders, not patients, in the daily clinical praxis of heavy burden, for most of the trainees these classification systems turned out to be used as labelization, categorization and delimitation tools which classify people, not disorders. While psychiatric training should focus on improving the ability of the trainee to make a comprehensive diagnostic assessment of the patient, overreliance on diagnostic manual derived data is diminishing the trainee's comprehension of the importance of understanding a patient and establishing a therapeutic alliance. The use and misuse of these classification systems in psychiatric training will be discussed in this presentation.

WO25.3.
THE IDENTITY OF PSYCHIATRY AND TRAINING

A. Lindhardt
Psychiatric Clinic, University Hospital of Copenhagen, Denmark

Training has a great impact on the identity formation of the young psychiatrists. This is done through theoretical training, role modelling, clinical experience under supervision, participation in international events, psychotherapy training - to name some of the contents. During a number of years the European Union of Medical Specialists (UEMS) has developed a training curriculum to be adopted by all European training institutions. The standards of training are reflecting the state of art of psychiatry and the continuous development of the speciality. A number of competences are needed to "create" a modern psychiatrist. In the presentation this will be explored, and issues of the psychiatric profession as such, the needed competences and the necessary training will be discussed.

WO25.4.
PHILOSOPHICAL PERSPECTIVES IN PSYCHIATRIC TRAINING

M. Musalek
Anton Proksch Institute, Vienna, Austria

One of the major questions in the field of training in psychiatry is: how should psychiatrists look like in the next decades, is there a need to change their profile, and what will be their tasks and needs in the future? In the last decades we became confronted more and more with various interesting and important results of studies carried out in different research fields, e.g. neurosciences, genetics, neuroimmunology, neurochemistry, sociology, psychology, psychotherapy, philosophy, ethics, anthropology, etc., which led to a high complexity of psychiatric knowledge. This development obviously creates new needs in the training of psychiatrists, e.g. the need for basic education in philosophy. In order to provide future psychiatrists with the possibility to assess critically new research results, basic knowledge in theory of science becomes necessary. Moreover, modern psychiatrists have to meet extended ethical requirements. Therefore basic knowledge not only concerning epistemology but also in ethics represents an indispensable assumption for successful work in psychiatry on a high level of humanity. Last not least it has to be emphasized that philosophy of education itself represents an important tool in developing future psychiatry. Philosophy of education is not so much seeking to solve only educational problems as to study the concepts that structure our educational thinking, and to lay bare the foundations and suppositions of our daily work. Philosophical discourse in psychiatry education is what happens when our practice becomes self-conscious.

WO26.
PSYCHOTHERAPY FOR CHILDHOOD DEPRESSION: A CROSS-NATIONAL EUROPEAN STUDY

WO26.1.
PSYCHOTHERAPY FOR CHILDHOOD DEPRESSION. A CROSS-NATIONAL EUROPEAN STUDY

J. Tsiantis
Department of Child Psychiatry, University Medical School, Athens, Greece

We present the implementation and preliminary results of a multicenter clinical trial for depressed adolescents aged 10-14 years in which two different forms of psychotherapy interventions are undertaken. The two treatment modalities are brief individual psychodynamic psychotherapy (BIPP) for a maximum of 30 sessions (once a week) and systemic integrative family therapy (SIFT) for 12 sessions (once a fortnight). A random allocation design was used for the two types of therapy. The total number of cases is 72. All therapists and parent carers were regularly supervised. Treatment manuals were also used. A variety of instruments have been used to assess child psychopathology, parental mental health, family functioning, academic achievement, expressed emotion, therapeutic alliance, etc. The assessment was made at three time points: baseline, end of therapy and six-month follow-up. Observations from the clinical work and some results of the treatment outcome will be presented and discussed.

WO26.2.
PSYCHOTHERAPY FOR CHILDHOOD DEPRESSION: A CROSS-NATIONAL STUDY

J. Trowell[1], I. Joffe[2]
[1]Tavistock Clinic; [2]Great Ormond Street Hospital, London, UK

Although clinically effective, there is little research evidence of efficacy or systematic study of effectiveness of individual psychodynamic psychotherapy or family therapy in the treatment of childhood depression. This study compared these two treatments in three culturally diverse settings using a manualised approach. A randomised control trial was conducted in London, Athens and Helsinki with 72 patients aged 10 years to 14 years. Assessment was done at baseline, end of therapy and after six months. The subjects received either individual therapy plus parent work or family therapy. Early results will be presented focussing on the presentation of the families and then the changes by the end of therapy in depression and in comorbidity. The cultural differences will also be discussed, with some thoughts on predictive factors, both of depression and of recovery. The outcomes were good and so there is some evidence for the use of these therapies in moderate and severe depression and/or dysthymia or double depression. Given the current anxiety about the selective serotonin reuptake inhibitors in this age range this is an important study.

WO26.3.
PATTERNS OF CHANGE IN PSYCHOPATHOLOGY AND SYMPTOMS IN DEPRESSED CHILDREN AND THEIR FAMILIES DURING AND AFTER SHORT-TERM PSYCHOTHERAPY

F. Almqvist, M. Soininen, E. Korpinen, S. Valle
Department of Child Psychiatry, University of Helsinki, Finland

Depression in childhood and early adolescence is a common disorder, with a prevalence ranging from 2 to 6% at the population level. Depression is also very common in clinical child and adolescent psychiatric populations. Depression in these developmental ages is a serious disorder, with extensive co-morbidity, that can persist for long periods and negatively affect different domains in the development of the child and youngster. The rationale for treating depression in developmental ages is therefore recognised. In this project, short-term individual psychodynamic psychotherapy and family therapy were offered to depressed youngsters aged 9-14 years. The study was conducted in three European centres: the Tavistock Clinic in London, the Aghia Sophia Children's Hospital, University of Athens and the Hospital for Children and Adolescents, University of Helsinki. The children are referred to the research centres from diverse clinics and services in the respective catchment areas of the centres. After a preliminary screen-

ing by the self administered Childhood Depression Inventory, subjects that are expected to have a depressive disorder are evaluated by child and parent interviews using the Schedule for Affective Disorders and Schizophrenia for Children (K-SADS). Children who fulfil the diagnostic criteria for major depression are further extensively evaluated at baseline by numerous questionnaires and interviews and randomly allocated to either individual psychotherapy or family therapy. The individual psychodynamic therapy consists of up to 30 weekly therapy sessions for the child, and 15 parental supportive sessions. The systems oriented family therapy is provided every second or third week, altogether up to 14 sessions. The therapies last for 6-9 months. There is an extensive evaluation both at the end of treatment and at follow up 6 months later. The intake of patients is completed, and most of patients have completed the course of treatment. In the presentation, the methods, especially the family and individual therapy approach, will be described in greater detail. Different therapy issues and relevant operational and methodological research issues will be presented and discussed. Preliminary results will be presented.

WO26.4.
FAMILY THERAPY IN A CONTROLLED CLINICAL TRIAL

V. Tomaras
Department of Psychiatry, University of Athens, Greece

In this presentation a theoretical approach to childhood depression from a systemic point of view is attempted. In the cross-national European study on the efficacy of psychotherapies in childhood and early adolescence depression, family therapy had to be adapted to the research protocol and to the frame of the "systemic integrative family therapy manual" which was applied. The supervisory scheme of family therapy was differentiated among the three sites of the study. A case-vignette will illustrate the major issues that the therapists and supervisors had to face during the therapeutic process. Furthermore, results concerning the outcome of family treatment will be presented and commented.

WO27.
TREATMENT OF LIMITS, LIMITS OF TREATMENT

WO27.1.
HIGH-DOSE PSYCHOTROPIC TREATMENT: THERAPEUTIC AND LEGAL LIMITS

E. Marcel[1], P. Chenivesse[1], N. Brion[2]
[1]Institut Marcel Rivière, Le Mesnil Saint-Denis; [2]Hospital of Versailles, France

In clinical practice, we encounter not rarely psychotic patients who are resistant to antipsychotic drugs, of both old and new generation. In some of these severe cases, the only way to obtain a therapeutic effect is to use high doses or atypical associations which are not recommended in international guidelines. The clinicians have to cope sometimes with specific problems such as peculiarities of metabolism in some of these patients. The efficacy and optimal posology of these drugs are evaluated in double-blind trials in which several patients with the above characteristics do not meet the inclusion criteria. This may lead to neglect an important fringe of patients which may be resistant to these treatments and need high dose prescriptions, beyond the marketing authorised posology, or associations of drugs which are usually discouraged.

WO27.2.
SCARIFICATIONS: FROM RITE TO CARE IN BORDERLINE STATES

M. De Luca
Institut Marcel Rivière, Le Mesnil Saint-Denis, France

Borderline states, since the moment they were described, appeared to be at the boundary of therapeutic possibilities, psychiatric as well as psychoanalytic. Borderline states are frequently accompanied by scarifications of the patient's skin. Doing so, the patient expects to limit or to control his or her massive anxiety and feeling of emptiness. Moreover, scarifications appear as an expression of problems with identity, a mark of singularity, an attempt of autonomisation, a first step to subjectification. These attempts to recover one's control may be interpreted as a first appeal to a therapeutic relationship; these marks are often badly accepted by the patient's entourage, leading to hospitalisation. When hospitalisation takes place, in order to instigate a process of change, we implement an intervention consisting of psychotherapy and body-centered therapy. This double approach materializes a containing frame, protecting the subject as a shield. Taking in charge the whole person reduces the split between psyche and soma, and reduces the libidinal conflicts, often masochistic, linked to an early deficient cathexis of the child body by his or her mother. This pattern of treatment reveals another type of relationship: when the patient accepts that somebody might take care of his or her body in a therapeutic space, protecting him or her from any risk of impingement or fusion, he or she may recover a narcissistic reinvestment which, like for the baby, will be a base for his or her ego reconstruction.

WO27.3.
THE LIMITS IN INSTITUTIONAL CARE OF THE ADOLESCENT PATIENTS IN AN ACUTE PHASE

C. Brocco, P. Votadoro
Institut Marcel Rivière, Le Mesnil Saint-Denis, France

The management of adolescent inpatients in an acute phase needs to harmonize all the therapeutic strategies at work in the patient. Some characteristics of the therapeutic relationship may appear like obstacles to these strategies; they may furthermore become resistances which can lead to a break in the treatment course. Such situations are considered by the medical staff as limits of its therapeutic action. The first limit may appear when the clinical intervention is requested by somebody else than the patient. Narcissistic stakes on the one hand, and a power conflict opposing adolescents to their parents on the other, may act as limits to the access to a therapeutic setting. The second type of limit refers to the specific psychopathology of the age of adolescence, expressing itself with spectacular acting-outs, masking narcissistic conflicts which may delay the onset of the therapeutic relationship. Thus, hospitalization may be altogether perceived as a failure, rejection or punishment, leading the adolescent inpatient to test out the psychiatric team, facing its own expectations and limits. Therefore, the therapeutic relationship may restrict itself to a narcissistic challenge, with the risk of its interruption. Another difficulty arises when group dynamics of "symptom contagion" occur. These may be considered as iatrogenic effects, limiting the therapeutic benefits expected from hospitalisation.

WO27.4.
THE LIMIT BETWEEN ANTISOCIAL PERSONALITY DISORDERS AND SEVERE PSYCHOPATHY

Y. Thoret
L'Evolution Psychiatrique, Paris, France

It is important to evaluate clinically the degree of severity of an antisocial personality behaviour. In this paper, we will refer to the works of Meloy and Hare, providing clinical criteria to detect severe psychopathy in patients with antisocial personality disorder. We will analyse the psychopathology of the psychopath, referring to concepts such as grandiose self (Kohut), paranoid regression (Kernberg) and negative narcissism (Green). This clinical analysis must be done early enough to determine what kind of therapeutic program is relevant to each patient.

WO28.
INVOLVING PATIENTS AND FAMILIES IN INTEGRATED PSYCHIATRIC TREATMENTS

WO28.1.
FLEXIBLE INTERVENTION STRATEGIES BASED ON THE ELEMENTARY PRAGMATIC MODEL

P. De Giacomo
Department of Psychiatry, University of Bari, Italy

A psychiatrist can and should do more than formulating a diagnosis and prescribing a drug therapy. In the course of the first psychiatric visit, as well as in the follow-up ones, a substantial help can be given to the patient. Flexible intervention strategies, relying on the integration of the biological and the relational aspect, can be implemented. These include: the prescription of specific activities, to be performed in the period before the following visit (e.g., in the case of anorexia nervosa, that the patient and her father make a four week travel together); the use of written programs (workbooks); the strategic use of sentences with a strong psychological impact on the patient. These sentences may: be given as answers to questions that the same patient asks; be a comment to what the patient expresses; be given as a direct/indirect suggestion to the patient and the relatives who accompany him.

WO28.2.
IMPLEMENTING THE BIO-PSYCHOSOCIAL APPROACH

P. Panzarino
Catskill Regional Medical Center, Harris, NY, USA

Modern clinicians have an array of pharmacological and psychological interventions at their disposal; yet the emphasis in treatment often seems to be determined more by the clinician's preference, philosophy or area of expertise, than on clinical appropriateness based on the patient's presentation. While most clinicians pay homage to Engel's bio-psycho-social model, few actually embrace it in a meaningfully way in their daily practice. In addition, many researchers have developed valuable interventions that are targeted and time limited, but there has been little empirical work using the bio-psychosocial model. If one approaches each episode of illness as the outcome of biopsychosocial forces and attempts to quantify the relative weight of each of these vectors, and develops the treatment plan accordingly with the patient, the episode of illness may be resolved quicker, and better long-term results may be obtained. We have attempted to create such a quantified system and utilize it with our patients. We will discuss the diagnostic tools, the way the first session and subsequent sessions are managed, and the results of our six month pilot study.

WO28.3.
INVOLVEMENT OF THE FAMILY IN THE MANAGEMENT OF SUICIDAL PATIENTS

J. Price
Odintune Place, Plumpton, UK

It is not current practice to involve children in the management of adult suicidal patients. A series is described in which children and other family members were invited to join in planning the management of patients who had informed others of their suicidal intention, either by letter, or words or by suicidal acts. The young people were pleased to be involved, and often contributed useful insights into the parental behaviour. They appreciated the opportunity of facing up to possible parental suicide before the act occurred. The intervention also short-circuits any communicational function of suicidal behaviour, particularly of an angry variety.

WO28.4.
THE WISH TO BE CRAZY, OR, IS THERE A RIGHT TO BE PSYCHOTIC?

L. Jacobsson
Department of Psychiatry, University of Umeå, Sweden

A small, but problematic proportion of patients suffering from psychotic disorders, mainly schizophrenia and schizoaffective disorders, are extremely non-compliant to treatment. In many cases such patients are being forced to treatment and they improve – not completely, but still there is a reduction in psychotic symptoms and deviant behaviour – but after a short time back home they stop taking their medication and they relapse in their psychotic disorder. Some of these patients are aggressive and disturbing to their family and neighbourhoods and sometimes even commit violent acts. When asked why they do not want to take drugs, some complain about side effects; others, and that is probably the majority of these cases, do not admit that they are mentally ill and in need of drugs. Instead, they have a paranoid perception that they are the victims of other persons or organizations. So, why should they take medications when the cause of their problems is outside themselves and out of their own control? Some of these patients even admit that they are psychotic, but they want to remain in that kind of state. So, the question is: how to deal with this kind of patients? Is there a right to be psychotic or is there a duty to treat these patients even against their own expressed will? This question and possible strategies to handle this kind of problem will be discussed.

WO28.5.
HELPING FAMILIES CHANGE: FAMILY MOTIVATION AND INVITATIONAL ENGAGEMENT IN SUBSTANCE ABUSE TREATMENT

J. Landau
Linking Human Systems, Boulder, CO, USA

Recent advances in therapeutic interventions for substance abusers capitalize on the strengths of families and loved ones. Families can be influential in getting substance abusers into treatment and successful long-term recovery. The interface of "family motivation to change" and individual motivation is a powerful, interactive dynamic for

engaging and retaining resistant substance abusers in treatment and maintaining their long-term recovery. Recent invitational intervention methods and their results will be explored, challenging beliefs and stereotypes that substance abusers need to "hit bottom" and that family interest is co-dependent, enabling or controlling. ARISE, A Relational Intervention Sequence for Engagement, a successful and cost-effective invitational method for engaging resistant substance abusers in treatment, will be presented.

WO29.
MENTAL HEALTH ISSUES IN HIV/AIDS

WO29.1.
HIV/AIDS AND PSYCHIATRY: TREATMENT ISSUES

K. Ashley
Peter Krueger Clinic - Beth Israel Medical Center, New York, NY, USA

There are significant mental health issues among individuals with HIV/AIDS and there are important interrelationships between these conditions. Various aspects of these relationships will be discussed, including: the identification and treatment of psychiatric illness; issues of stigma; potential drug-drug interactions between psychotropic medications and the highly active anti-retroviral treatments (HAART); the possibility of improved adherence and better general functioning with the treatment of co-morbid psychiatric illness and/or the provision of psychological interventions; the assessment and discussion of risk behaviors, including the role of substance use. The use of various modalities of mental health treatment/interventions will also be discussed.

WO29.2.
DELIBERATELY AND UNCONSCIOUSLY SEEKING INFECTION BY HIV: PUBLIC HEALTH AND CLINICAL ISSUES

R. Cabaj
San Francisco Community Behavioral Health Services, San Francisco, CA, USA

Certain people seek to deliberately become infected with the HIV and others, through their behavior, may be seeking to become infected unconsciously. The clinical issues will be explored, such as the role of alcohol and drugs, shame and internalized homophobia, and clinical interventions before the person becomes infected. The impact on the public health of all people at risk for HIV infection, including people who follow risky sexual practices and those who inject drugs, will also be explored.

WO29.3.
LESBIAN, GAY, BISEXUAL AND TRANSGENDER ISSUES AT A PSYCHIATRIC HIV/AIDS CLINIC

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Lesbian, gay, bisexual and transgender (LGBT) issues have been overlooked for some time, especially in the poor inner city setting. We will illustrate prevalent psychiatric diagnoses, the rate of suicidality, and issues of discrimination among LGBT individuals with HIV/AIDS and psychiatric illness at an inner city outpatient clinic in New York. Those psychiatric illnesses with a strong relationship to suicide will be identified. There will also be a discussion of the recognition and treatment/management of the suicidal patient.

WO30.
IMPLEMENTATION OF PSYCHOEDUCATIONAL INTERVENTIONS FOR SCHIZOPHRENIA IN ROUTINE CLINICAL SETTINGS

WO30.1.
PSYCHOEDUTRAINING STUDY: THE ITALIAN EXPERIENCE

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The Psychoedutraining Study has been promoted by the European Commission within the V Programme for Research and Technical Development and carried out in six European countries. This project aimed to assess the impact of two alternative staff training programmes on the implementation and effectiveness of psychoeducational intervention for relatives of patients with schizophrenia. Both training programmes included the following core components: a) a basic course on psychoeducational intervention, including sessions on engagement, provision of information on schizophrenia and its treatments, communication and problem solving skills; b) supervision sessions on the family work. The "augmented" programme also included the following components: a) training sessions on the use of communication and problem solving skills to cope with problems occurring in the implementation of the intervention; b) supervision meetings on implementation problems; c) exercises on the application of the psychoeducational techniques in routine work setting. In each country, the training programmes have been implemented in a leading centre, which has randomly selected four mental health services (MHS) and allocated them to one of the two programmes. In each MHS, two professionals were trained in the intervention protocol, one in the administration of assessment tools. As concerns the Italian experience, the overall impact of the courses on trainees was impressive: attendance rates at supervision meetings and frequency of sessions provided to families were very high; only one trainee from the augmented group had significant difficulties in attending the last supervision meetings and providing family sessions, due to changes in his work duties, but no one withdrew. A total number of 15 families were engaged; three families from the augmented group dropped out, due to relatives' guilt feelings, father's reluctance and patient's relapse. Service organization and trainees' motivation were found to play a major role in the use of the intervention. To overcome difficulties related to case-loads, trainees conducted most sessions outside the working hours and at families' home. Our experience highlights that it is possible to provide family interventions in Italian MHS, and that the implementation of these interventions on a large scale requires addressing organizational problems at decision-making levels. The impact of the programmes has been evaluated by: a) registering the families in which the intervention is started, interrupted or completed; b) assessing the trained staff's adherence to the intervention protocol; c) assessing family burden, coping strategies, and social network; d) assessing patients' clinical status and disability; e) recording patients' relapses and time spent in hospital at follow-up.

WO30.2.
IMPLEMENTING FAMILY WORK IN AN ENGLISH CONTEXT: RESULTS FROM THE PSYCHOEDUTRAINING STUDY

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The Psychoedutraining Study in England was conducted against a background of a number of policies and guidelines issued by the Department of Health stipulating that the needs of families should be addressed, and that psychoeducational interventions should be widely available to families of those with schizophrenia. In England, there are a number of centres that have been promoting family work for some time and conducting research, among them London, Manchester and Birmingham, as well as some other areas where there are staff training programmes focussed on family work. In the random selection for participating in the study, these established centres of excellence were not included, as many therapists in these areas would already have been trained in family work, and many families were already receiving psychoeducational interventions. The remaining sites available to select from had in common the fact that family work had not been established in the services, and most of the staff had not received training. Another significant feature was that these services did not have an established research ethos. Four sites were recruited from among those willing to enter the randomisation process. All successfully identified staff were trained as therapists and researchers. The selection of therapists was made by the centres involved. Frequently, they did not select those who were in the best position to recruit families where one person had schizophrenia, or who had the time to work with families, because of issues such as the size of their caseload. There were difficulties post-training with the recruitment of families willing to participate in the research. Other problems were linked to staff changing jobs and roles, families being unwilling to participate in the research element of the project, and the identified link people in services not being of sufficient seniority to resolve the difficulties that arose. The presentation will address factors that influenced difficulties with implementation, and the attempts made to overcome them.

WO30.3.
RESULTS OF THE PSYCHOEDUTRAINING STUDY IN GREECE

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The implementation of the Psychoedutraining Study in Greece included the random selection of four mental health services, in which eight therapists were trained in the standard or augmented programme. Eight families were treated by the professionals of the standard group and eight families were treated by the professionals of the augmented group. All families received the complete intervention sessions as planned in the study. The implementation of the study in Greece leads to the following preliminary results: a) mental health services showed interest in applying family interventions; b) mental health service managers were willing to facilitate the mental health professionals of their departments to participate in specialized educational programs; c) in half of the centers participating in the study, there were more than two professionals initially interested to attend training on behavioral family therapy; d) the therapists-trainees participating in the study were highly motivated to participate in the training and to apply family work; e) the duration and content of the training as well as the supervision were particularly useful for the trainees, who gained important clinical experience in behavioral family work and in negotiating with the administrators of their services about its integration in everyday work; f) regarding the recruitment of the families, it was much more difficult to engage families in the rural regions of Greece than in the cities; g) most of the families did not accept to be tape-recorded; h) most of the mental health centers neither facilitated nor kept back the trainees from implementing the family work. In most cases the sessions with the families took place in the afternoons and outside the working hours of the trainees, a fact that is expected to be a problem in the integration of family work in the routine of the services; i) the treated relatives had a tendency to experience less burden, and to apply more effective coping strategies after the intervention; j) the clinical status and the disability index of the patients was the same or had slight improvements at the 1 year follow-up.

WO30.4.
GERMAN RESULTS ON IMPLEMENTATION AND EFFECTIVENESS OF THE PSYCHOEDUTRAINING STUDY

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Although the effectiveness of psycho-educational interventions for families with schizophrenic patients has been assessed in Germany several years ago, the approach of behavioural family therapy is currently not provided. Therefore, the research question if therapists having received a training programme specifically tailored to practical problems of implementing this approach will provide this therapy more frequently and effectively than therapists having been trained within a standard programme is of high relevance. The study phases were the following: a) random selection of (at least 4) routine mental health services from three East-German Federal States, b) two staff members from each service randomly assigned to one of the two training programmes (standard vs. "augmented"), c) continuously supervised provision of behavioural family therapy by the trainees to at least one family per trainee in their routine work situation, d) assessment of the treated families and of the therapists over a 12-month period using a battery of standardized instruments. 40% of the mental health services (initially selected and informed about the project) refused participation (reasons: lack of staff, time-budget for the training). Finally, 8 mental health services sent two staff members to the training programmes. 3 trainees in each group withdrew during the training/supervision period. Results on the therapy of 13 families will be presented. Analyses of problems to implement the successful (e.g. in terms of re-admission rates to hospital) approach point to financial and administrative issues. Re-funding the costs for this approach and its acknowledgement as a training element of the residency in psychiatry are the main problems.

WO30.5
DIFFICULTIES REGARDING IMPLEMENTATION OF BEHAVIOURAL FAMILY THERAPY INTERVENTIONS: THE PORTUGUESE EXPERIENCE WITHIN THE PSYCHOEDUTRAINING STUDY

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The Psychoedutraining Study has been running in Portugal since 2002. According to the main schedule, eight therapists from four

mental health services (MHS) were allocated to two different training and supervision programs for behaviour family therapy (BFT) in schizophrenia. These eight therapists eventually became responsible for a total of thirteen families (one or two families each). Results of the training course were impressive regarding satisfaction and motivation of the trainees (most emphasised the clinical usefulness of the approach). Meanwhile, the trainees' acquisition of BFT skills was found rather satisfactory, although a minority expressed significant difficulties since the beginning (apparently, due to lesser baseline communication and problem-solving competence at a personal level). Eventually, all trainees came to acquire these basic skills, most of them expressing enthusiasm and confidence about psychoeducational work. Nevertheless, the speed at which BFT proceeded in some families was slow. Additional contributing difficulties were mentioned, namely conciliating the psychoeducational intervention with heavy caseloads and personal obligations: none of the therapists routinely undertook home sessions with families. Specifically, during the recruitment phase, some trainees have pointed out hidden prejudices concerning family interventions in their MHS colleagues. It is our experience that continued supervision while applying BFT for the first time contributes to overcome some (but not all) difficulties related to clinical issues and service organization. It also seems crucial for 'treatment integrity'. Outcome measures concerning clinical parameters, caregiver burden, coping strategies and social network throughout the process are still in study. According to our judgement, and regarding staff adherence, differences related to attendance of the standard versus augmented programmes will not prove significant. Variables related to each MHS organisation and openness to family approaches and, last but not least, personal characteristics of the trainees, seem to play a major role at that purpose. This will have implications in refining selection criteria for individual training, but mostly in further efforts contemplating systemic change of the services.

WO30.6
EFFECTIVENESS OF A PSYCHOEDUCATIONAL INTERVENTION FOR FAMILIES OF PATIENTS WITH SCHIZOPHRENIA AND THE IMPACT OF THE IMPLEMENTATION OF TWO STAFF TRAINING PROGRAMMES

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The study aims to: a) confirm in Spain that the rates of relapses of people with schizophrenic disorders are reduced by psycho-educational interventions upon their families, according to the international literature; b) assess the impact of two alternative staff training programmes ("standard" and "augmented") on the implementation of a well-known psycho-educational intervention for relatives of patients with schizophrenia (Falloon et al., 1985). The study is being carried out in six European countries, Spain among them. Within Spain, the study is being carried out in 4 mental health services representative of the country as a whole. An experimental group (A), constituted by the families to which the psycho-educational interventions are applied, will be compared with a control group (C) constituted by the same number of cases under clinical routine treatment. The treatment applied to this second group will not include any kind of psycho-educational intervention. For the objectives of the European study, the experimental group will be randomly divided in two subgroups (A-1 A-2), to which the two psycho-educational intervention programs of different intensity will be applied. The dependent variables are: rate of relapses, subjective and objective family burden, "adherence" of the trained therapists to the new technique.

WO31
THE EVOLUTION OF COMMUNITY PSYCHIATRY IN ITALY

WO31.1.
ITALIAN PSYCHIATRY AND ITALIAN PSYCHIATRISTS: 26 YEARS OF CHANGES

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Italian psychiatry is probably more debated than known in the international arena. The law 180 of 1978, introducing a radical community psychiatry system, has drawn worldwide attention, giving space to debates and comments ranging from enthusiastic to frankly disparaging. Even recently, this interest was marked by several well-attended symposia on the evolution of the Italian community psychiatry within international congresses. Historical analyses of how the reform movement took momentum, produced a law and how it was enacted can be found elsewhere. Now the majority of Italian psychiatrists work in the public mental health system. The mental health department is the network that provides for outpatient and inpatient care, for emergency and for psychosocial rehabilitation, for drug therapy and for different psychotherapies. In Italy the mental health departments are 234; 5,561 psychiatrists are working in the public mental health system (18% of the total number of mental health workers) and 95.7% of them are state employees.

WO31.2.
INTENSIVE COMMUNITY CARE: IS IT THE SAME IN ITALY AND THE REST OF EUROPE?

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It is assumed that descriptions of services such as intensive case management (ICM) and assertive community treatment (ACT) imply recognised patient groups and processes. We tried to identify whether two ACT services in different health care contexts (i.e., Italy, UK and US) serve patients with similar sociodemographic and clinical characteristics. Different researchers collected data on ACT patients in Italy, UK and US. Sociodemographic data, illness history, use of services and of medication were compared. As expected, in Italy patients significantly more often lived with their family and were employed. UK and US patients were more ethnically diverse. In UK and US a greater number suffered from psychotic disorders. Polypharmacy was much more frequent in Italy. Service descriptions can be misleading when used across differing health care contexts and need adequate 'input' characterisation to draw meaningful conclusions. Background social variables, organization and 'philosophy' of psychiatric systems of care, as well as professional education, may all differ substantially between countries and influence the actual implementation of psychosocial care programs.

WO31.3.
THE COMMUNITY MENTAL HEALTH SERVICE PROVISION ACROSS ITALY

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26 years after the introduction of the reform law, practically all Italian mental hospitals have been closed. When the law was approved in 1978, there were 78,538 mental hospital residents. Three types of community facilities, alternative to mental hospitals, have been set up for the management of psychiatric illness. These are: a) general hospital psychiatric wards (GHPWs); b) residential, non-hospital facilities (with full- or part-time staff care); c) non-residential, outpatient facilities, which include day hospitals, half day centers and outpatient clinics. These services are organized through 234 departments of mental health, covering the entire country. This paper offers a standpoint of the evolution and the diffusion of the community mental health services in Italy 26 years after the reform. The mental health care in Italy has grown and improved in terms of population coverage, number of available facilities, and capacity to meet patients' needs.

WO31.5.
RESIDENTIAL CARE IN ITALY: A NATIONAL SURVEY

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The "PROGRES" (PROGetto RESidenze, Residential Care) project is aimed to survey the main characteristics of all Italian non-hospital residential facilities (NHRFs) (Phase 1) and to assess in detail 20% of the NHRFs and the patients who live there (Phase 2). In Phase 1, structured interviews were conducted with the managers of all Italian NHRFs. In Phase 2, 20% of the surveyed facilities were evaluated by a research assistant who met with staff and then carried out an in-depth evaluation of each patient. On May 31, 2000, in Italy there were 1370 NHRFs, with 17138 beds, with an average of 12.5 beds each and a rate of 2.98 beds per 10,000 inhabitants. Discharge rates were very low. Most had 24-hour staffing. In Phase 2, 265 NHRFs have been evaluated in great detail, as well as 2962 residents. There is marked variability in the provision of residential places between different regions; discharge rates are generally low; NHRFs serve a very disabled population who in the past would have been admitted for lengthy stays in mental hospitals. However, the boundary between housing needs and treatment/rehabilitative aims of residential facilities seems unclear and needs to be identified.

WO31.6.
COMMUNITY TREATMENT OF SEVERE AND PERSISTENT MENTAL ILLNESS IN ITALY: THE OUTCOMES

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Care for people with schizophrenia, as in the Italian model of community care, should address a wide range of outcomes, including professional and consumer perspectives, and assess effectiveness of care in various life areas. The aims of the study are: a) to measure changes in psychopathology, functioning, needs for care and quality of life occurring in a three year period; b) to assess the frequency of 'good' and 'poor' outcomes. Data obtained in several studies performed in the South-Verona Mental Health Service setting will be presented, detailing in particular the results of a three-year follow-up of an annual treated prevalence cohort of 107 patients with an ICD-10 diagnosis of schizophrenia attending the Service. The mean symptom severity (especially negative symptoms) and some types of needs for care (especially social needs) worsen, while quality of life shows no change over the study period. The outcome for schizophrenia at 3 years depends upon: a) the domain of outcome used, b) whether staff or consumer ratings are used, and c) the degree of stringency of the definitions used for good and poor outcome.

WO32.
PREDICTING RESPONSE TO ANTIPSYCHOTICS AND ANTIDEPRESSANTS BY FUNCTIONAL IMAGING

WO32.1
ANTIPSYCHOTIC RESPONSE PREDICTION WITH FDG-PET IN SCHIZOPHRENIA

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We acquired positron emission tomography (PET) with fluorodeoxyglucose-F18 (FDG) as tracer and anatomical magnetic resonance imaging (MRI) in 30 never previously medicated psychotic adolescents (age 13-20) and 24 age- and sex-matched normal controls. PET scans were performed at baseline and after 8-9 weeks of a randomized double-blind trial of either olanzapine or haloperidol. Patients carried out a serial verbal learning task during the tracer-uptake period. PET scans were coregistered to the MRI. Of the baseline sample of 30 adolescent patients, 22 completed the second PET and clinical evaluation. We examined the baseline FDG values in the caudate and found that high metabolic rates in the caudate predicted response to haloperidol as reflected by the Brief Psychiatric Rating Scale total score (dorsal right caudate -0.56) while low metabolic rates at baseline predicted response to olanzapine ($r=0.39$, $z=2.07$, $p<0.05$). Treatment with haloperidol was associated with a greater increase in striatal metabolic rate than olanzapine. Individuals treated with olanzapine showed increased metabolic rates in the frontal lobe relative to the occipital lobe, while haloperidol-treated patients failed to show increased frontal metabolic rates and did not show an anteroposterior gradient in medication response. These results are similar to earlier FDG-PET findings with haloperidol in adult patients, but the finding of increased metabolism in the frontal cortex after olanzapine treatment has not been reported previously and is in contrast to findings in adult patients of decreased metabolism in the frontal cortex after treatment with clozapine, another atypical antipsychotic. In view of the widely reported findings of relatively low metabolism in the frontal lobe in schizophrenia, the ability of olanzapine to increase frontal metabolism is of special interest.

WO32.2.
THE PREDICTION OF RESPONSE TO ANTIPSYCHOTIC DRUGS: EEG AND LORETA FINDINGS

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Several independent groups have reported a relationship between the increase of EEG alpha activity during antipsychotic treatment and a favourable clinical response to the treatment with these drugs. Our

group found that changes in the slow alpha range, observed six hours after the administration of a single test dose of either haloperidol or clopenthixol, discriminated between responders and non-responders with an accuracy rate of 88.9% (91.3% in chronic and 84.6% in first episode patients). More recently the test dose procedure was used to identify predictors of response to novel antipsychotics. Clozapine or risperidone were administered to 18 drug-free patients with DSM-IV schizophrenia. EEG findings indicate that, in line with what observed with standard neuroleptics, changes in the slow alpha band discriminate responders from non-responders to risperidone. For clozapine the same pattern of EEG changes (increase of theta and decrease of fast alpha and beta activity) was observed in both responders and non-responders. These preliminary findings indicate that traditional parameters used by pharmaco-EEG studies may have limited utility in the prediction of response to novel antipsychotics. A low resolution brain electromagnetic tomography (LORETA) study is being conducted to identify topographic parameters contributing more than traditional pharmaco-EEG parameters to the early identification of responders and nonresponders to treatment with novel antipsychotics.

WO32.3.
TREATMENT RESPONSE TO RISPERIDONE AUGMENTATION IN SRI-REFRACTORY OCD PATIENTS: A STUDY BY POSITRON EMISSION TOMOGRAPHY IMAGING

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Previous positron emission tomography (PET) studies of patients with obsessive-compulsive disorder (OCD) have found elevated glucose metabolic rates in the orbitofrontal cortex (OFC) and caudate nuclei, that normalize with response to treatment. This is the first PET investigation of risperidone augmentation in OCD patients refractory to serotonin reuptake inhibitors (SRIs). We studied 16 OCD patients who were non-responders to SRIs with an additive trial of risperidone. PET with 18F-deoxyglucose and magnetic resonance imaging was obtained at baseline and following eight weeks of either risperidone or placebo in a double-blind parallel group design. Risperidone treatment was associated with significant increases in relative metabolic rate in the striatum, cingulate gyrus, the prefrontal cortex, especially in the orbital region, and the thalamus. Four of nine patients who received risperidone showed clinical improvement (Clinical Global Impression, CGI score of 1 or 2 at 8 weeks) while none of the six patients who received placebo showed improvement. Patients with low relative metabolic rates in the striatum and high relative metabolic rates in the anterior cingulate gyrus were more likely to show a clinical response. The metabolic response in the striatum with antipsychotics and cingulate gyrus with SRIs is consistent with earlier PET studies showing these effects when these treatments were administered individually. Our results are consistent with a fronto-striatial circuit change related to both dopaminergic and serotonergic systems and with the presence of subtypes within OCD which can be identified by drug response.

WO32.4.
IMAGING PREDICTORS OF TREATMENT RESPONSE FOR DEPRESSION

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While there are many effective options for treating a major depressive episode, there are no clinical markers that predict the likelihood of remission with an initial trial of either an antidepressant medication or psychotherapy. In prioritizing a role for direct measures of brain functioning in the development of new algorithms for first-line clinical management of depressed patients, a systematic characterization of pretreatment patterns predictive of unambiguous remission to standard treatments is a necessary first step. Towards this goal, we have characterized two distinct brain subtypes using positron emission tomography (PET) measures of resting state brain glucose metabolism. Building on past findings demonstrating pretreatment rostral cingulate (BA24) activity differences between responders and nonresponders to selective serotonin reuptake inhibitors (SSRIs), we examined baseline differences between patients treated with either an SSRI or cognitive behavior therapy (CBT). Analyzed in the context of a putative, limbic-cortical neural systems model using a multivariate approach (partial last squares), pretreatment differences involving the interactions of subgenual cingulate (BA25) with rostral anterior cingulate (BA24), medial frontal (BA10) and lateral frontal (BA9) regions distinguish depressed patients who later respond to SSRI pharmacotherapy or CBT, respectively. These preliminary studies provide foundation for prospective investigation of these outcome markers in studies of both pharmacological and non-pharmacological interventions.

WO33.
TREATMENT OF PERSONALITY DISORDERS: NEW PERSPECTIVES (Special Workshop organized by the International Society for the Study of Personality Disorders)

WO33.1.
NIDOTHERAPY IN THE TREATMENT OF PERSONALITY DISORDERS

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Nidotherapy is the collaborative systematic assessment and modification of the environment to minimise the impact of any form of mental disorder on the individual or on society. It is particularly appropriate to consider for chronic and recurring disorders in which there is no prospect of short-term improvement, and many personality disorders come into this category. It involves five phases of treatment, beginning with a full environmental analysis (physical and social) with the patient and the collaborative development of a programme for change, followed by an implementation plan, involvement of an arbiter if there is disagreement between therapist and patient, and a monitoring process with consequent changes in the plan when agreed. Nidotherapy is particularly suitable for those patients who have fought against all other forms of therapy as they wish to stay the way they are and its adoption leads to a much better therapeutic relationship.

WO33.2.
INTEGRATING PHARMACOTHERAPY AND PSYCHOTHERAPY/ PSYCHOANALYSIS

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There is increasing acceptance of combining medication and psychoanalytic psychotherapy, particularly during the past two decades. The concerns once expressed about the potential of medication to interfere with the therapeutic process (obscure the transference or the countertransference resistance) are giving way gradually to a growing acceptance that medication may enhance the therapeutic process, and that the two in fact may work together. Questions such as what worked and what was responsible for cure are superfluous. In this paper I will be discussing the indications for and problems with the use of medication in the context of psychotherapy, how they may work together, and who should do the prescribing. To integrate psychotherapy and pharmacotherapy, one must believe that in certain patients, for psychotherapy to be successful, an understanding of the complex interrelations between psychology, physiology and biochemistry must be present. As Kandel put it, "what we conceive of as our mind is an expression of the functioning of our brain". Freud himself viewed all mental disturbances as being fundamentally biological in nature. Gabbard reports that this acceptance has been reflected in surveys of analysts in the US: 90% of respondents to a questionnaire said they prescribed medication. In a study at the Columbia University Centre, pharmacotherapy was combined with psychoanalysis in 29% of the candidates' controlled cases, suggesting that medication is no longer seen as a contaminant that would interfere with certification of the new graduate. Since the mid 1980s, there has been an emerging literature examining the conceptual and clinical issues involved in combined treatments. As psychotherapists also prescribe or refer to a third party, prescribing has its inherent difficulties. This paper will look at the main arguments for and against the psychotherapist also being the pharmacotherapist to his or her patient. Some factors belong with the patient, some with both patient and therapist, and some with the therapist alone.

WO33.3.
TREATMENT OF METACOGNITIVE IMPAIRMENTS IN PERSONALITY DISORDERS PSYCHOTHERAPY

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In the last years, different authors have supported the hypothesis that difficulties in relationship and adaptability of patients with personality disorders are maintained and worsened by metacognitive function impairments. By "metacognitive function" we mean the ability to process and integrate mental state's representations and, according to such knowledge, to predict and explain the overt behaviour. Metacognitive impairments in personality disorders are different. In some cases there is a difficulty to monitor thoughts and emotions which constitute inner states, in other cases there is an inability to think about mental contents and mental states in an integrated way, in other cases there is an inability to differentiate between inner world and reality. Up to now there are few suggestions about how to improve metacognitive functions in these disorders. In this contribution some transcribed sessions with patients suffering from personality disorders will be analysed. We will present some examples of metacognitive impairments and therapist's interventions improving the function during the session. Interventions of validation of patient's experience and interventions in which shared aspects of the experience are underlined are followed by an improvement of patient's ability to recognise and comprehend mental states.

WO34.
BIOLOGICAL CORRELATES AND TREATMENT OF PATHOLOGICAL GAMBLING

WO34.1.
FUNCTIONAL MAGNETIC RESONANCE IMAGING STUDIES OF PATHOLOGICAL GAMBLING

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Despite associations with adverse measures of functioning and having similar prevalence estimates as schizophrenia and bipolar disorder, pathological gambling (PG) has historically received little attention from the psychiatric community. In particular, little research has focused on the brain mechanisms contributing to PG, although an improved understanding of these mechanisms has significant implications for prevention and treatment. Functional magnetic resonance imaging (fMRI) studies involving subjects with and without PG were performed to investigate the neural correlates of gambling urges and impulse control. A videotape cue exposure paradigm was used to investigate gambling urges. In response to gambling, but not happy or sad videotapes, PG subjects reported substantially more intense gambling urges than did control subjects: on a 0-10 Likert scale, PG subjects reported mean scores of 5.20±3.43 and control subjects reported mean scores of 0.32±0.60 ($p<0.001$). Brain activations differed most during the early portion of viewing of the gambling tapes, with PG, as compared with control subjects, showing decreased activation in cortical, basal ganglia and thalamic brain regions. During the final portion of gambling tape viewing, PG subjects showed relatively decreased activation in the ventral anterior cingulate, a portion of the ventromedial prefrontal cortex, a region previously implicated in impaired impulse control. A subsequent fMRI study using an event-related version of the Stroop color-word interference test found that PG and control subjects were distinguished most by relatively decreased activation in the ventromedial prefrontal cortex. These preliminary studies highlight neural circuits that distinguish PG and control subjects, and suggest potential targets for treatments.

WO34.2.
THE RELATIONSHIP OF PATHOLOGICAL GAMBLING TO ADDICTIONS

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Pathological gambling (PG) has been described as a "behavioral" addiction due to the common core qualities shared between PG and drug addictions: a) repetitive or compulsive engagement in a behavior despite adverse consequences; b) diminished control over the problematic behavior; c) an appetitive urge or craving state prior to engagement in the problematic behavior; and d) a hedonic quality during the performance of the problematic behavior. This presentation will discuss the evidence supporting phenomenological, clinical, epidemiological and biological links between PG and drug addictions. In particular, this presentation will focus on the use of opioid antagonists in the treatment of PG.

WO34.3.
MOOD STABILIZERS IN THE TREATMENT OF PATHOLOGICAL GAMBLING AND THE BIPOLAR CONNECTION

S. Pallanti
University of Florence, Italy

While selective serotonin reuptake inhibitors are effective for some patients with pathological gambling (PG), others experience relapse of gambling during treatment. These patients may suffer from comorbid conditions, such as bipolar spectrum disorders, which influence treatment response and contribute to relapse of impulsive gambling. Systematic and controlled studies with mood stabilizers in PG are limited. We describe the results of a trial of lithium and valproate in PG, and a placebo controlled treatment study in bipolar spectrum pathological gamblers. Forty-two subjects with PG entered a 14-week single-blind trial with lithium or valproate and a total of 15 subjects on lithium and 16 patients on valproate completed the protocol. Forty bipolar spectrum PG patients entered a ten-week double-blind treatment study with slow release lithium carbonate compared to placebo. At the end of the 14-week treatment period, both the lithium and the valproate groups showed significant improvement on mean PG-Yale-Brown Obsessive-Compulsive Scale (PG-YBOCS) score. This improvement did not significantly differ between groups. Fourteen of the 23 patients (60.9%) on lithium and thirteen of the 19 patients (68.4%) on valproate were responders based on a Clinical Global Impression (CGI)-Improvement score of very much or much improved. The second study showed that bipolar spectrum PG patients significantly improved on sustained release lithium carbonate compared to placebo on gambling behavior as measured by total PG-YBOCS Scale (p=0.002), including both thoughts/urges (p=0.002) and behavior (p=0.034), as well as PG-CGI Severity (p=0.045) and control over gambling behavior (PG self-report scale). A reduction of affective instability (Clinician-Administered Rating Scale for Mania score) and reduction of non-planning impulsivity (Barratt scale) was also observed in the lithium-treated group compared to placebo. According to the PG-CGI Improvement score, 11 out of 12 patients (91.7%) were rated as responders in the lithium group vs. 6 out of 17 (35.3%) in the placebo group (p=0.002). Of note, improvement in gambling severity significantly correlated with improvement in mania ratings (r= .478, p=0.009). Findings from the first study suggest the efficacy of both lithium carbonate and valproate in the treatment of PG. This is the first controlled trial of mood stabilizers efficacy in PG. A double-blind, placebo-controlled trial is required to confirm these findings. In the second study, sustained released lithium appeared an effective treatment in reducing both gambling behavior and affective instability in bipolar spectrum PG patients. This highlights the need to identify subgroups of PG patients with bipolar spectrum conditions, since this may have important treatment implications.

WO34.4.
PATHOLOGICAL GAMBLING AND THE OCD SPECTRUM

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In the research planning agenda for DSM-V, a new category of obsessive-compulsive behaviors spectrum has been proposed. This would encompass disorders that share clinical features of repetitive thoughts and behaviors, comorbidity, family history, brain circuitry, neurobiology and treatment response. One subgroup of the obsessive-compulsive spectrum would include impulsive disorders, including pathological gambling (PG). This presentation will examine whether PG may be conceptualized within the obsessive-compulsive spectrum, particularly within the impulsive subgroup. It will review similarities and differences between obsessive-compulsive disorder and PG with regards to phenomenology, family history, brain circuitry, and treatment response. It will also discuss alternative conceptualizations of PG as a behavioral addiction, and as a classic impulse control disorder.

WO35.
PSYCHIATRY IN THE COUNTRIES OF EASTERN EUROPE AND THE BALKANS: SIMILARITIES AND DIFFERENCES (Organized by the WPA Institutional Programme for Eastern Europe and the Balkans)

WO35.1.
WPA INSTITUTIONAL PROGRAM FOR EASTERN EUROPE AND THE BALKANS: INTRODUCTION

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The area of Eastern Europe and the Balkans is characterized by a long scientific tradition and a formative contribution to world psychiatry, but also by severe socio-economic deprivation, war conflicts and disasters (mainly man-made). This has had a serious impact on the population and on mental health professionals. In view of the above, the World Psychiatric Association has established in October 2002 an Institutional Program for Eastern Europe and the Balkans. The goals of the Program, its activities and the steps towards establishment of a Psychiatric Society of Eastern Europe and the Balkans will be reported.

WO35.2.
MULTICENTRIC STUDY ON POST-TRAUMATIC STRESS: FROM RESEARCH TO RECONCILIATION

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Ten years after the armed conflict in ex-Yugoslavia a significant number of people still suffer from post-traumatic stress. However, the majority of them have not requested or received any type of specialised psychiatric help. In order to better understand these phenomena, empirical results are needed about both barriers to treatment and treatment outcomes in specialised psychiatric services. The STOP study (Treatment seeking and treatment outcomes in people suffering from post-traumatic stress following war and migration in the Balkans), is a multi-centre study funded by the European Commission, carried out by six centres in Croatia, Bosnia-Herzegovina, Serbia, Germany and the UK. A combined quantitative-qualitative method has been developed in order to: a) identify barriers to treatment and coping strategies of people with post-traumatic stress that have not asked for help, both of the ones that

took refuge outside the post war area and of those who stayed in the region and b) assess treatment outcomes in people already engaged with services. Empirical results will hopefully contribute to better organisation of assistance to traumatized people, but also initiate reconciliation in the countries that faced the armed conflict and its severe consequences.

WO35.3.
PAST AND PRESENT IN THE ROMANIAN PSYCHIATRY

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University of Medicine and Pharmacy, Craiova, Romania

Traditionally, the psychiatric patients were helped by the churches and monasteries, among which some small asylums were developed. The "birth" of the Romanian psychiatry was a law issued in 1838, which enforced the transfer of the patients' care responsibility to the hospital administration. Further, several large psychiatric hospitals have been built, the last one in Bucharest in 1924. After a short period of progress between the two world wars, the era of communism began. During the 1960s and early 1970s, some achievements in the health care infrastructure were noticed, but not in psychiatric care. After 1990, during the transition period, the frequency of stress-related disorders, depression and coping disorders has escalated and generated delinquency and violence. The offer of psychiatric care remained modest, without infrastructure improvement and under the continuous hegemony of somatic medicine. For a country with a population of 21,7 millions inhabitants, we have at present about 4 psychiatrists/100,000 people and 0,7 beds/1000 inhabitants, with insufficient opportunities for day-care and ambulatory care. This situation is far from covering the needs of the people, considering the results of the epidemiological studies conducted in late 1970s, which revealed that almost one third of the population would need psychiatric help. The policy in psychiatry and mental health is limited to the secondary prevention, with very few actions towards primary prevention, rehabilitation, and patients' quality of life. An important and difficult problem is the development of non-biological therapies, which are very little used at the present. The domination of the somatic medicine and the almost exclusive use of biological therapies are reflected also in psychiatric training, both undergraduate and postgraduate. On the other hand, some progress has occurred. New opportunities for information appeared, the professional associations were founded, second generation antipsychotics and antidepressants were approved for marketing and the psychiatrists participated in international multicenter trials. In one sentence, the gates to the world have been opened. Currently, we need to highlight the discrepancy between the efforts of the specialists, who are trying to act according to modern psychiatry, and the mental health policy, which is based on unsuitable and, sometimes, obsolete traditions.

WO35.4.
BULGARIAN PSYCHIATRY: CURRENT SITUATION AND TRENDS FOR DEVELOPMENT

L. Jivkov
Bulgarian Psychiatric Association, Municipal Psychiatric Dispensary, Sofia, Bulgaria

The Balkan countries have close historical, economic and sociocultural interactions. This exerts a considerable influence on the development of psychiatric science and practice. This presentation will summarize the main trends in the development of Bulgarian psychiatry, with emphasis on its situation under the totalitarian regime and the changes and reforms after 1990. An outline of the similarities and the differences in the development of Bulgarian psychiatry compared to the other countries of the region will be made possible by retracing the general features of these two periods. An attempt will be made to describe the current tendencies in psychiatric progress at both the scientific and the practical level in Bulgaria. The National Program for Mental Health in force at the present moment, the current changes in the legislation concerning mental health care, the current state of the educational system, the present role of psychiatric non-governmental organizations such as the Bulgarian Psychiatric Association will be considered.

WO35.5.
PSYCHIATRY IN TURKEY: SYSTEMS IN TRANSITION

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Although psychotherapeutic understanding and accordingly humane practice of caring for the mentally ill have a long history in Turkey, modern forms of practice in mental health have developed in the last century. Being under the effect of continental Europe first and the Anglo-Saxon tradition later on, psychiatric praxis reflects the prevailing socio-cultural values. Turkey, with a population of about 70 million, is at geographical crossroads of East and West, and this dichotomy is deeply reflected in many facets of life, including psychosocial constructs. Being a developing country with limited health and mental health resources, the challenge is to manage and adapt to the rapid transitional processes. In this presentation, the data on the epidemiology of psychiatric disorders and the mental health personnel will be presented. Accordingly, areas of service, research, training and publications in psychiatry will be reviewed in the context of their regional and institutional differences. Finally, the issues of developing a national mental health program and the role of psychiatric societies and the importance of international collaboration in such processes will be discussed.

WO35.6.
PSYCHIATRIC REFORM IN GREECE

G.N. Christodoulou, M. Madianos
Athens University Medical and Nursing Schools, Greece

Data indicating reduction of long-stay patients and of the total number of patients in Greece between 1984 and 2004, coupled with increase in extramural facilities, are presented. Closure of public mental hospitals seems to be a realistic goal. However, much remains to be done in the areas of prevention, primary care, integration of psychiatric and medical services, as well as with respect to the creation of alliances with the community, mental health promotion and quality of extramural services.

WO36.
AUTISM IN SCHIZOPHRENIA, TODAY

WO36.1.
AUTISM AND SCHIZOPHRENIA: AN INTRODUCTION FROM A PHENOMENOLOGICAL POINT OF VIEW

A. Ballerini
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The image of retreat, of detachment from external reality, of distancing from others, of separation from the world that is common and in-

common, of closure into a sort of virtual hermitage, whether actively sought or passively submitted to, has from the beginning been central to the concept of autism and has remained one of its descriptive aspects. In schizophrenia, the condition described as the autistic mode of life can arise from a person's being confronted with a pathological crisis of his ontological security, of "basic faith" in the obviousness of the intersubjective world: a crisis in the intersubjective foundation of human presence. In short, from the phenomenological point of view, autism derives from a difficulty in the "empathic" (Husserl, Stein) primary process that represents in the consciousness the Other, as a subject like ourselves. Autism is a concept that goes beyond psychiatric diagnoses, even if it finds in the sphere of schizophrenias its most complete and persuasive expression and characterization. It can thus be proposed that even if not all forms of autism are a schizophrenic disorder, the core forms of the schizophrenic spectrum are unthinkable except as autistic.

WO36.2.
AUTISM, THE SELF AND SCHIZOPHRENIA SPECTRUM

J. Parnas
University of Copenhagen, Denmark

Over the past years, we have been studying the issue of disordered selfhood in schizophrenia as an essential aspect of the autistic vulnerability. We consider this condition both as a generative disorder, defining the construct validity of schizophrenia spectrum disorders, as well as a purely symptomatic or subsyndromatic entity, potentially useful in differential diagnosis. A summary of the relevant data from the following studies are presented: a) a pilot study of 18 first admission cases (FAC); b) a systematic study of 155 FAC cases; c) a comparison of remitted bipolar patients with residual schizophrenic patients, and d) cases identified in a large genetic population. Jointly these studies support our hypothesis that anomalies in self-experience belong to the cardinal phenomenological aspects of schizophrenia.

WO36.3.
SCHIZOPHRENIC AUTISM AS A RESTING POSITION OF IMPAIRED INTENTIONALITY: THERAPEUTIC APPROACH

C. Mundt
University of Heidelberg, Germany

Psychotherapeutic access to schizophrenic autism requires a psychopathological concept as a pathogenetic tool suitable for psychotherapy. For this purpose this presentation will look at schizophrenic autism from the viewpoint of impaired intentionality in the sense of the ability to constitute intersubjective meaning and keeping up the continuous readjustment of it. In this perspective schizophrenic autism can be looked at as a resting position of intentional efforts. Functionally this resting position can serve either the prevention of overchallenging intentional efforts during developmental tasks or coping with fragile and weakened intentionality after the onset of psychosis. Taking schizophrenic autism as a resting position of impaired intentionality opens two lines of psychotherapeutic access: firstly, to tentatively share the patient's world of private meanings and hence establishing a sort of preliminary intersubjectivity as a starting point for developing topics of future common meaning; secondly, to encourage patients to step out of their world of private meanings, to stimulate curiosity for meanings in the social space. This should be safeguarded by creating a social frame in which the vigor of intentional protrusions from the social other and the weak intentional efforts of the patients are kept in balance so that the patient is not discouraged and forced into retreat again. A clinical case vignette and the history of an artist suffering from schizophrenia will elucidate these lines of psychotherapy.

WO36.4.
NEUROPHYSIOLOGICAL ASPECTS OF INTERSUBJECTIVITY

V. Gallese
University of Parma, Italy

The capacity to understand others as intentional agents, far from being exclusively dependent upon mentalistic/linguistic abilities, is deeply grounded in the relational nature of action. An implicit form of "understanding" is achieved by modeling the behavior of others as an intentional action on the basis of a motor equivalence between what they do and what the observer does. Mirror neurons are likely the neural correlate of this mechanism. New evidence suggests that some of the neural structures involved in processing felt sensations and experienced emotions are also active when the same sensations and emotions are recognized in others. It appears therefore that a whole range of different "mirroring systems" are present in our brain, their functional mechanism being embodied simulation. Simulation is embodied not only because it is neurally realized, but also because it uses a pre-existing body-model in the brain, and therefore involves a prerational form of self-representation. Embodied simulation enables individuals to entertain a series of implicit certainties about others, thus constituting a shared manifold of intersubjectivity. I will propose that embodied simulation could be a basic organizational feature of our brain, enabling our rich and diversified interpersonal experiences. This perspective may offer a global approach to the understanding of the vulnerability to major psychoses such as schizophrenia.

WO37.
CLINICAL RESEARCH ON IMPULSIVITY: NEW DEVELOPMENTS AND DIRECTIONS FOR POSSIBLE TREATMENTS

WO37.1.
IMPULSIVITY, AGGRESSIVENESS, AND PERSONALITY DISORDERS: LOOKING BEYOND BORDERLINE AND ANTISOCIAL PERSONALITY DISORDERS

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Although extensive research has interrelated measures of impulsivity and aggression, identifying the latent structure of these constructs among patients with selected personality disorders (PDs) has not been broached. Starting from these considerations, in this study 380 consecutively admitted outpatients were administered the Structured Clinical Interview for DSM-IV Personality Disorders, the Barratt Impulsiveness Scale-11 and the Buss-Perry Aggression Questionnaire. Using a maximum likelihood exploratory factor analysis with a Promax rotation, six latent dimensions were identified. Impulsivity and aggression were identified as independent constructs which were related primarily to antisocial and borderline PDs. A less robust relationship was found between the aggression and impulsivity dimensions and narcissistic/passive-aggressive PD dimension.

WO37.2.
NEW RESEARCH ON THE ASSOCIATION BETWEEN IMPULSIVITY AND SUICIDE

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Clinical predictors of suicide risk in bipolar disorder are needed. Impulsivity is a prominent and measurable characteristic of bipolar disorder that can contribute to risk for suicidal behavior. The purpose of this study was to investigate the relationship between impulsivity and severity of past suicidal behavior, which is a robust predictor of eventual suicide, in patients with bipolar disorder. We measured impulsivity, using a questionnaire (Barratt Impulsiveness Scale, BIS-11) and a performance measure (Immediate Memory-Delayed Memory Task, IMT-DMT), in subjects with bipolar disorder who had a definite history, or absence of history, of attempted suicide. Diagnosis used the Structured Clinical Interview for DSM-IV (SCID). Interviews of patients and review of records were used to determine the number of past suicide attempts and the medical severity of the most severe attempt. Subjects with suicide attempts had more impulsive errors on the IMT and had a faster latency to respond, especially for impulsive responses. Impulsivity was highest in subjects with the most medically severe suicide attempts. Effects were not accounted for by presence of depression or mania. BIS-11 scores were numerically, but not significantly, higher in subjects with suicide attempts. A history of alcohol abuse was associated with greater probability of a suicide attempt. These results suggest that a history of severe suicidal behavior in patients with bipolar disorder is associated with impulsivity, manifested as a tendency toward rapid, unplanned responses.

WO37.3.
IMPULSIVITY AND AGGRESSION IN ADOLESCENTS WITH CONDUCT DISORDER

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Impulsivity has been implicated as playing an important role in the development of aggressive and other maladaptive behaviors in children with conduct disorder. However, the most common measures of impulsivity (i.e., questionnaires) are limited by reliance on the accuracy of historical recall by the subjective rater and are only appropriate for measuring generalized tendencies to respond impulsively across a variety of situations over longer periods of time (trait specific). We have recently applied a modified continuous performance task among adolescents, which demonstrated significantly greater impulsive-type performance among those with conduct disorders and oppositional defiant disorder than controls. As an extension of that work, the current design explores the role of fighting history in continuous performance task scores among adolescents with conduct disorder. A modified continuous performance task (i.e., Immediate and Delayed Memory Tasks) was administered to three groups of adolescents: those without conduct disorder or a history of fighting (control), and those with conduct disorder who either exhibit planned (CDfight/plan) or impulsive (CDfight/nonplan) histories of physical fighting. Impulsive type performance on the Immediate and Delayed Memory Tasks showed a significant difference by fighting subtype. The CDfight/nonplan group exhibited a significantly higher proportion of impulsive-type responses than either the control or CDfight/plan groups, which were not different from one another. The current findings support the notion that impulsivity is a characteristic associated with distinct subgroups within the conduct disorder population. This unique behavioral profile has implications regarding biological mechanisms and treatment prediction/outcome among certain sub-samples of adolescents with conduct disorder.

WO37.4.
IMPULSIVITY AS A RISK FACTOR AND CONSEQUENCE OF PSYCHOSTIMULANT ABUSE

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Studies report changes in brain function and structure in individuals who abuse psychostimulants, including cocaine, methamphetamine, and methylene-dioxymethamphetamine (MDMA). There is also a growing body of evidence that stimulant abuse is associated with increased impulsivity. This association could be secondary to changes in brain function due to stimulant abuse, or due to personality traits that lead to stimulant abuse. This paper will review the literature and present new data on the association between psychostimulant abuse, impulsivity, and brain function. Data will be presented that stimulant abusing individuals exhibit increased impulsivity and show changes in brain function and structure relative to controls. There is also evidence that at least some of these changes in brain function are related to impulsivity. Measures of brain function and structure include an auditory-oddball event related potential task, functional magnetic resonance imaging (fMRI), and diffusion tensor imaging (DTI). Impulsivity measures include self-report (Barratt Impulsiveness Scale-11) as well as behavioral laboratory measures of impulsivity (Immediate and Delayed Memory Task). The data presented will support the hypothesis that changes in brain function seen in psychostimulant abusing individuals are also responsible for processes leading to increased impulsivity. These results will be discussed in light of effects of chronic psychostimulant abuse on the brain, and possible pharmacologic treatments for impulsivity.

WO38.
TEACHING AND LEARNING CORE COMPETENCIES OF BASIC CONSULTATION/LIAISON PSYCHIATRY

WO38.1.
CORE COMPETENCIES FOR PSYCHIATRIC TRAINEES: DIAGNOSING AND TREATING PSYCHOTIC PATIENTS IN MEDICAL SETTINGS

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A number of competencies are required of physicians who evaluate and manage psychosis in consultation-liaison settings. Of perhaps primary importance is the need to determine the origin of the psychosis. The possibility that the medical or surgical illness is responsible for the psychotic phenomena must be addressed. Appropriate history, mental status examination, and laboratory findings will be essen-

tial. Awareness of the breadth of illnesses that may produce psychosis is required. These can range from Alzheimer's disease and other neurological illness to several endocrinopathies, tumors (e.g. gastrointestinal tumors), infections such as HIV/AIDS, and sensory disturbances among many other disorders. Psychosis may often be present in the context of delirium or dementia. Another issue is that the treatment of medical disorders by pharmacotherapy, surgery, radiation therapy, etc., may cause psychosis. Yet another important clinical discernment is whether the psychosis is primary as with schizophrenia or bipolar disorder, after underlying medical causation is ruled out. Schizophrenia, for example, has numerous medical co-morbidities often requiring hospitalization. Substance-induced psychotic disorders are also an important consideration in differential diagnosis. The use of appropriate psychopharmacotherapy is a central core competency. In general, the newer atypical antipsychotics cause fewer extrapyramidal symptoms, but there are occasions when an older, typical antipsychotic such as haloperidol is necessary to control agitated psychotic behavior. The tendency for glucose dysregulation and weight gain to be associated with atypical antipsychotics must be considered in selecting treatment for psychotic patients with obesity or diabetes.

WO38.2.
DELIRIUM AND THE CORE COMPETENCIES

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Delirium is a serious medical condition with a prevalence estimated to be between 10-30% of medically ill patients in the hospital setting. The prevalence of this condition is even greater in hospitalized elderly, cancer, AIDS and terminally ill patients. Delirium has a significant morbidity associated with it. Elderly patients with delirium have been estimated to have a 22-76% chance of death during the hospitalization where the delirium occurs. As many of the symptoms of delirium mimic other psychiatric disorders (i.e. anxiety, apathy, psychomotor agitation, psychosis) it is imperative that the psychiatric trainee have the ability to recognize, diagnose, and recommend treatment for patients with this condition. Therefore psychiatric trainees should: a) have knowledge of various subgroups of patients at risk for developing delirium; b) have knowledge of medications which may put patients at risk for the development of delirium; c) recognize the signs and symptoms of this condition; d) recognize laboratory tests and physical exam findings which will aid in the diagnosis of delirium; e) work with various medical/surgical teams in the diagnosis and management of the patient with delirium; f) recommend appropriate medical and environmental interventions to the primary team/nursing staff/family.

WO38.3.
CORE COMPETENCIES FOR PSYCHIATRIC TRAINEES: EVALUATION AND MANAGEMENT OF DEPRESSION IN ADULTS, CHILDREN, AND ADOLESCENTS IN MEDICAL SETTINGS

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Depression is a frequent concern in patients of all age groups. Physicians are therefore required to remain sensitive to the presenting symptoms of depression. In medical settings, both inpatient and outpatient, the primary physician may feel uncomfortable, or perhaps inadequate, in making the diagnosis of depression and then, in managing the patient with depression. A simple screening tool with a symptom checklist can prompt the physician to make a referral to a psychiatrist or mental health provider if the patient needs a further assessment. Depression can be co-morbid with other medical conditions, often exacerbating the illness, or complicating treatment. In consultation-liaison settings, the psychiatrist should be aware of the confounding medical condition and its contribution to underlying depression (or vice versa). Other conditions associated with depression, such as infectious (mononucleosis, HIV), endocrine (diabetes, hypothyroidism, others), or drug and alcohol abuse should also be considered. In choosing appropriate treatment, the psychiatrist should guide the primary physician in the choice of psychopharmacotherapy, explaining the possible side effects. Medical therapy in depressed children is not as well studied as with adults, and this has raised some controversy when treating children. The psychiatrist should be able to relay well-known information. Selective serotonin reuptake inhibitors remain the first choice of treatment for most age groups, but physicians should be aware of the older medications and other options with newer medications. The consulting physician should also be aware of other therapy options appropriate for the individual patient.

WO38.4.
SUBSTANCE ABUSE IN THE MEDICALLY ILL: COMPETENCIES FOR TRAINEES

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Substance abuse is a common problem both in general society as well as a co-morbid condition amongst patients hospitalized in the general hospital. Therefore, the psychiatric consultant must be able to recognize, diagnose and treat those medical/surgical patients who present with co-morbid substance abuse problems. Thus, the trainee in psychiatry must: a) have basic medical knowledge of the pharmacologic actions of the most frequently abused substances; b) be able to recognize the signs and symptoms of both toxicity and withdrawal; c) be able to recommend to the attending physician appropriate management of the signs and symptoms of toxicity and/or withdrawal; d) be able to recommend to the patient and his/her family appropriate aftercare treatment following discharge from the acute care hospital.

WO39.
THE CURRENT ROLE OF PSYCHOTHERAPY IN GRADUATE PSYCHIATRIC TRAINING

WO39.1.
PSYCHIATRISTS AS PSYCHOTHERAPISTS

P. Ruiz
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Currently, the use of psychotherapy by psychiatrists is facing major challenges in the United States as a result of the managed care practices that are nowadays prevailing in the health and mental health care system in this country. Nevertheless, the training of psychotherapy in all its modalities continues to be one of the requirements for graduate training in psychiatry in the United States. The Residence Review Committee (RRC) in Psychiatry, as mandated by the Accreditation Council for Graduate Medical Education (ACGME), not only

requires appropriate training and clinical experiences in psychotherapy during the four years of psychiatric residency training in the United States, but also expects that this type of training will focus on all modalities of psychotherapy. That is, supportive, cognitive-behavioral, psychodynamic, interpersonal and other modalities. Within this context, this presentation will examine the role of psychiatrists as providers of psychotherapy in the United States given the prevalence of managed care in the health and mental health care delivery system of this country.

WO39.2.
TRAINING PERSPECTIVES ABOUT PSYCHOTHERAPY CORE COMPETENCIES

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In today's training and educational environment in the United States, directors of psychiatry training are facing major challenges and difficulties in documenting all of the current accreditation requirements pertaining to core competencies in psychotherapy. Based on the existing accreditation requirements, as promulgated by the Accreditation Council for Graduate Medical Education (ACGME), all residents in psychiatry must have appropriate exposure to all basic modalities of psychotherapy before they are allowed to graduate from graduate training programs in psychiatry in the United States. This exposure calls for clinical experience, supplemented by appropriate supervision and didactic seminars. Moreover, this requirement extends not only to supportive, cognitive-behavioral, interpersonal and psychodynamic modalities of psychotherapy, but is also required for an array of diagnostic categories of psychiatric disorders. This required documentation and validation from the supervisors is quite demanding and time consuming. In this presentation, this situation will be fully addressed, discussed, and documented.

WO39.3.
PERSPECTIVES OF ACADEMIC DEPARTMENTS OF PSYCHIATRY ABOUT PSYCHOTHERAPY TRAINING

R.W. Guynn
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Nowadays, academic departments of psychiatry in the United States are facing major challenges in the provision of appropriate training experiences and supervision in the different modalities of psychotherapy education. On one side, we face the reality of the current training requirements that call for the learning in psychotherapy both clinically and didactically during the four years of psychiatric residency training. On the other side, however, we face the fact that clinical experiences in individual psychotherapy provided by psychiatric residents are not reimbursed by medical insurance companies. This policy is based on the fact that faculty supervision on site is required for academic departments of psychiatry to be able to bill for psychotherapy services provided by psychiatric residents. The availability and cost of faculty supervision under this model is rather prohibitive at the present time. This situation creates a major financial hardship for academic departments of psychiatry under the present regulations from both the medical insurance companies and the residency accreditation guidelines. In this presentation, these academic and financial challenges will be addressed and discussed.

WO39.4.
CURRENT PATTERNS OF PSYCHOTHERAPY TRAINING IN THE UNITED STATES

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The current model of graduate training in psychiatry in the United States is undergoing a major reconceptualization and restructuring. This re-modeling is not unique of the United States but is also occurring in Canada, the United Kingdom, Western Europe, and other industrialized regions of the world. This educational re-shaping is so important and novel that it requires examination, reflection and evaluation. With this thought in mind, a study was conducted among all graduate training programs in psychiatry in the United States. The goal was to define the patterns of psychotherapy training that are currently taking place in the United States as well as their future trends. In this presentation, the results of this study will be presented, discussed and examined. Hopefully, the outcome of this discussion and examination will be helpful for educators from other regions of the world that might face similar situations in the near future.

WO39.5.
EVALUATION OF THE PSYCHOTHERAPY CORE COMPETENCY MODEL

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The core competency model (based on the six basic competencies: medical knowledge, patient care, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice) is nowadays used in several developed nations such as the United Kingdom, Canada and the United States. It is, however, in the United States that this model has brought major challenges and dilemmas insofar as its applications to psychotherapy are concerned. The United States have given high priority and relevance to the use of psychotherapy for several decades. Yet, this emphasis is currently being seriously challenged with the prevalence in the United States of the managed care-oriented health and mental health system. Also, as a result of its underpinning, emphasis on evidence-based medicine/psychiatry is nowadays prevailing in the field. In this presentation, the impact of this dilemma in the overall educational system of this country will be addressed, examined and discussed.

WO39.6.
RESIDENTS' PERSPECTIVES ON THE CORE COMPETENCY MODEL OF PSYCHOTHERAPY

R. Bailey
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In the last several years, residency training programs in psychiatry across the United States have adopted the new core competency model in the training of psychotherapy. This new model has greatly impacted on the perception and conceptualization of psychotherapy on the part of the psychiatric residents. Until recently, the view of the residents about psychotherapy training was pessimistic at best due to the impact of the managed care model that was prevailing in the United States for about two decades. Under this model, the opportunity for psychiatrists to practice psychotherapy was almost nil. Yet, under the new core competency model, psychotherapy has been given much priority and relevance. This new emphasis on psychotherapy as a

treatment modality in psychiatry has led to optimism and interest on the part of the psychiatric residents. In this presentation, the perspectives of psychiatric residents in this educational and treatment topic will be addressed and discussed.

WO40.
INNOVATIVE APPROACHES TO OUTCOME ASSESSMENT OF PSYCHOSOCIAL INTERVENTIONS IN SEVERE MENTAL DISORDERS (Special Workshop organized by the World Association for Psychosocial Rehabilitation)

WO40.1.
KEY METHODOLOGICAL ISSUES IN OUTCOME ASSESSMENT

A. Barbato
Mario Negri Institute, Milan, Italy

The definition and measurement of outcome in severe mental disorders is a controversial issue in the mental health field and is a major source of misunderstanding among clinicians, researchers, consumers, informal caregivers and policy makers. This is particularly true for outcome assessment in psychosocial interventions. It is clear that the complexity of psychosocial interventions requires the use of innovative approaches in the design of studies aimed at testing their efficacy, such as the development of community-based clinical trials and pragmatic clinical trials incorporating a qualitative approach, and treatments allocation using block randomization, cluster randomization, or patient preference allocation. Moreover, the integration of various stakeholders' views is of primary importance in the identification of care endpoints.

WO40.2.
USE OF RECOVERY INDICATORS IN OUTCOME ASSESSMENT

M. Farkas
Center for Psychiatric Rehabilitation, University of Boston, MA, USA

There are a wide range of recovery outcomes that should be taken into account when assessing the efficacy of psychosocial interventions for people with severe mental disorders. Examples include: gaining/regaining a valued role, i.e. student, worker, family member, tenant; experiencing increased success and satisfaction in these roles; reducing/controlling symptoms; increased sense of self-efficacy; increased feelings of wellbeing; increased number or quality of interpersonal connections; increased measures of physical health; increased sense of self-esteem. Research in this field should include those outcomes that consumers believe are most critical, and focus on recovery; subjective outcomes and qualitative approaches should assume greater credibility and utilization. Evidence-based psychosocial interventions research should continue to make the best possible use of quasi-experimental and correlational research.

WO40.3.
OUTCOME EVALUATION OF WORK REHABILITATION

G. Harnois
McGill University, Montreal, Canada

In the last years various approaches to work rehabilitation have emerged and a research base in this area is being developed. Traditional models of vocational training are being gradually replaced by social firms, supported employment and other approaches. Current status of outcome research in the field will be reviewed.

WO40.4.
OUTCOME ASSESSMENT: A VIEW FROM DEVELOPING COUNTRIES

H. Chaudhry
Department of Psychiatry, University of Lahore, Pakistan

The evaluation of psychosocial interventions in developing countries faces many difficulties: in general, they are non-standardised; their content, duration and delivery depend on the quality and numbers of psychosocial care personnel; they tend to be client-specific, with very few generalisable models developed – simple, culture-specific and need-based interventions which are difficult to compare with the evidence-based psychosocial interventions included in professional guidelines. However, a number of strategies to integrate outcome assessment within the care process in areas with limited resources are being identified. Examples will be provided from Pakistan, India and other Asian countries.

WO41.
HOW TO IMPROVE ADHERENCE TO PSYCHIATRIC TREATMENTS

WO41.1.
THE RELATIONSHIP BETWEEN ADHERENCE TO AND EFFICACY OF COMBINED TREATMENT VERSUS MEDICATION ALONE IN DEPRESSIVE DISORDERS

G. Tibaldi, C. Munizza
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We conducted a systematic overview, by means of weighed regression analysis, of sixteen randomised clinical trials comparing pharmacological treatment alone to pharmacological treatment plus a non-pharmacological intervention. We measured within trial difference in dropout and response rates between drug alone and combined treatment arms. The weighed average of the differences of response rates was 12.1% favouring combined treatment. This increase in response was made up by an average decrease in dropout rate of 10.7% and in non-response rate of 1.4%. Weighed regression indicates that 65.7% (p=0.008) of any reduction in dropout rate is converted into response and the remaining is converted into non-response. When the dropout rate difference is zero, the combined intervention generates an average increase in response rate of 5.1% (p=0.141) thus reducing the non-response rate by the same amount. This study clearly demonstrates that it is possible to reduce the dropout rate and that a large proportion of dropouts do indeed respond to therapy. The combined treatment appears effective over and above drug alone only thanks to

the response to the drug of a sizable proportion of patients who would have otherwise dropped out of a treatment with drugs alone.

WO41.2.
MAIN ISSUES ABOUT IMPROVEMENT OF ADHERENCE IN THE LONG-TERM TREATMENT OF SCHIZOPHRENIC DISORDERS

L. Salvador-Carulla
University of Cadiz, Spain

Many systematic reviews examined interventions aimed at improving adherence to pharmacological treatment for schizophrenia. Although interventions and family therapy programs relying on psycho-education were commonly used in clinical practice, they were often ineffective. Concrete problem solving or motivational techniques were usual characteristics of successful programs. Interventions targeted specifically to problems of non-adherence were more likely to be effective than more broadly based interventions. Psycho-educational interventions without accompanying behavioural components and supportive services are not effective in improving medication adherence in schizophrenia. Specific types of community interventions such as assertive community treatment and motivational interviewing have a good level of efficacy, to be further confirmed. Concrete instructions to patients and problem-solving strategies, such as reminders, self-monitoring tools, cues, and reinforcements, appear useful, as well as sessions to reinforce gains.

WO41.3.
INTEGRATING TREATMENT APPROACHES IN PERSONALITY DISORDERS: IMPACT ON ADHERENCE AND EFFICACY

A. Andreoli
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In a recent paper, A. Kopelowicz and R. P. Liberman proposed seven principles to guide mental health professionals in their integration of pharmacological and psychosocial interventions: a) pharmacological treatment almost exclusively improves symptoms and reduces the risk of relapse; b) pharmacological treatment leads to improvements in psychosocial functioning when the individual has acquired the relevant psychosocial skills before; c) psychosocial treatments affect primarily psychosocial functioning (social, vocational, educational, family, recreational, and self-care skills); d) both pharmacological and psychosocial treatment have dosage related therapeutic effects and side effects; e) psychosocial treatment is most helpful for clients who are symptomatically stable (states of partial or full remission); f) all effective psychosocial treatments (individual therapy, group or family therapy, day hospital, or inpatient milieu therapy) contain elements of concrete problem solving; g) continuing positive and collaborative relationship infused with hope, optimism, and mutual respect is essential. Assuming that these specific principles are fully relevant to the management of personality disorders, usually based on longer term therapeutic programs, available data about the adherence to the more effective treatment strategies currently available for these disorders will be reviewed. Data on the impact of psychosocial interventions on medication adherence will also be presented and discussed.

WO42.
OBSESSIVE-COMPULSIVE DISORDER: FROM SEROTONIN TO OTHER MONOAMINES AND BACK AGAIN

WO42.1.
OBSESSIVE-COMPULSIVE DISORDER: FROM SEROTONIN TO OTHER MONOAMINES AND BACK AGAIN

J. Zohar
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Obsessive-compulsive disorder (OCD) is a common disorder with a worldwide prevalence of about 2% and unique with regard to treatment response. As opposed to other psychiatric disorders, such as depression, panic disorder, post-traumatic stress disorder etc., in which monoadrenergic and serotonergic medications were found to be effective, it seems that OCD responds primarily to serotonergic medications. However, there are about 40% of the patients who are not responding, or who respond only partially to appropriate intervention with serotonergic medication. In those resistant patients, the possibility of adding an antipsychotic, and especially the new atypical antipsychotics, is often raised. There are actually four types of situations where intervention with antipsychotics might be considered: obsessive-compulsive patients with poor insight (what was previously called 'psychotic obsession'), schizophrenic patients with OCD, obsessive-compulsive patients with tic disorder, and obsessive-compulsive patients who did not respond to intervention with an adequate treatment (in terms of dose and duration) of antiobsessive medication. With the advances in the study of OCD, it has become apparent that it is necessary to sharpen the diagnosis and to distinguish between subsets of OCD, such as early versus late onset, with tic disorder versus without tic disorder, OCD related to autoimmune pathology versus no autoimmune pathology, comorbidity of OCD and schizophrenia versus comorbidity with other anxiety or affective disorders, etc. It seems that an analysis which takes into consideration these and other subtypes will provide us with better information than if they were studied as one group and hence shed a light on the possible role of other monoamines in OCD.

WO42.2.
SEROTONINERGIC AND DOPAMINERGIC SYSTEMS IN NAÏVE OBSESSIVE-COMPULSIVE DISORDER PATIENTS

L. Bellodi, P. Cavedini, A. Gorini, C. Zorzi, D. Perani
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Obsessive-compulsive disorder (OCD) is characterized by intrusive thoughts and ritualized behaviours. Many studies suggest that the pathogenesis of this disorder may be linked to deficits in serotoninergic and dopaminergic neuronal transmission. We investigated in vivo serotonin 2A (5-HT2A) and dopamine (D2) receptors activity in OCD using positron emission tomography (PET). PET imaging was performed in 9 drug-naïve OCD patients and 8 healthy controls after the administration of [11C]MDL, a highly selective 5-HT2A receptor antagonist, and 11C-labelled raclopride ([11C]RAC), a potent selective D2 receptor antagonist. Statistical analysis was performed using voxelwise analysis of spatially normalized parametric maps (SPM99) and region of interest (ROI) analysis. [11C]MDL-PET binding data in OCD patients compared to controls showed significant reductions of 5-HT2A receptor density in the dorsolateral frontal cortex bilaterally

and in the anterior cingulate cortex, the right insula and the left middle temporal gyrus. The same analyses for [11C]RAC binding revealed an increased D2 receptor activity in OCD patients in the ventral striatum and in the putamen. The study provides evidence of the involvement of serotoninergic and dopaminergic systems in the pathophysiology of OCD. In particular, a key role for the striatum in the regulation of stereotyped behaviour patterns is highlighted by the increased ventral and dorsal striatal [11C]RAC binding. Behavioural disorders in OCD associated with serotoninergic system dysfunction provide a rationale for pharmacological treatment with selective serotonin reuptake inhibitors.

WO42.3. INTRACELLULAR MECHANISMS IN OBSESSIVE-COMPULSIVE DISORDER

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Protein kinase C (PKC) and protein kinase A (PKA) are the final targets of the pathways mediated, respectively, by the breakdown of phosphatidylinositol-4,5-bisphosphate and cyclic AMP (cAMP). Preliminary indications are available on alterations of these intracellular mechanisms in obsessive-compulsive disorder (OCD). Therefore, we investigated whether OCD patients differed from control subjects in the effect of PKC upon the 5-HT transporter, after stimulation of this enzyme with 4-beta-12-tetradecanoylphorbol 13-acetate (ß-TPA). Basal velocity of adenylate cylase (AC), as well as the effect of the synthetic catecholamine isoprenaline (ISO), were also examined. At baseline, OCD patients showed a significant decrease in the maximal velocity (Vmax) of 5-HT uptake, as compared with control subjects, with no change in the Michaelis-Menten constant (Km). The activation of PKC with ß-TPA provoked a significant decrease in Vmax values in both groups, but the effect was significantly more robust in OCD patients who, in turn, also showed an increase in Km values. On the contrary, with regard to basal AC activity or ISO stimulation, no difference was observed between the two groups: however, OCD patients showed a leftward shift of the ISO dose-response curve that did not reach statistical significance. These results could indicate the presence of hyperactivity of PKC in OCD that could be the result of increased activity of the phosphatidylinositol pathway. The findings regarding AC might be due to a possible condition of supersensitivity of beta2-adrenoreceptors in OCD. Taken together, the overall findings suggest that intracellular mechanisms are altered in OCD and might, perhaps, represent the targets of future drugs.

WO42.4. ALTERNATIVE ANTI-OBSESSIONAL AGENTS

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Although treatment with serotonin reuptake inhibitors (SRIs) such as clomipramine, fluoxetine, fluvoxamine, paroxetine, sertraline and citalopram represents a promise for many patients with obsessive-compulsive disorder (OCD), still a proportion comprised between 40 and 60% fail to adequately respond to such agents or are intolerant to side effects. This underlines the urge to develop other pharmacological agents for the treatment of OCD and to develop new strategies for patients resistant to SRIs. Several compounds have been tested, both in drug-naïve and in resistant subjects, without satisfactory results. The only compound to date which seems to exert an antiobsessive action is venlafaxine. Venlafaxine, a serotonin and norepinephrine reuptake inhibitor, similar to clomipramine but lacking the anticholinergic, antihistaminic, and alpha-adrenergic blocking effects, has been studied in the treatment of OCD. We will present results from a 12-week, single blind study versus clomipramine in the treatment of drug-naïve patients and from a 12-week, single blind study versus clomipramine and citalopram in the treatment of patients unresponsive to at least two previous trials with selective SRIs (SSRIs) other than citalopram. These studies, together with other data coming from different groups of researchers, strongly support the need of well controlled studies performed in double-blind conditions on the use of this compound in the treatment of OCD.

WO42.5. LONG-TERM PHARMACOLOGICAL TREATMENT OF OBSESSIVE-COMPULSIVE DISORDER

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Obsessive-compulsive disorder (OCD) is a chronic lifelong illness with a waxing and waning course, that can have a significant impact on the quality of life of the sufferers and their families. Behavioral and pharmacological therapies have been found to be effective in the treatment of OCD, both alone and in combination. However, the literature on long-term treatment of OCD is rather controversial, due to the paucity of studies exceeding a 2 year follow-up. The aim of this study was to evaluate the long-term course of OCD in patients treated with serotonin reuptake inhibitors (SRIs) and to identify predictors of clinical outcome. Seventy-nine patients fulfilling DSM-IV criteria for OCD were followed prospectively for 3 years. Baseline information was collected on demographic characteristics, axis I and II diagnosis, family history, and severity of obsessive-compulsive (OC) and depressive symptoms using standardized instruments. During the follow-up period, the clinical status of each patient was evaluated monthly in the first year and bimonthly thereafter by means of the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) and the Hamilton Rating Scale for Depression (HDRS). Twenty-one patients were lost at various stages of follow-up. At the end of the third year, 24 patients (44%) still met full criteria for OCD, 19 (34%) were in partial remission, and 12 (22%) were in full remission. The cumulative probability of achieving at least partial remission from OC symptoms during the 3-year period was 68%. The probability of full remission was 38%. For subjects who achieved at least partial remission, the probability of subsequent relapse was 60%. Significant predictors of poor outcome included an earlier age at onset, a longer duration of illness, and a greater severity of OC and depressive symptoms at intake.

WO43. GUIDELINE DEVELOPMENT AND IMPLEMENTATION IN PSYCHIATRY

WO43.1. STEPS FOR GUIDELINE DEVELOPMENT

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Clinical guidelines are systematically developed statements which enable clinicians and patients to make decisions about appropriate treatment for specific situations. The initial guideline development at

the National Institute for Clinical Excellence (NICE) made use of a five-step model to achieve optimised treatment for people with schizophrenia in England and Wales. Identifying and refining the subject area was the first step in developing the guideline. Then strategies had to be designed allowing a systematic search for evidence. In addition, aspects concerning cost-effectiveness were examined.

WO43.2.
GUIDELINE ADHERENCE IN INPATIENT SCHIZOPHRENIA CARE

S. Weinmann, B. Janssen
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German Guidelines for Schizophrenia Care have been developed since 1996. However, there are few incentives for guideline implementation and practical use. Within the multicenter German Research Network in Schizophrenia (GRNS), seven psychiatric hospitals participated in a quality management study with the aim to improve schizophrenia treatment outcomes by implementing guidelines and quality circles, and benchmarking relevant processes and outcomes. Baseline data point to significant differences in patient case-mix and treatment processes between the seven hospitals. Mental state at admission, particularly thought disturbance, and a chronic disease course were best predictors for mental state outcomes at discharge. Guideline adherence among hospitals was moderate. To correlate guideline adherence with outcomes, case-mix adjustment models had to be used controlling for mental state, duration of disease, age, comorbidity and occupational and residential situation. Overall low guideline adherence concerning a variety of treatment domains was associated with poorer outcomes. However, results differed whether mental state or social functioning was used as primary outcome parameter.

WO43.3.
THE TEXAS MEDICATION ALGORITHM PROJECT: STEPS FOR OPTIMAL GUIDELINE IMPLEMENTATION

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By transforming clinical guidelines into specific stepwise graphical sequences (algorithms), strategies and methods arise, which lead to optimised therapeutic effects. The Texas Medication Algorithm Project, started in 1996, is designed to develop, implement and evaluate a set of medication algorithms in the Texas public mental health sector. It is a public and academic effort that consists of four phases. A major result has been the development of medication treatment guidelines for three major psychiatric disorders: schizophrenia, major depressive disorder and bipolar disorder. The rationale for using algorithms is to improve the quality of treatment by reducing unnecessary variations in clinical practice. These algorithms go beyond guidelines by providing a systematic approach to decision making that should provide similar answers when clinicians are faced with similar clinical situations. Phase IV of the project focusses on algorithm implementation in clinical care.

WO43.4.
GUIDELINES AND DECISION SUPPORT SYSTEMS IN OUTPATIENT SCHIZOPHRENIA CARE

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The positive effect of adherence to evidence-based guidelines has been repeatedly shown. Electronic systems for interactive decision support are new methods of implementing guidelines. The present study evaluates different approaches to optimise schizophrenia outpatient treatment. Elements of internal quality assurance (documentation system, implementation of guidelines and monitoring systems) as well as elements of external quality management (benchmarking) are being established in hospital-associated practice networks of psychiatrists in four project groups. 15 private practice psychiatrists in the experimental group 1 work with computer-aided documentation and decision support. Various guidelines appear at trigger points (e.g. psychopathological deterioration, relapse). In addition, psychiatrists receive comparative data feedback focussing on patient outcome variables (benchmarking). A second group of 9 psychiatrists in private practice use computer-aided documentation systems without guidelines and benchmarking, but implement quality circles. Another two control groups in Munich assess patients and treatment using a paper and pencil version without benchmarking data or guideline implementation. 583 patients with schizophrenia were recruited by 55 psychiatrists and followed-up for at least 16 months. There were no baseline differences in psychopathology between the groups. After 16 months, patients in the experimental group had a significant reduction in Positive and Negative Syndrome Scale general, positive and negative scores; nearly similar results were obtained in the second group working with quality circles. In the control groups no such changes were found. Further data with regard to guideline adherence will be analysed.

WO44.
THE CURRENT MANAGEMENT OF ALZHEIMER'S DISEASE

WO44.1.
TREATMENT OF ALZHEIMER'S DISEASE: FROM CHOLINESTERASE INHIBITORS TO ANTI-AMYLOID

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Various forms of pharmacological treatment are being tested clinically in an effort to slow down or block the conversion of mild cognitive impairment to Alzheimer's disease (AD). Experimental and clinical data suggest that cholinesterase inhibitors (ChEI) in addition to symptomatic benefit might have a delaying effect on AD progression. Other approaches being investigated include anti-inflammatories, nootropics, amino-3-hydroxy-5-methyl-4-isoxazole propionic acid (AMPA) receptor agonists. Data from the recent vaccination study with pre-aggregated A-beta-42 shows that patients who generated amyloid plaque immunoreactivity over one year period showed a significantly slower rate of decline of cognitive functions and an improvement in activities of daily living. These preliminary results suggest that targeting beta-amyloid with immunization could be of benefit to early cases of AD.

WO44.2.
NON-PHARMACOLOGICAL TREATMENTS IN DEMENTIA

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Reality orientation (RO) is the only rehabilitative approach for the demented patients supported by clinical evidence. A recent Cochrane review about RO evaluated 6 randomized controlled trials, with a total of 125 subjects. Change in cognitive and behavioural outcomes showed a significant effect in favour of treatment. Cochrane reviewers concluded that there is some evidence that RO has benefits on both cognition and behaviour for dementia sufferers. Reminiscence therapy (RT) is based on the assumption that remote memory remains intact until the latter stages of dementia and could be used as a form of communication with the patient. RT can be conducted on an individual basis or in a group and involves the recall of past events with the use of music, photographs and other aids. RT is usually conducted in weekly sessions by trained staff. The aims of RT include: socialisation, memory stimulation and intergenerational sharing. Specific forms of sensory stimulation (e.g. music therapy, aromatherapy, bright light therapy) and exercise have been investigated as interventions for behavioural and psychological symptoms of dementia. The aims of stimulation therapy are both calming and activating. Music therapy aims to aid communication with patients who can no longer use language and is based on the observation that musical abilities, including singing, remain preserved until the later stages of dementia. Music therapy aims to provide social stimulation, reduce agitation, encourage reminiscence and help patients cope with emotional problems. Aromatherapy involves the use of essential oils either massaged into the hand or used in oil burners or baths in order to provide sensory stimulation, reduce agitation and aggressive behaviour. Bright light therapy has been found to be effective in the treatment of sleep disturbance. The aim of bright light therapy is to attempt to re-establish circadian rhythms and reduce sleep disturbance.

WO44.3.
THERAPY OF ALZHEIMER'S DISEASE: WHAT IS THE FUTURE?

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The pathogenesis of Alzheimer's disease includes, among others, factors such as oxidative stress, inflammation and deficit of the brain cholinergic system. An example of therapeutic approach to be developed concerns the pharmacological interference with beta-amyloid. There is evidence that intracerebroventricular infusion of beta-amyloid causes brain dysfunctions similar to those of Alzheimer's disease, as evidenced by neurodegeneration and impairment of learning and memory in rodents. However, the mechanisms of neurotoxic effects of beta-amyloid in vivo are not fully understood yet. Neuronal degeneration induced by beta-amyloid affects subcortical nuclei modulating various physiological processes and behaviors. Various neurotransmitters are involved in synaptic connections of these nuclei, including acetylcholine, norepinephrine, dopamine and serotonin. Indeed, beta-amyloid fragments induce a dose-dependent memory deficit in mice. Their effect on memory retention depends upon the time of administration and seems to involve cannabinoid CB1 receptors in the brain, as the administration of the cannabinoid CB1 receptor antagonist SR141716A reverts the impairment of cognitive capacity induced by beta-amyloid fragments. Other therapeutic routes may be the development of new drugs acting as antagonists on the N-methyl-D-aspartate (NMDA) glutamate receptors. Furthermore, beta-secretase and gamma-secretase enzymes produce beta-amyloid and drugs which inhibit these enzymes have entered clinical trials. Scientists are also researching ways to activate non-neural brain cells, known as microglia, whose function is to clear away amyloid and prevent the build-up of plaques. While trials for the anti-amyloid vaccine AN-1792 were suspended in 2002, scientists continue to investigate an immune response to remove amyloid plaques. Scientists are studying ways that may help decrease or prevent neurodegeneration and may help injured neurons to re-grow. One method involves the application of nerve growth factors or drugs that mimic their effects. Researchers are also excited at the prospect of replacing lost neurons by using stem cells derived from bone marrow and other tissues, which have been induced to change into neurons. Finally, studies with estrogens, Ginkgo biloba extract and vitamins/antioxidants deserve some interest.

WO45.
COMING-OUT AND HEALTH CARE FOR YOUNG HOMOSEXUALS

WO45.1.
ANTI-HOMOSEXUAL RHETORIC AND THE COMING-OUT OF YOUNG GAYS

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An increasing aggressive media strategy from conservative religious groups in Norway exposes young gays in their coming-out process to condemning and disparaging attitudes. Examples of psychiatrists and medical doctors supporting this activity are to be found and this creates an unclear and insecure situation among young gays as what to expect if they go to a psychiatrist or general practitioner with problems in this potentially vulnerable phase. Based on clinical material and review of literature, the presentation will describe how this can influence the coming-out process where internalizing of negative attitudes to homosexuality leads to specific therapeutic challenges.

WO45.2.
SEXUAL ORIENTATION AND HEALTH-RELATED ISSUES IN ADOLESCENCE

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The study attempts to assess and understand physicians' inadequacies in the management of sexual health-related issues with adolescent patients. It places emphasis on sexual orientation to promote the improvement of healthcare for young homosexuals. Overall improvement in adolescent healthcare by providing further understanding of a physician's relationship with such issues is another objective. How often physicians address and discuss sexual orientation, how aware are they of issues dealing with sexual orientation, and how prepared are they in dealing with these issues are addressed by the study. The study was conducted by distributing an anonymous survey to residents and attending physicians in family practice, internal medicine, psychiatry, obstetrics and gynecology, emergency medicine, and pediatrics at Upstate Medical University and the University of Hawaii.

WO45.3.
YOUNG HOMOSEXUALS AND THEIR FEAR OF HOMOPHOBIC ATTITUDES

P. Singy
Psychiatry Service, Lausanne, Switzerland

A qualitative study among young gays in the French speaking area of Switzerland concentrated on the view that young homosexuals had of their medical practitioners. The study further analyzed the relationship they had with them and observed that the fear of suffering homophobic attitudes in this treatment relationship and in society in general represents a great preoccupation among the people interviewed.

WO45.4.
PSYCHIATRY AND SUICIDAL THOUGHTS IN YOUNG HOMOSEXUALS

P. Cochand
Psychiatry Service, Lausanne, Switzerland

The view that young homosexuals had upon their psychologists and psychiatrists was highlighted in a qualitative study among young gays in the French speaking area of Switzerland. One third of the interviewed population reported they had once gone through depression with or without the determination of committing suicide. These alarming findings should incite psychologists and psychiatrists to rethink their clinical practice with this group of patients.

WO46.
COGNITIVE DYSFUNCTION IN SCHIZOPHRENIA: FROM EVALUATION TO TREATMENT

WO46.1.
BARRIERS AND OPPORTUNITIES IN THE TREATMENT OF COGNITIVE IMPAIRMENT IN SCHIZOPHRENIA

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Cognitive impairment is often but not invariably inherited. It does not correlate with severity of delusions and hallucinations and it is weakly correlated with severity of primary negative symptoms, and thought processing impairment. There is conflicting evidence whether, following the first episode, cognitive performance stabilizes or continues to deteriorate. Comparison on cognitive batteries between groups of schizophrenic patients and population norms or non-schizophrenic individuals reported differences ranging between 1 and 2 SD on composite scores and inferior performances on at least one specific test in 70 to 90% of the patients. Therefore, trials have to include large numbers of patients to detect small and variable effects. Furthermore, to show that a compound is useful in clinical practice it must be proven that it benefits not only performance on cognitive tests but also cognitively related social and vocational performance or at least intermediate surrogates between it and the tests. Although there exist specific domains of cognitive performance on which schizophrenic patients are impaired, there is considerable heterogeneity regarding the domain and quality of the impairment. Hence, it is difficult to decide what kind of schizophrenic patients to enroll into trials and what scale to use to measure change. Also, the most likely trial design should be an add-on one, in which the cognitive enhancers or placebo are added to an antipsychotic drug. However, add-on designs are often difficult to interpret. Moreover, there are currently no clear indications from the regulatory bodies about what trials design and outcome measurements would be acceptable in order to gain an indication, making the pharmaceutical industry reluctant to invest in this direction. Furthermore, several biological hypotheses exist to explain the cognitive impairment, but none has been proven, making the selection of compounds to be tested in trials difficult. Despite these difficulties, the realization that cognitive impairment is a major source of suffering and disability to schizophrenic patients is responsible for initiatives common to academia, government and industry to develop an appropriate treatment. A number of such initiatives are currently underway.

WO46.2.
THE REMEDIATION OF COGNITIVE DEFICIT IN SCHIZOPHRENIA: THE STATE OF THE ART

A. Rossi
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The current literature on strategies and methods of cognitive remediation in schizophrenic disorders has been focused on the remediation of executive functions. The possibility of an improvement of the neurocognitive deficit through specific interventions has been hypothesized. People with schizophrenic disorders have some degree of cognitive deficit that often precedes the clinical onset, is not secondary to the symptoms of the disorder and persists even when the positive symptoms have been resolved. The possibility that the neurocognitive deficits could be modified by psychological remediation with effects not exclusively confined to the cognitive domain has been nowadays accepted and numerous studies demonstrate that these interventions are effective, with a positive impact on social and working abilities, symptomatology and self-esteem.

WO46.3.
DISTRIBUTION OF WCST REMEDIATION AMONG SCHIZOPHRENIC PATIENTS TREATED WITH TYPICAL OR ATYPICAL ANTIPSYCHOTICS

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To appreciate the potential of efforts for improving psychiatric care and their impact on opportunities for rehabilitation, we examined the utility of a categorization of a schizophrenic sample on the basis of their response to a modified procedure for Wisconsin Card Sorting Test (WCST) administration that, through verbalization, has been demonstrated to be useful to remediate the cognitive performance. A sample of 70 recent onset to long-term schizophrenic patients treated and clinically responsive to 'atypical' (A) or typical (T) antipsychotics (APs), and with relatively good outcome in terms of Global Assessment of Functioning Scale (GAF, at least 65) were evaluated along a naturalistic observation. Patients were divided on the basis of the WCST remediation pattern through verbalization into 'good performers', 'remediators' and 'poor performers'. The analysis of the data shows a significant different distribution of subjects responsive to AP treatment, with more 'good performers' in the subgroup responsive to AAPs and no 'remediators' in the patients treated with TAPs. Subjects on AAPs showed less perseverative errors than those on TAPs, both with the standard and the modified administration. Subjects assuming AAPs but not those receiving TAPs reduced perseverative errors with verbalization. These data suggest the potential relevance of the findings from neurocognitive assessment as predictors of AP response.

WO46.4.
A RANDOMIZED, PLACEBO-CONTROLLED, ADD-ON STUDY OF THE EFFECTS OF COGNITIVE REMEDIATION ON FUNCTIONAL OUTCOMES OF COGNITIVE-BEHAVIOURAL REHABILITATION

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There is a growing interest in cognitive rehabilitation of schizophrenia deficits, in particular in what is called 'cognitive remediation', where cognitive deficits are treated directly through repeated practice on cognitive exercises. This approach is mainly hypothesized to overcome the so-called 'cognitive limiting factors' to rehabilitation, gaining the effect of classical cognitive-behavioural therapy. Nevertheless, generalization of these effects to functional outcomes is still unclear. The aim of this controlled study was to evaluate the efficacy of a program of computer-aided neuropsychological enhancement of cognitive dysfunctions in a sample of chronic schizophrenics participating in a cognitive-behavioural rehabilitation program, and to assess its effectiveness on daily functioning and quality of life. The sample consisted of 75 patients with clinically stabilized schizophrenia, who were tested before and after three months of a single blind, placebo-controlled cognitive enhancement program with the Brief Assessment of Cognition in Schizophrenia battery, the Wisconsin Card Sorting Test (WCST) and the Continuous Performance Task (CPTax) to assess neuropsychological performance change. Psychopathological and functional assessment were performed by the Positive and Negative Syndrome Scale (PANSS) and the Quality of Life Scale (QLS), on the same occasions. Patients were randomised to placebo or active computer-aided cognitive training with multiple weekly sessions, added to a standard cognitive-behavioural rehabilitation program. We observed a significantly better outcome of measures of executive function (WCST p=0.04), sustained attention (p=0.02) and of the measure of daily functioning (QLS p=0.02) at ANOVA analysis among patients randomised to active treatment in comparison to those receiving placebo. These results confirm previous studies reporting positive effects of cognitive remediation therapy on cognitive functioning, but demonstrate also a significant effect on functional outcomes of rehabilitation programs.

WO47.
EARLY PSYCHOSIS: NEW STRATEGIES FOR PREVENTION AND REHABILITATION

WO47.1.
EARLY PSYCHOSIS: PREVENTION AND REHABILITATION

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Several studies conducted worldwide in the past decade have described a delay averaging 1 to 2 years between the onset of psychosis and accurate detection, diagnosis, and initiation of treatment. Reported associations between treatment delay and longer time to medication response and earlier relapse have focused attention on duration of untreated psychosis as a potentially modifiable determinant of illness course. The provocative hypothesis that delayed treatment allows disease progression that affects long-term morbidity, along with intriguing descriptions of detection and prevention efforts, has catalyzed a surge of scientific interest in the early detection, treatment, and prevention of schizophrenia. This interest has grown alongside recognition that despite progress in developing medications with fewer side effects, the treatment of established schizophrenia is very often inadequate to alleviate the morbidity and disability associated with chronic forms of the illness. Deficit symptoms and cognitive impairments, which appear to be the greatest determinants of disability in this disorder, remain largely beyond the reach of current treatments. Scientific interest in the possibility of altering the course of schizophrenia through early intervention has generated both enthusiasm and controversy. While there is little disagreement that timely detection and treatment of those already ill with schizophrenia are important public health priorities, the identification and treatment of patients prior to full-blown disease onset has generated a significant debate.

WO47.2.
DEPRESSION AND QUALITY OF LIFE IN THE EARLY COURSE OF SCHIZOPHRENIA

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Depression remains poorly understood in schizophrenia, even if this condition is common among schizophrenic patients. The reported rate of depression is 7% to 75%, with a modal rate of 25%. Differences in cohort status, illness chronicity, and assessment methods all contribute to the variability of these estimates. The occurrence of depression in schizophrenia has often been associated with worse outcome, impaired functioning, personal suffering, higher rates of relapse or rehospitalization and even suicide. The question of whether the depressive syndrome could be considered an epiphenomenon of other symptoms of schizophrenia remains unclear. Few studies focused on the relationship between depressive and positive symptoms and this literature showed conflicting results, with some studies reporting an association between depressive symptoms and psychotic exacerbation, and others not. The issue of overlap between negative symptoms and depressive symptoms has been debated in the literature, too. We investigated whether depressive symptoms, assessed by Calgary Depression Scale for Schizophrenia, were significantly associated with functional outcome in a group of subjects with recent-onset schizophrenia (n=54). We also analyzed depression and social functioning in a group of chronic schizophrenic patients (n=108). In both patient groups, depressive symptoms were strongly related to quality of life. This finding suggests that depressive symptoms should represent a focus of attention in schizophrenia, particularly in view of their relevance for clinical treatment and rehabilitation.

WO47.3.
PROBLEMS OF EARLY INTERVENTION IN PSYCHOSIS

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While prompt state of the art intervention in cases of full blown psychosis is an important and generally agreed upon goal, important questions remain open about indications, potentials and limitations

(including ethical aspects) of intervention programs for individuals considered at very high risk of later psychotic development. The authors review problems in this research area and in particular: a) recent epidemiological data that, suggesting that psychotic-like experiences are common in the general population, may cast doubt on the specificity of intervention programs targeted on the formal characteristics of these experiences; b) the issue of predictive power of available instruments to evaluate these at risk states; c) controversy about the real meaning of the reported association between duration of untreated psychosis and outcome; d) the persistence of preventive effect once the active intervention phase ceases; e) the implications, at the ethical level, of adopting both pharmacological and non-pharmacological treatments, in situations not well defined in a psychopathological way; f) the meaning and appropriateness of establishing dedicated centres and programs for first episode psychosis in comparison to treatment in general community mental health centres. The authors suggest that these issues deserve wide debate involving not only researchers and policy makers but also consumers and the general public before extending research models to everyday practice.

WO47.4.
BOUFFÉE DÉLIRANTE: A FIRST APPROACH

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The onset of the psychotic process takes sometimes the form of a sudden explosion of fragments of the Self which are almost obliterated in the Inconscious, where they lie substantially dissociated from the rest of personality, in order to provide a delicate, precarious balance. If sky is conscience, the explosion (or eruption) is similar to a volcanoid whirl, incandescent lava, lapilli thrown toward infinity, that gravity brings back to the subtle rifts of the conscience surface. These sudden bouffées can undergo different evolutions; one of the most favourable is a sort of "self-recomposition", which is quite rare, and resolves in the re-establishment of the previous, precarious balance, with the residue of some more or less consistent scar tissue. More frequently, the recovery is tightly related to the "empathic" way of approaching the patient since the first clinical interview. In fact the therapist's "retention-comprehension" skills may play a significant role in determining the evolution of the clinical picture. We are strongly convinced that the therapist should have a "psychoanalytic mind", considering the content of the fragments of the Self chaotically expelled, typically interrelated by an intimate logic that can be rebuilt, stitched up, according to a program of pharmacological-psychotherapeutic treatment for each patient.

WO48.
THERAPEUTIC FACTORS IN THE DIFFERENT PSYCHOTHERAPEUTIC METHODS

WO48.1.
THERAPEUTIC FACTORS IN COGNITIVE BEHAVIORAL THERAPY WITH SPECIAL EMPHASIS ON INTERPERSONAL APPROACHES

J. Burmeister
Swiss Psychiatric Association

We are struggling for effectiveness and appropriate cost management in the public health services on a global scale. In general, more importance is attached to immediate economic benefit than to treatment efficacy. Suboptimal and false treatments, induction of chronicity and poor health economics contrast with the available beneficial psychological treatments. The second generation of the General Model of Psychotherapy exhibits a number of well identified therapeutic factors which can sufficiently explain the effectiveness of psychotherapeutic interventions apart from so called unspecific factors: the activity of the therapist, the explanation/understanding of the disorder, the management/positive influence on the disorder and the use of resources. In cognitive therapy most interventions foster individual self management (empowerment; competence enhancement) by: a) giving information including explanation of symptoms; b) providing ways to intervene by monitoring and modifying stressful symptoms; c) putting emphasis on different resources. One of the main targets is the interpersonal sphere with functional diagnostics and systematic change programs (family therapy, psycho-education).

WO48.2.
THERAPEUTIC FACTORS IN PSYCHODYNAMIC INPATIENT TREATMENT

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Our dynamic psychiatric concept of a "healthy person" is not just freedom from disease and symptoms nor a static consideration of an enduring and stable state of well-being. Our concept of health and healing aims at a process towards identity formation, developmental possibilities and goals and meaningfulness in life. Disease is regarded as one of a person's possibilities and a momentaneous loss of homeostasis of various personality functions. In a state of disease a person is no longer able to cope with internal and external stress and challenges. Symptomatology is understood as an important source of communication in the person's environment and can be used as a communication bridge in psychotherapy. The treatment goal is therefore not regaining of an earlier state of well-being but differentiation and strengthening of a person's identity, regulatory forces and capability to establish and maintain human contacts. The following aspects of psychodynamic inpatient treatment are essential in our Dynamic Psychiatric Hospital in Munich: a) constructive use of the total context of the hospital as a transference and counter-transference field and as a field of real interpersonal relationships; b) identity psychotherapy in verbal and non-verbal groups; c) strengthening the patients' non-pathological part of personality in the sense of "alliance with the healthy Ego parts", such as skills, competences, talents, life experience, knowledge – the so-called internal and social resources; d) working with reflection and transference/counter-transference processes and group dynamics in case-conferences and team supervision.

WO48.3.
THERAPEUTIC FACTORS IN PSYCHODRAMATIC–PSYCHODYNAMIC GROUP THERAPY

G. Tarashoeva
Bulgarian Psychiatric Association

According to the 2001 report of the World Health Organization "Mental Health: New Understanding, New Hope", psychotherapy is one of the main methods of modern treatment of mental illness. This understanding, coming from the bio-psycho-social model of mental illness, succeeded in entering in Bulgaria in the new law for public health. What is, actually, that cures in psychodrama? What is the target of the therapeutic factors, what do they influence and how? Which are the therapeutic tools of psychodrama and psycho-

dynamic group therapy that we can use for fulfilling the therapeutic factors? Some of the therapeutic factors in psychodrama are: acting catharsis; acting insight; corrective emotional experience; re-integration of the new experience; re-learning (emotional, cognitive, interpersonal).

WO49.
UPDATE ON RESEARCH IN PSYCHIATRIC TREATMENT ISSUES FOR LESBIAN, GAY, BISEXUAL AND TRANSGENDER PATIENTS

WO49.1.
DIAGNOSIS RELATING TO HOMOSEXUALITY IN ICD-10: TREATMENT IMPLICATIONS

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Although homosexuality was deleted as a mental illness in ICD-10 in 1992, egodystonic sexual orientation, which is defined as "the gender identity or sexual preference is not in doubt but the individual wishes it were different because of associated psychological and behavioral disorders, and may seek to change it" remained a diagnostic category. Sexual maturation disorder and sexual relationship disorder were also added. All three of these diagnoses can be subdivided by sexual orientation to include homosexuality. No published scientific studies support the use of any of these diagnoses. However, they have been used by unethical therapists to justify trying to change gay, lesbian, and bisexual men into heterosexuals. Examples of how these diagnoses can be used in unproven "treatments" will be discussed. Suggestions for future changes in ICD-11 and DSM-V concerning homosexuality will also be provided.

WO49.2.
SELF HARM IN LESBIAN, GAY AND BISEXUAL PEOPLE

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Despite increasing recognition of the rights of lesbian, gay and bisexual (LGB) people to be free of discrimination and prejudice and to have their relationships accepted in law, LGB people are disadvantaged in modern society and may be vulnerable to mental disorders. Ethnic minority gay men and lesbians bear multiple levels of discrimination. There are worrying levels of suicide and parasuicide among gay youth and considerable problems of substance abuse in the gay and lesbian communities that go unrecognised. A recent study in the UK compared the mental health of approximately 1285 LBG with 1093 heterosexual people, using a computerized interview. Gay men were 1.24 (95% CI 1.07, 1.43) times more likely, and lesbians 1.34 (CI 1.11, 1.52) times more likely to have a current psychiatric disorder than their heterosexual counterparts. 33% of heterosexual, 52% of gay or lesbian and 56% of bisexual people had considered harming themselves. Of those who had considered it, 44%, 55% and 56% respectively had actually harmed themselves. Attempted suicide in the LGB population was associated with markers of discrimination such as recent physical attack (odds ratio, OD 1.7, CI 1.3, 2.3) and school bullying (OR 1.4, CI 1.1, 2.0), but not current psychiatric status. In conclusion, LGB people have high levels of mental disorder and self harm, possibly linked with discrimination.

WO49.3.
ADOLESCENT TRANSGENDER HEALTH CARE

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The Health Outreach To Teens Program is an institution providing primary care services in New York City that works with lesbian, gay, bisexual and transgender youth. Particularly transgender youth may undergo fluctuating identities before reaching stability. Many people of transgender experience have been shunned by family and social supports, or inadequately serviced by traditional medical care. A profile of this particular program is presented.

WO49.4.
THE EVALUATION OF HOMOPHOBIA IN AN ITALIAN SAMPLE: AN EXPLORATORY STUDY

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Homophobia has not been systematically studied by Italian mental health researchers and social scientists. The purpose of this study was to conduct an initial investigation of the nature of homophobia among Italians, and to investigate personality and other factors related to homophobia. We investigated: a) whether a male military personnel group would have more homophobic attitudes than a group of comparably aged male university students; b) whether some personality factors and other personal characteristics would be correlated with homophobia, and c) whether there are differences in homophobia between male and female university students. In this study, a group of male officers of the Italian Marine Corps was compared to a group of male university students of the same age with respect to homophobia and personality characteristics. Then, we compared a sample of female university students with male students. The instruments used were the Italian version of the Modern Homophobia Scale and the 16 Personality Factor Inventory. Results showed significantly higher homophobia in the military personnel than male students. Consistent with previous research on sex differences in homophobia, males demonstrated more negative attitudes towards gay and lesbian people than females.

WO50.
PSYCHIATRY IN FORENSIC SETTINGS

WO50.1.
CONSULTATION PSYCHIATRY: A POSSIBLE MODEL FOR PSYCHIATRIC INTERVENTION IN PRISON?

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Psychiatry in prison needs a new clinical, ethical and organisational model. Consultation psychiatry can offer such a model, but the application of a model developed in general hospital to prison requires a discussion on the similarities and differences between the two situations. The psychiatric team is in both cases in “other people's house” and is asked to intervene by other physicians; there is always a contextual taking care of both patient and institution; the body (sick or closed) has a major importance; there is a secondary issue to break the isolation, that of psychiatry in the hospital and that of prison in the community; psychiatrists risk to be used as “white dressed”

policemen called to face disorder, violence, protest and legal risk and must constantly confirm their dignity and negotiate their own space, role and autonomy in evaluation. But prison is not a health care setting and its mission is different: a direct access to the users is not possible for health professionals, because other professionals have the door's key; the patient is, as in the hospital, "without family", but he has many more impediments to meet his family; the population of prison has a lower mean age, a strong male predominance and a greater presence of foreigners and drugs abusers. Finally, the time of permanence is usually longer.

WO50.2.
COMPULSORY PSYCHIATRIC TREATMENTS IN PRISON

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Psychiatrists working in prison are regularly asked to implement compulsory treatments in agitated, violent prisoners presenting psychological disturbances. This issue arises at various levels: at the level of the prison institution, where it leads to numerous discussions between medical teams and the prison administration; at the level of the elaboration of the health care policy (in what places can such a treatment be ordered and made?); at the legislative level (is a special legislation necessary?); at the ethical level, considering the many questions related to this intervention. Some legislations ban such a treatment within the prison (France), others tolerate it. In any case, the debate is lively between the various concerned partners. The Canton of Vaud changed recently its legislation concerning compulsory treatment by detailing scenarios and modalities of control and appeal. The application of this legislation in prison settings remains vague. Only a rigorous procedure validated by the health authorities can avoid drifts and abuses, but we must avoid that patients remain without care because there is no place for them.

WO50.3.
CAN A EUROPEAN FORENSIC PSYCHIATRY EVER EXIST?

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The issue of treatment and placement of the mentally disordered offenders (MDOs) certainly arises at the European level, involving such crucial issues as the position of the citizen with respect to the penal law; acknowledgement of a special status of the MDOs within the criminal law; the acknowledgement of a public safety interest in the use of coercive measures; the balance between punishment and care; the protection of rights of MDOs and their right to health care. European countries share some common features: all of them have special legislations and systems concerning MDOs, show a slower pace of changes in this area when compared with ordinary services, put the issue at the national level, express concern about the protection of human rights while ensuring public safety, and had similar trends in the development and use of the psychiatric forensic sector during the 1990s. European forensic systems appear much more different than their respective psychiatric ordinary services. Each of them reflects a complex mix of elements coming from the legal background system, health care system, broader welfare system, and their degree of integration. The authors discuss these differences with a view to harmonising objectives, ethical values and clinical practice. Cross-cultural comparisons, joint empirical research and involvement of European political bodies may help in building and consolidating a common European forensic psychiatric knowledge.

WO50.4.
THE ITALIAN DEBATE ON THE TREATMENT OF THE MENTALLY ILL OFFENDER: AN UPDATE

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The complex issue of treatment of mentally ill offenders is analysed referring to the scientific debate still in progress in Italy, with particular reference to the different reform projects of the penal code, and a special focus on the tendency to replace the concept of social dangerousness by that of the necessity of treatment of the mentally ill recognised as not responsible. The most remarkable consideration is that it is necessary to consider both the clinical and forensic aspects, the custody and the treatment, overcoming anachronistic and old fences. There is a particular complexity in conjugating therapy and control, also considering the intrinsic complexity of the violent and criminal behaviour. The authors emphasize the need for a project in which crime prevention can be linked to an individualised rehabilitation and therapeutic intervention by the community services. The need for new protected residential facilities managed in concert with the penal system but integrated in the national health system is also stressed.

WO51.
PHARMACOLOGICAL AND NON-PHARMACOLOGICAL TREATMENT ISSUES CONCERNING SCHIZOPHRENIA IN KOREA

WO51.1.
KOREAN MEDICATION ALGORITHM FOR SCHIZOPHRENIA

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The rapid development of psychopharmacology during the recent years has changed the strategy of pharmacotherapy for major psychiatric disorders. At the same time, an active development of various clinical practice guidelines or algorithms has taken place. However, there may be problems with applying the foreign guidelines directly to our clinical situation, due to the differences in racial characteristics, socioeconomic conditions, government policy, and clinical practice. In addition, the changes of circumstances outside of clinical situation in Korea may distort clinical practice and may go even against the trend of recent psychopharmacology. As a solution to such problems, the Korean Medication Algorithm Project for Major Psychiatric Disorders (KMAP) was started with the support from the Korean College of Neuropsychopharmacology (KCNP) and the Korean Academy of Schizophrenia. In 2001, a medication algorithm for schizophrenia was developed and distributed. We present the objectives, processes, methods as well as the outline of this algorithm for schizophrenia.

WO51.2.
TRENDS IN PHARMACOLOGICAL TREATMENT FOR SCHIZOPHRENIA IN KOREA

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Clozapine and risperidone were introduced in Korea around 1996. After then, olazapine, zotepine, nemonapride, quetiapine, amisulpride, aripiprazole, and ziprasidone became available. A survey done in 1999 showed that the new antipsychotics took up 18.1% of the total number of antipsychotic prescriptions. A survey done among some in-patient units in 2001 showed that the proportion was 27.1%. In 65.9% of cases the new antipsychotic was risperidone. The mean dose calculated by chlorpromazine equivalents was 763.4±546.0 mg. As of now, the proportion of new antipsychotics among the total antipsychotic prescriptions is expected to be even higher. However, the price of new antipsychotics hinders more popular usage. A multicenter study reported that the effective dose for risperidone was 4.9±1.7 mg and that of olanzapine was 15.1±5.4 mg. These findings suggest that effective dosage is not different from those of Western countries. The combination among antipsychotics, either new antipsychotics with typical ones or two or more new antipsychotics, occurred in 31.1% of cases. The rate of extrapyramidal side effects was 31.9% and anticholinergics were prescribed in 68.2% of new antipsychotic users. In the guideline developed for schizophrenia in 2001 by the Korean College of Neuropsychopharmacology and Korean Academy of Schizophrenia, new antipsychotics were recommended as the first line drug. This guideline will affect the trend of antipsychotic prescription.

WO51.3.
THE ROLE OF DRUG COMPLIANCE AND NON-PHARMACOLOGICAL FACTORS IN THE LONG-TERM COURSE OF SCHIZOPHRENIA IN KOREA

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Since the introduction of new antipsychotics in the treatment of schizophrenia, improvement in the short-term efficacy or side effect profile has been repeatedly reported. However, the efficacy of new antipsychotics still remains to be explored in two important aspects: first, whether these drugs are helpful in the prevention of relapse, and secondly, whether they are effective in providing a better quality of life in the long run. In this study, the authors looked into the relationship of antipsychotic compliance and the rate of recurrence and re-admission of schizophrenic patients. The issue of efficacy has been also explored not only in the aspect of improvement of psychotic symptoms, but also in the improvement or the maintenance of psychosocial profile. We found that a significant portion of the schizophrenic patients with good compliance also experienced relapse of schizophrenia, raising questions regarding several issues: the optimal maintenance regimen for schizophrenic patients, the use of appropriate evaluation methods in antipsychotic use, the long-term natural course of schizophrenia, and the importance of the evaluation of non-pharmacological factors in the treatment of patients with schizophrenia.

WO51.4.
MENTAL HEALTH SITUATION AND PSYCHOSOCIAL TREATMENT FOR SCHIZOPHRENIA IN KOREA

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Psychosocial interventions can improve the course of schizophrenia when integrated with psychopharmacologic treatments. However, the application of psychosocial approaches depends not only on the particular needs of a patient in the various phases of the person's life and illness, but also on the context of mental health situation over the countries. Since the enactment of the mental health act in 1995, community-based mental health services have been introduced in Korea, with an increasing range of psychosocial interventions. However, there is still an upward trend in the number of psychiatric beds, especially in mental institutions. Failure of deinstitutionalization made it difficult to focus on psychosocial interventions in inpatient settings. A stepwise and evidence-based process towards integrating pharmacological and psychosocial treatment is required.

WO52.
INPATIENT TREATMENT OF PERSONALITY DISORDERS

WO52.1. PERSONALITY DISORDERS: INDICATIONS FOR HOSPITAL ADMISSION

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This paper reviews the current indications for hospital admission of patients with personality disorders (PD) and compares them with our daily practice. We study non-psychopathological factors involved in the hospitalisation (family pressure, legal risk, lack of other resources, etc.) and analyse the short-term hospitalisation results and their consequences in our practice. We studied the hospitalisation of patients diagnosed with PD in the Hospital Principe de Asturias of Alcala de Henares (Madrid) in a year. We explored the reasons for hospital admission, the characteristics and difficulties of hospitalisations and the rate of re-hospitalisation: all of this was compared with the literature on the topic. The main reasons for hospital admission were self-harm and violent behaviour. We found an important number of admissions due to non-psychopathological factors. The rate of re-hospitalisation was high and the changes observed after the hospital discharge were practically non-existent. According to these results, we question the clinical benefit of short-term hospitalisations of patients diagnosed with PD in psychiatric units. Alternative resources that fit better to the profile of these patients must be sought.

WO52.2.
INPATIENT TREATMENT OF PERSONALITY DISORDERS: MILIEU MANAGEMENT

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The current literature emphasizes the difficulties of the inpatient treatment of personality disorders (PD). In this presentation we shall briefly review the milieu management of personality disordered inpa-

tients. We shall also present our experiences on team work, collaborative approaches, rules/limits/flexibility, and time scheduling for inpatient therapies in PD. We found that the implementation of a clear, explicit set of rules is of major importance in PD inpatient treatment. Also, some kind of flexibility is sometimes helpful. Long hospitalisations can be iatrogenic in many occasions. Using day hospital as a middle step to outpatient treatment can be useful in many cases. A brief, well structured approach to treatment will be helpful in the management of PD. Day hospital treatment can be more helpful, in many cases, than a prolonged inpatient therapy.

WO52.3.
INPATIENT TREATMENT OF PERSONALITY DISORDERS: CURRENT PSYCHOTHERAPEUTIC GUIDELINES

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We aim to review the main clinical and practical issues regarding the current psychotherapeutic approaches for the inpatient management of personality disorders (PD). We will briefly review individual, family, and group short-course therapy approaches. We will also present our experience with a brief, directive, psychoeducational group approach for borderline inpatients. Psychotherapeutic approaches to the treatment of personality disorders are tough to implement, and have a limited success rate. We have found some promising results with psychoeducational group therapy for borderline patients. Due to the limited success obtained with any kind of psychotherapy, we should try only brief approaches, with limited expectations, mainly aimed for crisis resolution and facilitation of a subsequent, long-term, outpatient treatment.

WO52.4.
TREATMENT OF PERSONALITY DISORDERS: ARE THE ATYPICAL ANTIPSYCHOTIC DRUGS A REAL INNOVATION?

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The use of atypical antipsychotic drugs is increasing enormously in some countries like Italy, indicating that these drugs are not prescribed only for schizophrenic patients but are used for personality disorders too. Atypical antipsychotic drugs are ill-defined as a class and have been tested in schizophrenic patients sensitive and resistant to classic antipsychotic agents. Claims by pharmaceutical manufacturers about the superiority of atypical antipsychotics are not backed by adequate trials. They certainly offer an advantage in terms of less extrapyramidal adverse reactions, but this does not mean that fewer patients decide to stop treatment. Particularly worrisome is the weight gain caused by atypical drugs because this may increase the risk of cardiovascular diseases and diabetes. Finally, the atypical antipsychotics cost several times more than the classical antipsychotics and this results in a financial burden for national health services and a switch of funds that could be put to better use for mentally ill patients.

WO53.
AN INTEGRATED RESEARCH-BASED APPROACH TO TREATING FIRST EPISODE PSYCHOSIS (Special Workshop organized by the International Society for the Psychological Treatment of Schizophrenia and other Psychoses, ISPS)

WO53.1.
THE PARACHUTE PROJECT FOR FIRST EPISODE PSYCHOSIS: A FIVE YEAR FOLLOW-UP INCLUDING COST ANALYSIS OF CARE

J. Cullberg, S. Levander, M. Mattsson
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The Parachute project is a Swedish multicenter study for "need-adapted care" of first episode psychosis. Every first episode psychosis patient in 17 areas (n=253) has been evaluated for the study during the years 1996 and 1997 and those accepting to take part in the study (n=175) have been followed up for five years. One historical (n=74) and one prospective comparison group (n=64) (treatment as usual) are also followed up. In addition to clinical and outcome data, a cost comparison has been performed.

WO53.2.
THE DANISH NATIONAL SCHIZOPHRENIA PROJECT. COMPARISON OF THREE MODELS OF INTERVENTION AT TWO-YEAR FOLLOW-UP

B. Rosenbaum
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The Danish National Schizophrenia project is a prospective, longitudinal, multi-centre study, including 562 patients with a first episode psychosis of ICD-10 F-2 type, consecutively referred during two years. Patients were treated with three different interventions: “assertive, integrative psychosocial and educational treatment programme”, “supportive psychodynamic treatment as a supplement to treatment as usual”, and “treatment as usual”. The presentation will contain a comparison of the three modes of intervention after 2 years of treatment.

WO53.3.
TREATING STIGMA: THE DIFFERENTIAL EFFECTIVENESS OF PSYCHOSOCIAL AND BIOGENETIC CAUSAL EXPLANATIONS IN REDUCING NEGATIVE ATTITUDES TOWARD MENTAL ILLNESS

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Treatment of mental health problems is often rendered harder by the stigma faced by clients as a result of being diagnosed as, and treated for, mental illness. Destigmatisation programmes frequently assume that the public should be taught to think of mental health problems in illness terms. The international research shows, however, that the public continues to reject the “medical model”, believing that mental health problems are predominantly caused by adverse life events, especially in childhood. Furthermore, research also shows that biogenetic causal beliefs are associated with greater fear and prejudice than psychosocial causal beliefs. In a recent New Zealand study, a medical model explanation of hallucinations significantly increased perceptions of dangerousness and unpredictability, whereas a psy-

chosocial explanation for the same symptoms reduced such perceptions.

WO53.4.
ANTISTIGMA AS PREREQUISITE FOR EARLY INTERVENTION IN FIRST EPISODE PSYCHOSIS. LESSONS FROM THE TIPS PROJECT

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The presentation will describe the Early Treatment and Intervention in Psychosis Study (TIPS), a prospective longitudinal study of first-onset psychosis from four Scandinavian health sectors with equivalent first-episode treatment. Two sectors carried out an extensive early detection (ED) program, and the other two did not (not-ED). We have included 281 consecutive patients with a DSM-IV diagnosis of non-organic, non-affective psychosis between 1997 and 2000. The duration of untreated psychosis (DUP) was significantly shorter for the ED group compared with not-ED (median 5 weeks vs. 16 weeks). Clinical status was significantly better for patients from the ED sectors, both at presentation and at three months. First results from one year follow-up will be presented. Antistigma strategies will be highlighted.

NEW RESEARCH SESSIONS

NRS1.
PSYCHOTIC DISORDERS (I)

NRS1.1.
TREATMENT OF SCHIZOPHRENIA PRIOR TO THE DIAGNOSIS OF SCHIZOPHRENIA

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Drawing on the results of the Copenhagen Prodromal Study, psychiatric treatment prior to the diagnosis of schizophrenia is described in a group of patients with psychotic schizophrenia spectrum disorders. The Copenhagen Prodromal Study is an ongoing combined pro- and retrospective survey of psychopathology in the schizophrenic prodrome and schizophrenic spectrum disorders. Fifty-one subjects received a diagnosis of psychotic schizophrenia spectrum disorders, but had not received such a diagnosis prior to the inclusion in the study. Two-thirds of these subjects had received some form of psychiatric treatment before inclusion in the study, psychotherapy as well as pharmacological medication. The previously treated versus the untreated group were compared regarding to age, gender, suicide attempts, Global Assessment of Functioning (GAF) and Positive and Negative Syndrome Scale (PANSS) scores, prodromal symptoms, expressive psychopathological phenomena (formal thought disorder, contact disturbances) and subjective psychopathological phenomena (depressive symptoms, anxiety, cenestesias, disturbances of cognition, perception and Self) at the time of inclusion. The various kinds of previous treatments were not predicted by psychotic symptoms, but by other symptoms (e.g. depressive symptoms and anxiety). Despite long-lasting psychotic symptoms, several patients did not receive antipsychotic medication, largely because these symptoms remained unnoticed by doctors or psychologists. It is concluded that psychotic symptoms are missed in patients seeking treatment for other symptoms like depression and anxiety, leading to an underdiagnosis of psychotic disorders. This points to a large potential for early recognition of psychotic disorders, provided that the level of knowledge of the early and manifold symptoms of schizophrenia is raised among practitioners, psychologists and psychiatrists. At present the main ethical concern seems not to be an over-diagnosing of schizophrenia, even though this concern about "false positive schizophrenic" is often mentioned in the discussion of early detection and treatment of schizophrenia.

NRS1.2.
OUTCOME AND ITS PREDICTORS IN SCHIZOPHRENIA BEFORE 35 YEARS OF AGE WITHIN THE NORTHERN FINLAND 1966 BIRTH COHORT

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Follow-up studies of schizophrenia have reported divergent rates of outcome. Because these findings are based on samples from particular hospitals or clinics, their generalizability is limited. Only follow-up of an epidemiologically based cohort can establish the prognosis of schizophrenia in the population. We report outcomes of schizophrenia before age 35 years in a longitudinal, population based birth cohort, and test the prognostic significance of selected demographic, developmental and illness-related variables. All 144 living members of the Northern Finland 1966 Birth Cohort who had a psychotic episode were asked to participate in a field study during 1999-2001. Fifty-nine of participants were diagnosed with DSM-III-R schizophrenia. Interviews and medical records were used to rate measures of outcome, including clinical global impression, social and occupational functioning, positive and negative symptoms, occupational status, psychiatric hospitalizations and medication. Based on available data, outcome was categorized as good/moderate or poor; complete recovery was studied as well. While 25 (42%) cases had good/moderate and 34 (58%) had poor outcome, only one schizophrenia case was considered as fully recovered. Mortality was high before age 35 years: ten cases (10-fold risk) had died (most by suicide). When compared to good outcome cases, cases having poor outcome had earlier age of illness onset and more often genetic risk. To conclude, too few patients have favorable outcome of schizophrenia in this relatively early onset group. Some predictors for good and poor outcome can be found.

NRS1.3.
REACTIVE PSYCHOSIS AND ICD-10 F23 ACUTE AND TRANSIENT PSYCHOTIC DISORDERS: EVIDENCE FROM A REGISTER-BASED STUDY

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ICD-10 F23 "acute and transient psychotic disorders" (ATPD) category integrates several clinical concepts such as *bouffée délirante*, cycloid psychosis, psychogenic (reactive) psychosis, schizophreniform psychosis, into the diagnostic paradigm of acute transient psychoses. ATPD nomenclature remains as uncertain as their clinical validity. The purpose of this study was to evaluate the relationship between the concept of reactive psychosis (RP), equivalent to a main ICD-8 diagnosis of 'other psychoses' (298), and ATPD. Subjects with an ICD-8 298 diagnosis on their last admission in 1992-93 and re-admitted in

1994-95 according to ICD-10 classification were identified from the Danish Psychiatric Register. ICD-8 diagnosis of RP was coded in 19.2% of patients with functional psychoses in 1992-93. Nearly 40% of these patients were re-admitted in 1994-95. F2 schizophrenia, schizotypal and delusional disorders and F3 affective disorders groups accounted for two thirds of ICD-10 diagnoses assigned. Diagnosis of ATPD was found in 262 (20%) cases, with a higher proportion of F23.3, F23.0, and F23.9 sub-categories. A significant majority were female and life events preceding acute psychosis occurred in a few cases. ATPD overall prevalence decreased to 8.7% of non-organic psychotic and affective disorders in 1994-95. A retrospective survey of such patients revealed that nearly a quarter of them had a previous admission and more than half (53%) were given the RP diagnosis, mainly ICD-8 298.3 acute paranoid reaction. ICD-8 diagnosis of RP showed little empirical continuity to ATPD and conformed more to F23.3 acute delusional disorders among ATPD subtypes.

NRS1.4.
EARLY SIGNS IN SCHIZOPHRENIA SPECTRUM DISORDERS

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Non-specific early indicators of illness and psychological distress often occur prior to the onset of psychotic symptoms in schizophrenia spectrum disorders. In this presentation we examine whether the nature of such early signs have implications for the course of the psychotic disorder. The frequencies of various early signs were examined in 96 first episode patients suffering from schizophrenia, schizoaffective or schizophreniform disorder. A factor analysis of these early signs identified five dimensions of early signs, including emotional dysphoria and odd perceptual and cognitive content; impaired functioning; changes related to psychobiological or vegetative functioning; suspiciousness accompanied by difficulties in concentration; and irritability. Impaired functioning in the pre-psychosis period was associated with higher levels of negative symptoms at presentation for treatment, and higher levels of psychobiological disturbance was associated with lower positive symptoms of psychosis after a year of treatment. The latter findings may indicate that patients with more profound indications of affective disturbance or stress have a better prognosis.

NRS1.5.
PERSISTENT NEGATIVE SYMPTOMS IN FIRST EPISODE PSYCHOSIS: EARLY IDENTIFICATION OF A POOR OUTCOME SUBGROUP OF SCHIZOPHRENIA SPECTRUM PSYCHOSES

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Patients with schizophrenia who show persistent negative symptoms are an important subgroup with generally a poor functional outcome but difficult to identify early in the course of illness. The objective of this study was to examine characteristics which discriminate between first episode psychosis (FEP) patients in whom primary negative symptoms do or do not persist after one year of treatment. In a large sample of patients (n=156) with a DSM-IV diagnosis of FEP, those whose primary negative symptoms did (n=36) or did not (n=35) persist at one year were contrasted on their baseline and one year characteristics. Results showed that patients with persistent primary negative symptoms (n=36) had a significantly longer duration of untreated psychosis (DUP) ($p<0.005$), a worse pre-morbid adjustment during early ($p<0.001$) and late adolescence ($p<0.01$) and a higher level of affective flattening ($p<0.01$) at initial presentation compared to patients with transitory primary negative symptoms. The former group also showed significantly lower remission rates at one year ($p<0.001$). Multiple regression analysis confirmed the independent contribution of DUP, pre-morbid adjustment and affective flattening at baseline on the patients' likelihood of developing persistent negative symptoms. It may, therefore, be possible to distinguish a sub-group of FEP patients, whose primary negative symptoms are likely to persist, on the basis of characteristics shown at initial presentation for treatment. However, further neurobiological investigations are warranted to establish a putatively different pathophysiology underlying the development of this subgroup so that more appropriate treatment can be designed to influence its outcome.

NRS1.6
THE SCHIZOPHRENIA DIAGNOSIS AS A BASIS FOR TREATMENT FROM A POLYDIAGNOSTIC PERSPECTIVE

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In a review of more than 40 polydiagnostic studies on schizophrenia, the rate of schizophrenia by each definition, the interrater reliability, the concordance between the definitions, and the validity (e.g. prospective) are compared. Generally, the number of patients by each definition varies considerably, and the number of 'core schizophrenia' cases shared by all definitions is limited. Except for some outcome studies, disappointingly few validation studies are found. Schizophrenia by modern criteria (DSM-IV and ICD-10) appears to be poorly validated and arbitrarily demarcated. The implications for early detection and treatment are discussed.

NRS1.7.
DURATION OF UNTREATED PSYCHOSIS AND COURSE OF CHILD AND ADOLESCENT PSYCHOTIC DISORDERS

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The study aimed to examine the course of child and adolescent first psychotic episode in relation to the duration of untreated psychosis (DUP). From a one year longitudinal, prospective study with different sites in Austria, Switzerland, and Germany, 58 subjects aged 11-18 were drawn with early onset psychotic disorders. Diagnosis was based on the Structured Clinical Interview for DSM-IV (SCID-I) according to DSM-IV criteria. Participant's course was observed at two timepoints. Youths with schizophrenia (n=24), schizophrenia spectrum disorders (n=27), affective disorder with psychotic symp-

toms (n=7) were included. We found correlations between parents' and raters' estimates of DUP, and a limited range of predictive value of DUP for symptoms and general measures for overall outcome after one year. Gender differences in DUP were observed. These data suggest that the concept of DUP is very general but of relevance for outcome in psychosis.

NRS2.
PRIMARY CARE AND LIAISON PSYCHIATRY

NRS2.1.
CLIMATE/GP: BUILDING CAPACITY TO TREAT ANXIETY AND DEPRESSIVE DISORDERS IN PRIMARY CARE

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Less than half the people with anxiety or depressive disorders get medical help with their disorder, even though most attend a general practitioner for other reasons. Australia has striven to improve recognition and treatment of these disorders by general practitioners and, while recognition and prescribing has improved, there remains a shortfall in necessary psychotherapy skills. We have developed a computerised patient education system that teaches the cognitive behaviour therapy steps that are an essential component of treatment for people with these disorders. Some patients do these programs in the doctor's office and others, acting on prescription from the doctor, can do the programs at home while connected to the Internet. There are five depression modules that target people of different ages and gender, and three modules for anxiety (for panic/agoraphobia, social phobia and generalised anxiety disorder). Each module takes four or five sessions to complete. The sessions are interactive, and begin by measuring symptoms, checking homework from a previous session and then educating about the disorder by using an illustrated story line akin to an Asterix or Tintin book. Finally, homework is printed. The story lines can be viewed on www.climate.tv.

NRS2.2.
FREQUENCY OF CONSULTATIONS AND GENERAL PRACTITIONER RECOGNITION OF PSYCHOLOGICAL SYMPTOMS

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General practitioners (GPs) are widely reported to "miss" half the psychological problems in their patients. This study aimed to describe the relationship between consultation frequency and general practitioner recognition of psychological symptoms. A survey of 70 randomly selected GPs and 3414 of their patients was conducted in the lower North Island of New Zealand. Of GPs selected, 90% participated. The Composite International Diagnostic Interview (CIDI) was completed for 70% of selected patients. In patients with a CIDI-diagnosed disorder, 63.7% (95% confidence interval (CI): 53.3-74.1) were considered by the general practitioner to have had psychological symptoms in the last year; 40.1% (CI: 31.0-49.2) to have had clinically significant psychological problems, and 33.8% (CI: 24.9-42.6) were given an explicit diagnosis. However, in those CIDI-diagnosed patients who had been seen five or more times during the last year, these recognition figures increased to 80.2% (CI: 68.9-91.4), 59.4% (CI: 45.9-72.9) and 53.6% (CI: 40.1-67.1) respectively, and dropped to 28.8% (CI: 13.0-44.7, 13.6% (CI: 3.4-23.7), and 10.7% (CI: 1.4-19.9) among patients not consulting during the last year. GPs often differed from the CIDI in their assessment of clinical significance and diagnosis. GP non-recognition of psychological problems was at a problematic level only among patients with little recent contact with the GP. Efforts to improve patient outcomes by addressing GP recognition of mental disorder may be more effective if they foster continuity of care, focus on the disorders most likely to be missed, take into account high levels of comorbidity of common mental disorders, encourage patient disclosure of psychological issues, and target new or infrequent attenders.

NRS2.3.
THE EFFICACY OF ENHANCED COUNSELLING IN THE PRIMARY PREVENTION OF HEPATITIS C AMONGST INJECTING DRUG USERS: A RANDOMISED CONTROLLED TRIAL

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This study aimed to assess the efficacy of enhanced counselling in the prevention of hepatitis C amongst injecting drug users, as compared with a brief, informational intervention. It was a randomised controlled trial, with participants stratified into two groups by self-reported recent sharing behaviour. The enhanced counselling group received up to four one-hour sessions of manual-guided therapy, based upon harm-reduction strategies and techniques of motivational interviewing, delivered by trained therapists. The simple educational counselling group received one ten-minute session of purely informational, didactic intervention on the risks of hepatitis C and ways in which these could be minimised. The setting consisted of nine local drug treatment agencies in London and the South-West, plus one inpatient treatment centre. The subjects were 95 drug users who had injected at least once in the past six months, and who had a test within the last three months to confirm that they were currently hepatitis C seronegative. Primary outcome measurement was seroconversion rate at twelve months. In addition, measures of change in self-efficacy and risk-taking behaviour, along with the overall cost-effectiveness of each intervention, were measured using a battery of standardised research tools. Follow-ups are still ongoing, with data on the first 33 recruited clients analysed so far. Preliminary findings indicate little difference between the two groups, although both groups exhibited improvements in most areas over time, and seroconversion rates were significantly lower than expected. Compliance with enhanced counselling was a significant problem. The cohort analysed so far is too small to draw any firm conclusions about the efficacy of enhanced counselling, although early indications are that it may not perform significantly better than a simple educational intervention, and background effects such as ongoing treatment and the process of testing for hepatitis C may be enough to initiate positive change.

NRS2.4.
SUBSTANCE ABUSE AMONG ADOLESCENTS AND CRITICAL ROLE OF COUNSELLING

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During the last few years, there has been a remarkable increase in the use of psychoactive drugs and alcohol in our society, particularly among youths. The management of substance related disorders and

disorders associated with alcohol is a multidisciplinary approach. The role of psychotherapy and counseling is important. Counseling is an act of assistance and is a particular form of brief psychotherapy based on humanistic-existential theory. By counseling an individual is assisted to become self-sufficient, self-dependent, self-directed and to adjust efficiently to the demands of a better and meaningful life. In the management of substance abusing persons, early detection and evaluation is essential, which has to be followed by predetoxification counseling, detoxification, after care, follow-up and rehabilitation along with psychologist counseling. Substance and alcohol abuse frequently coexist with other psychiatric conditions, which are often difficult to detect and evaluate. During management, including counseling, dependence and tolerance already developed with different chemicals and alcohol are important to consider. The chances of polydrug abuse, denial, relapse and coexisting mental disorders or behavioural problems are to be kept in mind. Counseling with family members and group counseling will help in family and social rehabilitation. Psychoanalytically oriented psychotherapy, behaviour therapy, cognitive therapy, interpersonal therapy are also useful for substance abusers and alcohol dependent patients. Adequate and proper relapse prevention strategies are to be considered during counseling of substance abusers and alcohol dependent persons. Psychosocial intervention through counseling is to be done for prolonged maintenance of total sobriety. Individual psychotherapy and counseling is needed, but group therapy may be more effective and acceptable to many patient who perceive substance abuse or alcohol dependence as a social problem rather than a personal psychiatric problem. To make counseling meaningful and effective, an empathetic attitude of family and community members is essential.

NRS2.5.
DISTURBANCE OF EMOTIONAL EXPERIENCE AS PRIMARY DISORDER IN OPIATE ADDICTS

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Many studies report a frequent association between affective or personality disorders and opiate dependency. However, the question of direction of causality is still unsettled. The present study was aimed at the investigation of emotional experience, for the description of which we used a modified version of the Bartlett and Izard's Scale of Differential Emotions (SDE). The study sample consisted of 56 opiate addicts, 41 depressive patients and 69 healthy subjects of the same age. The average scores for 10 emotional states in addicts was significantly lower than in healthy subjects (3.7±0.16 versus 4.2±0.34; $p<0.001$) and higher than in depressive patients (3.7±0.16 versus 3.5±0.35; $p<0.01$). Emotional exertion in addicts was lower than in healthy subjects and similar as in depressive patients. Emotional devaluation and secondary emotional undifferentiation were more frequent in addicts. The proportion of so-called rejected emotional attributes in addicts was higher than in healthy subjects (25.0% vs. 8.0%; $p<0.001$) indicating the tendency to suppress some emotional experiences (grief, fear, shame). The experience of opiate intoxication was characterized by the highest emotional exertion (4.5±0.17). Thus, disturbance of the emotional experience in opiate addicts appears as the primary disorder and develops in two ways: a) reduction of the emotional exertion, or the "depressive way"; b) emotional devaluation and undifferentiation with emotional perversion, or the "personality regressive way".

NRS2.6.
LEARNING DISABILITIES, ANTISOCIAL PERSONALITY DISORDER, AND SUBSTANCE USE DISORDER: FINDINGS FROM A 20 YEAR FOLLOW-UP STUDY

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This study reports on the 20-year follow-up of a group of children originally assessed at the age of 5 with speech and language impairments and a group of matched controls without speech and language impairments. The original one in three survey of all 5-year-old English-speaking children was conducted in 1982 in Ottawa, Canada. Each participant received comprehensive testing of cognitive, academic, behavioural, and psychiatric variables at age 5, 12, 19, and 25. The participation rate at the 20-year follow up was 85% of the original cohort. Using the Composite International Diagnostic Interview, we identified a group of participants from the original cohort with antisocial personality disorder and substance use disorder at age 25. Using independent variables obtained at age 5, 12 and 19, we developed a multivariate model predicting to young adult substance use disorder and antisocial personality disorder. The findings reveal that persistent learning disabilities are significantly more salient for substance use disorder in late adolescence than in young adulthood, while persistent learning disabilities continue to be salient for antisocial personality disorder, both in young adolescence and young adulthood.

NRS2.7.
COPING METHODS OF HIV/AIDS PATIENTS IN TURKEY

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We investigated coping strategies in 46 HIV-positive patients followed and treated in Hacettepe University Infectious Diseases Clinics and Health Ministry Ankara Numune Hospital's 1st and 2nd Infection Clinics. The data was collected through face to face interviews, patient information forms and the Ways of Coping with HIV(+)/AIDS Scale between September 25 and December 25, 2002. We found that the coping method most used by the patients was cognitive avoidance. Higher education was associated with positive coping and information seeking; unemployment, living alone, being in the symptomatic stage, having lost a beloved due to AIDS, having family relations problems, having future plans adversely affected, and being confronted with negative attitudes and behaviors of the treatment team, were associated with the palliative coping method.

NRS2.8.
HEALTH CARE COST IN SOMATOFORM DISORDERS

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We evaluated the health care costs in patients with somatoform disorders in comparison with patients affected by physical illnesses, screened in primary care. Forty-two patients with somatoform disorders and 65 patients with physical illnesses, aged over 60, were consecutively recruited. Several assessment instruments were used to evaluate the psychic state of all the subjects. The costs supported by the national sanitary service for laboratory assays and therapy over a six months follow-up were evaluated. A significant difference was observed only regarding laboratory assays (higher costs in physical illnesses group; $p<0.001$). No difference was found concerning the cost of therapies. In conclusion, health care costs were lower for patients with somatoform disorders than for those with somatic illnesses.

NRS3.
COMMUNITY PSYCHIATRY (I)

NRS3.1.
INTEGRATED PSYCHIATRY: EVIDENCE-BASED RECOVERY OF INDIVIDUALS AND SYSTEMS

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The results of a 2-year randomised controlled efficacy trial with five year follow-up in schizophrenia, mixed with more than 20 years of Swedish clinical expertise and patient values and cost analyses of all the individual patients and a qualitative study of interpersonal interaction between practitioners. Those are the original evidence-based ingredients of "integrated psychiatry", the revised Swedish version of "integrated care": a mental health production concept for evidence-based recovery, early intervention and secondary prevention in severe mental illness. "Integrated psychiatry" is a comprehensive program for the combined treatment, care and rehabilitation by medication and psychosocial interventions, a curriculum for the postgraduate education of professionals and empowerment of users, schemes for program fidelity and quality control, and a computer supported design for the follow-up of effectiveness. The recovery process is founded on robust procedures for shared decision-making in resource groups: a model for the practitioner-patient/user collaborative relationship in the 21st century in Scandinavian public health welfare? On a system level similar co-operation between political intentions and professional know-how should create local "one-stop-provider-stations". The main on-site operating units for the delivery of "integrated psychiatry" are small mobile assertive outreach teams, the mission of which is personalised by the personal practitioners, coaching the unique resource groups of every single patient. The new research findings have been implemented in clinical practice by a generalist assertive community treatment team with a total responsibility for all kinds of mental disorders in Lysekil, Sweden. The 10-year Lysekil experiences and the generalisations to European public health settings are to be discussed.

NRS3.2.
REHABILITATION IN PSYCHIATRY: HOW RELEVANT IN THE PRESENT, HOW VIABLE FOR THE FUTURE?

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Rehabilitation in psychiatry shares a basic characteristic of the medical model and of *treatment* at large: specific interventions are performed *by* professionals *on* clients. But, at the same time, it offers the opportunity for a deeper involvement and participation on the part of the client. In its alternative meaning, in fact, rehabilitation refers to the restoration of one's own rights lost or forfeited. It thus entails client's processes of insight, self-acceptance, redeeming, repair of self-esteem and involvement in self-advocacy. In a number of contexts, concepts like treatment and cure have been joined or even replaced by different perspectives, related to *recovery*. Sensible clients, once supported and reassured by self-help initiatives where they eventually find a sense of belonging, become critical of goals and criteria of success set by others, including professionals, currently referred to as *outcome*. On the other side, common and appreciated types of rehabilitative programs perform poorly under evidence-based scrutiny. A few cognitive-behavioral or psychoeducational approaches pass the test, but at the expense of conservative goals and molecular scopes to make the protocol suitable for empirical study. Thus current rehabilitation practices face both clients' and scholars' disrepute, maybe without real fault. It could just be high time for revisiting the founding values of rehabilitation by always asking the clients what *they* need and want and sticking with that, by encouraging their partnership to identify individual goals and appraise their achievements, by questioning commonly-accepted, standardized criteria of outcome and investigating other, more individualized and normalizing ones. After all, by changing the frame of reference as to goals and criteria of evaluation, Van Gogh may turn out as either a poor-outcome psychiatric case, actually a casualty, or an all-time genius. The presentation will include a review of the literature on the heuristics of psychiatric rehabilitation and of studies on its efficacy and effectiveness.

NRS3.3.
PSYCHOSOCIAL REHABILITATION – A NEW UNDERSTANDING IN DEVELOPING COUNTRIES

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There is increasing recognition that many medical illnesses, including psychiatric disorders, are chronic in nature. Their treatment will have both an acute and a long-term component. Long-term management of deficit states requires a variety of interventions, psychosocial as well as pharmacological. Psychosocial rehabilitation is gradually gaining ground in developing countries like India. The practice of psychosocial rehabilitation seems deterred by financial problems, lack of trained personnel, attitudes of staff and family members. However, in our country custodial care of mentally ill is being shifted to therapeutic care and rehabilitation of the patient through psychosocial intervention. Psychosocial rehabilitation is practiced in our center through a program called CARE (Counseling And Rehabilitation Exercise). Rehabilitation is of three types: individual based psychosocial intervention, family based psychosocial intervention, community

based psychosocial intervention. Resistance handling, skills training, psychoeducation, mid-way homes, sheltered workshops, community awareness and resource mobilization are gaining more importance. With the introduction of the new mental health act, much stress has been focused on mental health and welfare law.

NRS3.4.
HOME BASED MENTAL HEALTH CARE: CAN WE DISTINGUISH EFFECTIVE INGREDIENTS?

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Over 90 high quality studies of home based care for mental illness have been published world-wide. Their results have been mixed and there has been a vigorous debate to try and understand these differences. Much of the controversy has centred on the greater reductions in bed usage reported in North American studies (often of assertive community treatment) compared to European studies. We undertook to try and identify the factors driving these reported differences. We also approached study investigators to get a more detailed clarification of the components of the services they reported and to individually test these components to see which were common in experimental services and, using regression analysis, to see if any were more highly associated with reduction in bed usage than others. Nineteen characteristics of home based care services were identified by a consensus exercise among local experts. Over 60 researchers replied with characteristics of their study services. Of these, 6 factors were found to occur most frequently in studies. Two loose 'clusters' can be identified within these 6 factors. Regression analysis indicates that two of them –'home visiting' and 'responsibility for health and social care' – are most responsible for reducing bed occupancy, irrespective of health care culture. These findings, along with the findings about the role of control services, sharpen our focus on what may make a difference and also explain some anomalous results and help direct further research.

NRS3.5.
COMMUNITY INTENSIVE THERAPY TEAM VERSUS INPATIENT SERVICES

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Our community intensive therapy team (CITT) has been formally operational since April, 1998. CITT takes referrals from generic teams of the child and adolescent mental health services covering an area of 420,000 population. CITT is made of medical and nursing staff. CITT takes cases with acute psychoses, eating disorders, cases with the potential to develop personality disorder and complex cases of autistic spectrum disorder, attention deficit hyperactivity disorder or looked after children with complex mental health concerns. The team worked with 23 eating disorder patients and 15 psychotic cases. We assess, investigate, medicate, monitor and support the patient and family at home. We take the case back promptly in the case of a relapse. We 'titrate' our therapeutic in-put to the ability of the patient and family to make use of therapy. We invest heavily in liaising with other agencies. The management is based on forging a therapeutic relationship between the CITT and the patient, family and professionals. In this relationship CITT attempts to be: consistent, available, responsive, clear in communication, and appropriately reciprocating. The paper describes the history of how CITT came to being, how it functions, the outcome to date and the future.

NRS3.6.
RESIDENTIAL FACILITIES FOR THE ELDERLY IN ITALY: A SURVEY IN FIVE REGIONS

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The 'PROGRES-Anziani' (PROGetto RESidenze – Residential Project for the Elderly) is aimed to survey the main characteristics of all residential facilities for the elderly in five Italian regions (Phase 1), and to assess in detail a representative sample of facilities and residents (Phase 2). In Phase 1 structured interviews were conducted with the managers of all residential facilities located in five regions (Calabria, Sardinia, Sicily, Umbria and Veneto). In Phase 2 a random sample of facilities is being assessed in detail and residents (n=1,800) are being administered the Resident Assessment Instrument (RAI), an international multidimensional instrument to assess elderly residents, and a set of specific instruments to evaluate cognitive and behavioural problems. In 2003, in the five regions involved in the survey (out of 21), there were 747 residential facilities; preliminary data are available for 620 facilities (82.9%), with a total of 30,265 beds and a median number of 34 beds for each facility. The mean age of residents was 78.4 years ($\pm$6.7). In 512 facilities (83.1%) there was at least one resident with dementia; the median number of residents with dementia-related disorders was 11. In 376 facilities (61.0%) there was at least one resident with other severe psychiatric disorders; the median number of residents with other psychiatric disorders was 5. In conclusion, residential facilities for the elderly host a substantial number of aged subjects; in most facilities there are subjects with dementia and other severe psychiatric disorders. A closer look at this vulnerable population is needed in order to meet their specific needs and improve their quality of life.

NRS4.
BIOLOGICAL RESEARCH

NRS4.1.
DRD4 RECEPTOR GENE EXON III POLYMORPHISM IN INPATIENT SUICIDAL ADOLESCENTS

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Some studies have suggested the possible association of the dopamine receptor subtype 4 (DRD4) gene exon III 48bp repeat polymorphism with novelty seeking behavior. As suicidal behavior in adolescents is linked to risk taking behavior, we evaluated the association of suicidality with DRD4 polymorphism in Israeli inpatient suicidal adolescents. Sixty-nine inpatient adolescents who recently attempted suicide were assessed by structured interview and rating scales for detailed clinical history, diagnoses, suicide intent and risk, impulsivity, violence, and depression. The frequency of DRD4 alleles was compared between the suicidal inpatients and 167 healthy control subjects. No significant association between the DRD4 polymorphism and suicidal behavior was found. Analysis of the suicide-related measures demonstrated a significant difference in depression severity between suicidal inpatients homozygote and heterozygote for the DRD4 alleles ($p=0.003$). The relevance of this finding to increased depression severity in suicidal adolescents, if replicated, is as yet unclear.

NRS4.2.
GLUCOCORTICOID RECEPTOR TRANSGENIC MICE ARE MODELS FOR DEPRESSION

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Impaired glucocorticoid receptor (GR) signaling is a postulated mechanism for the pathogenesis of major depression. Since in vivo expression and functional studies of GR are not feasible in humans, we have generated different mouse strains that over- or underexpress GR. This presentation will summarize neuroendocrinological and behavioral findings that have been obtained in two mouse strains that turned out to be highly interesting for depression research: a) mice that lack GR selectively in the central nervous system show a disinhibition of the hypothalamic-pituitary-adrenal (HPA) system similar to depressed patients, but reduced anxiety and despair behaviour; due to the lack of GR in the brain, they represent a behavioural model for a depression-resistent mouse strain; b) heterozygous mice that underexpress GR exhibit normal baseline behaviors, but after stress exposure they demonstrate helplessness and despair; similar to depressed patients they show a disinhibition of the HPA system and a pathological desamethaxone/corticotropin releasing hormone test. Thus they represent a murine depression model with good face and construct validity. These mice can be used to study long-term plasticity changes underlying the pathogenesis of depressive episodes. Using modern genomic or proteomic techniques they may turn out to be valuable tools to detect new molecular targets for antidepressive therapy, and thus open new therapeutic avenues for faster and better treatment with less side effects.

NRS4.3.
EFFECT OF WORRY ON CEREBRAL BLOOD FLOW IN NORMALS AND IN PATIENTS WITH GENERALIZED ANXIETY DISORDER

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Worry is an uncontrollable, verbally mediated, analytic-cognitive activity concerning potentially hazardous future events. In anxiety disorders, and particularly in generalized anxiety disorder (GAD), worries become excessive and often unrealistic and may generalize to situations that, ordinarily, are not regarded to be dangerous. We are presenting results of several studies that examined the effect of worrisome, in contrast to neutral, thoughts on regional cerebral blood flow, using functional magnetic resonance imaging (fMRI) and positron emission tomography (PET). When normal subjects were permitted to worry undisturbed for several minutes over a personal topic, regional cerebral blood flow (rCBF), measured with PET, was activated in medial-orbital prefrontal regions but inhibited in limbic regions, regions generally activated by anxiety. These findings confirm clinical evidence that worry is an avoidance mechanism that helps to attenuate more severe manifestations of anxiety through the inhibiting effect of the prefrontal cortex on the limbic system. However, this inhibitory mechanism may fail in anxious patients. Repeated listening to worry, as well as neutral, sentences led to stronger fMRI blood oxygenation level-dependent (BOLD) responses in GAD patients than in normals in prefrontal, limbic/paralimbic and pontine regions, indicating in patients a more intense activation of areas that process cognitive/emotional information and affective responses. Anxiety reduction after treatment with citalopram led to BOLD reduction while listening to worry and to neutral sentences. Thus, heightened anxiety caused poor discrimination between inputs describing adverse and harmless conditions, which improved after reduction of anxiety. The results of the studies confirm the clinical impression of "generalization" of anxiety responses in GAD patients, which is sensitive to pharmacotherapy.

NRS4.4.
ANTI-PANIC TREATMENTS: DO THEY EXERT THEIR EFFECTS VIA THE RESPIRATORY SYSTEM?

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Breathing is one of the main systems involved in the phenomenological and biological features of panic disorder. Klein's theory hypothesizes that panic attacks result from an abnormally lowered threshold of a specific suffocation monitor. We hypothesize that the anti-panic properties of the anti-panic drugs could result from an action of these compounds on the respiratory system. Neurotransmitters can modulate this complex system and several studies reported a relationship between the neurotransmitters' modulation and CO_2 sensitivity. Carbon dioxide sensitivity and respiratory function are influenced by several neurotransmitters, including serotonin, GABA, norepinephrine and acetylcholine, the most important neurotransmitters modulated by anti-panic drugs. Several studies investigated the effects of psychotropic drugs on the response stimulation with hypercapnic gas mixtures. Two lines of research have been developed: the first investigated changes of some physiological responses to the inhalation of CO_2 before and after anti-panic treatment, while the second investigated the modulation of the panic/anxiety response to CO_2 inhalation by psychotropic drugs. Both showed a "normalization" of the respiratory function after treatment with anti-panic drugs. Recently, some studies have shown a higher level of irregularity and complexity in respiratory functions of patients with panic disorder compared to healthy controls, supporting the idea of an abnormal regulation of the respiratory system as a key mechanism in panic disorder. Preliminary results from our centre showed that paroxetine treatment causes a significant decrease of the irregularity of tidal volume and minute ventilation patterns, compared with pre-treatment condition, in patients with panic disorder. This decrease in the breathing pattern irregularity suggests that a modulation of the respiratory function caused by the serotonergic activity of paroxetine could be an important mechanism of the anti-panic effect of this drug. The regulation of breathing irregularity might be considered as an expression of a "normalization" of the deranged pathogenetic mechanisms underlying panic disorder. Although the serotonergic system influences the function of many brain areas involved in the regulation of body functions, serotonin receptors have been found in many body organs other than the brain: serotonin transporters are expressed on human pulmonary membranes, are important in the maintenance of patent upper airways in obstructive sleep apnea and influence phrenic nerve activity. Sertraline was able to decrease dyspnea in seven patients with chronic obstructive pulmonary disease, and paroxetine relieved respiratory symptomatology of patients with obstructive sleep apnea. Thus, serotonergic compounds could also exert their anti-panic properties via modulation of peripheral organs.

NRS4.5.
THIRD TRIMESTER EXPOSURE TO SEROTONIN REUPTAKE INHIBITORS INCREASES THE RISK FOR PERINATAL COMPLICATIONS AND IS ASSOCIATED WITH CHANGES IN MOTOR QUALITY IN INFANCY

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The primary objective of the study was to compare the birth and developmental outcomes of children exposed to selective serotonin reuptake inhibitors (SSRIs) during the first trimester (n=12) with those of children exposed to SSRIs during the third trimester of pregnancy (n=37). Information regarding delivery and neonatal course was collected from obstetric and neonatal medical records. Children, mean ages 14-15 months, underwent neurologic and dysmorphology examinations and were tested using the Bayley Scales of Infant Development (BSID-II). Children with late exposure had a shorter gestation (38.8 vs. 39.8 weeks; $p<0.016$) and lower Apgar scores at 1 min ($p\leq0.001$) and 5 min ($p\leq0.001$) and a third of newborns with third trimester exposures were admitted to neonatal care units as opposed to none among first trimester exposures. Frequencies of major and minor structural anomalies were similar. Bayley Scales Mental Development Indices (MDI) scores were comparable. Lower scores were observed on the Bayley Scales for behavioral motor quality ($p<0.001$) in the late exposure group. The higher rate of neonatal adaptation problems in children exposed to SSRIs late in gestation, compared to children exposed during the first trimester, and the motor changes in early infancy suggest that SSRIs should be used judiciously during pregnancy.

NRS4.6.
FUNCTIONAL BRAIN IMAGING OF PREPULSE INHIBITION

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Inhibition deficits have been consistently demonstrated in a broad spectrum of neuropsychiatric conditions where altered dopamine neurotransmission has been implicated. This is thought to result in impaired 'sensory motor gating', a physiological measure of inhibitory brain processes. Traditionally, sensory motor gating is measured using prepulse inhibition of the acoustic startle eye-blink response. However, this measure is limited in terms of assessing individual elements of the neural networks underlying sensory motor gating. Functional brain imaging, on the other hand, offers the potential to address these limitations. For example, our positron emission tomography data indicate increased prefrontal regional cerebral blood flow (rCBF) in association with a prepulse presented at short lead intervals (e.g. 120ms) when compared to a no-prepulse baseline and a 480ms prepulse condition, respectively. By contrast, rCBF in the primary auditory cortex followed the opposite pattern, thus resembling the responses assessed by the auditory startle eye-blink reflex. This pattern was confirmed when adapting the procedure to the magnetic resonance environment. We found significantly increased right inferior frontal activation associated with the 120ms prepulse condition when contrasted with the 480ms prepulse condition, while the reverse contrast confirmed bilateral temporal lobe and left cerebellar activation suggesting less activation in the 120ms prepulse condition when contrasted with the 480ms prepulse condition. These findings suggest a fronto-temporal mechanism of cortical prepulse inhibition, which may help to explain attention modulation effects and its impairment in various neuropsychiatric conditions.

NRS4.7.
EXECUTIVE FUNCTIONS AND PSYCHOPATHOLOGICAL FEATURES OF IMPULSIVITY IN BORDERLINE PERSONALITY DISORDER

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Borderline personality disorder (BPD) is characterized by a pervasive pattern of impulsivity, affective dysregulation and disturbed relatedness. As the abilities of mentalization and the reduction of inhibitory factors (executive functions) are all subfactors which contribute to impulsivity, the present study examined BPD patients with a neuropsychological assessment of executive functions and a self-report evaluation of impulsivity. 70 in- and outpatients (25 males and 45 females, mean age 37.25±4.73 years) with a BPD diagnosis according to DSM-IV criteria were examined using the Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II) and the Global Assessment of Functioning (GAF) to evaluate the severity of borderline symptomatology and the global functioning; the Barratt Impulsiveness Scale to assess impulsivity; the Wisconsin Card Sorting Test, the Stroop Colour Word and the Standard Progressive Matrices to assess executive functions. The severity of borderline symptomatology was positively correlated with impulsivity. Cognitive impulsivity at Barratt Scale was negatively correlated with executive functions. Clinical symptomatology and global functioning were negatively correlated with executive functions. The results obtained suggest that neuropsychological and psychometric assessment of executive functions and impulsivity may help to define two typologies of BPD subjects with different psychopathological features. BPD patients with intact executive functions showed a less severe clinical picture; the integrity of executive functions seemed to exert a softening effect on the severity of clinical symptomatology and on impulsive expressions. On the contrary, BPD patients with executive dysfunction showed more severe clinical symptoms, social dysfunction and impulsivity.

NRS5.
MOOD DISORDERS (I)

NRS5.1.
PREVENTING RELAPSE IN RECURRENT DEPRESSION USING COGNITIVE GROUP THERAPY: A RANDOMIZED CONTROLLED TRIAL

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This presentation reports on the outcome of a randomized controlled trial of cognitive therapy (CT) to prevent relapse/recurrence in a group of high risk patients diagnosed with recurrent depression. Recurrently depressed patients currently in remission following various types of treatment (n=187) were randomized to treatment as usual (TAU),

including continuation of pharmacotherapy, or to TAU along with brief CT. Relapse/recurrence to major depression was assessed over two years. Adding CT to TAU resulted in a significant protective effect, which was amplified when patients had experienced more depressive episodes previously. For patients with five or more previous episodes (41% of the sample), CT reduced relapse/recurrence from 72% to 46%. Our findings extend the accumulating evidence that cognitive interventions following remission can be useful in preventing relapse/recurrence in patients with recurrent depression.

NRS5.2.
THE EFFECTIVENESS OF THE TREATMENT OF DEPRESSION WITH ANTIDEPRESSANTS, PSYCHOTHERAPY OR COMBINED THERAPY

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The issue whether combining antidepressants and psychotherapy is more effective than either of these treatment modalities alone in mild to moderate depression has not been resolved. Data are presented from two consecutive randomized controlled trials investigating this question. Pharmacotherapy comprised fluoxetine or venlafaxine as the first antidepressant. Psychotherapy consisted of 16 sessions of short psychodynamic support therapy. 263 patients were included in the two trials. Analyses were performed using the last observation carried forward procedure. Rates of recovery, defined as a Hamilton Depression Rating Scale score of less than 7, were 24% for pharmacotherapy, 31% for psychotherapy and 40% for combined therapy. Defining response rate as an improvement of at least 1 standard deviation on the Short Check List-90 (SCL-90) subscale of depression, the results were 44%, 61% and 73% respectively. Results were not related to depression severity and duration. It is concluded that combined treatment is the first choice in patients with major depression of mild to moderate severity.

NRS5.3.
ELDERLY DEPRESSION: CLINICAL SYMPTOMS, BRAIN ABNORMALITIES AND DRUG RESPONSE

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Fifty-three patients with late onset (>60 years) DSM-IV major depressive episodes were treated with flexible doses of standard antidepressants for six months. The Brief Psychiatric Rating Scale (BPRS), the Hamilton Rating Scale for Depression (HAM-D) and the Hamilton Rating Scale for Anxiety (HAM-A) were administered at baseline, after 1, 3, and 6 months. The presence of vascular/degenerative brain processes, assessed by computed tomography (CT) scans and frontal/vascular indexes, and of mild/moderate cognitive impairment (24-28 total score at the Mini Mental State Examination, MMSE) were assessed at baseline and evaluated with respect to the antidepressant response. Baseline clinical characteristics were compared between subjects with and without mild cognitive impairment and between subjects with and without CT abnormalities (t-tests for independent samples). Baseline depressive symptoms were correlated with CT scan indexes. Treatment response was evaluated by ANOVA with repeated measures on HAM-D, HAM-A, BPRS scores across the different groups defined by presence/absence of mild cognitive impairment, normal/abnormal CT or presence/absence of BPRS "emotional withdrawal". Patients with CT abnormalities showed higher baseline scores on the BPRS item "emotional withdrawal" ($p=0.002$). The HAM-D "depressed mood" item was negatively correlated to the right frontal index ($p=0.006$). Patients with CT abnormalities showed a lower reduction of HAM-D total scores than patients with normal CT ($F=5.154$, $p<0.03$). Both patients with and without mild cognitive impairment improved with treatment on the HAM-D ($p<0.0001$), BPRS ($p<0.0001$), and HAM-A ($p<0.0001$) total scores. Patients with emotional withdrawal showed lower improvement on BPRS total scores ($F=5.121$, $p<0.03$). According to these results, the presence of emotional withdrawal appears to discriminate a subgroup of elderly patients with more evident brain abnormalities, higher levels of cognitive impairment, and worse antidepressant response. In the light of these preliminary results we are currently enlarging the sample including younger subjects without cognitive impairment. This larger sample will allow to identify specific clinical depressive symptoms predictive of frontal lobe pathology.

NRS5.4.
ETHNIC, GENDER AND AGE DIFFERENCES IN THE QUICK INVENTORY OF DEPRESSIVE SYMPTOMS

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The 16 item Quick Inventory of Depressive Symptoms ($QIDS_{16}$) is derived from the 30 item Inventory of Depressive Symptoms. These items are scored in terms of 9 domains or groupings of 1 to 4 items using four-point scales. We have previously shown that a self-report version of the $QIDS_{16}$ is highly comparable to a clinically administered one. This paper considers ethnicity, gender and age as variables of interest using both classical test theory and the Samejima item response model. Controlling for level of depression, African-Americans are more likely to express symptoms of depression than Whites, but Hispanics are less likely to express symptoms than Whites. The relation between individual symptoms and overall depression is identical in all three groups. Furthermore, gender- and age-based differences in both extent of symptom expression and the relation of individual symptoms to depression are extremely small.

NRS5.5.
LOOKING BEYOND POSTNATAL DEPRESSION

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Postnatal depression (PND) is now a recognized condition. Notwithstanding its massive morbidity rate, between 11 and 13%, PND is generally not recognized, not assessed and therefore not treated. The infancy studies have highlighted that mother-infant interaction is compromised by maternal mood status. Medium-term effects of PND have been found to impeach behavioural and cognitive development of boys at two years of age. However, how PND is related to maternal history, personality, and development of self are some of the questions that have, up until now, not been addressed. The aim of this study was to go beyond postnatal depression and to consider personality status of women during the perinatal period. 65 mothers-to-be were assessed for depression, 4 to 6 weeks before presumed date of birth, with the Edinburgh Postnatal Depression Scale (EPDS) and the Montgomery-

Asberg Rating Scale (MADRS), and for Axis II disorders with the Structured Interview for the Diagnosis of Personality Disorders for DSM-IV. Levels of depression were high in the study (26%). Correlations between EPDS and MADRS were very high, showing great coherence to PND diagnosis ($p<0.0001$). Two cluster B personality disorders were highly related to PND, borderline and narcissistic personality disorders ($p<0.001$). These correlations indicate that maternal postnatal depression is a complex construct that needs to be investigated further. Co-morbid depression to personality disorder cannot be regarded as a PND, that would be a particular form of major depression. The results and therapeutical implications will be discussed.

NRS5.6.
LONG-TERM EDUCATION ON DEPRESSION

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The educational activities on depression are focused on explaining the psychopathology of the disorder, the therapeutic possibilities, and the long-term outcome of the disorder. Educational programs are aimed to improve supporting activities for depressed patients who are on long-term treatment and to improve compliance with ongoing treatment. We performed a study on an educational program for patients treated for an episode of recurrent depression. The program focused on family members or relatives or the ones living within the family. Education on depression was performed at the beginning of pharmacological treatment (paroxetine), after 8-10 weeks of treatment and after 6 months of treatment. We recruited 675 outpatients (426 women, 235 men). Their clinical condition was evaluated by the Global Clinical Impression scale. Two evaluations of the educational program were available – one done by the patient himself (global assessment of the educational program, I learned more about my disorder, cooperation with my family has changed) and the second one done by the psychiatrist (global assessment of the educational program, did the educational program improved compliance of the patient with the treatment). After six months of treatment, patients considered the educational program to be useful (n=598), neutral (n=45), or useless (n=18). As many as 608 patients learned more about their disorder; cooperation with their families improved in 460 cases. Psychiatrists assessed the educational program as useful in 650 cases and saw improvement in cooperation of patients on treatment in 622 cases.

NRS5.7.
DETERMINANTS OF CHOICE OF HEALTH CARE FACILITY AND SUBSEQUENT FOLLOW-UP IN CASES OF DEPRESSION ATTENDING A PSYCHIATRIC CLINIC IN INDIA

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Medico-psycho-social factors determining the choice of health facility and subsequent follow-up in 150 consecutive cases of depression attending a psychiatric clinic in India were studied. Cases with somatic symptoms mostly had a non-psychiatric medical facility as the first contact and took a long time to reach a psychiatric facility. When family members with supernatural belief in causation of illness were the decision makers, indigenous healers were the first contact in the majority of cases with psychotic symptoms and behavioral disturbances. In the majority of cases with a history of recent suicidal attempts, a psychiatric facility was the first contact. When the family decision was associated with participation of social network, the time lag between the suicidal attempt and attending the psychiatric facility was short. Correlations between pattern of follow-up and variables like age, sex, education and socio-economic status, belief system in respect of causation of illness, the nature of decision makers were studied.

NRS6.
IMPROVING PSYCHIATRIC PRACTICE

NRS6.1.
FROM SCHOOL-ORIENTED TO EVIDENCE-BASED AND DISORDER-SPECIFIC PSYCHOTHERAPY

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In the past few years, a gradual change is taking place from school-oriented to evidence-based and disorder-specific psychotherapy. The basis of numerous psychotherapy schools is increasingly questioned by the fact that there are not sufficient evaluations of these approaches, but also by the fact that most of these interventions are derived from more or less plausible theories. However, according to the principles of evidence-based medicine, a seemingly plausible theory is no warranty for deriving and applying a therapy without evaluation. There is a risk of false surrogate conclusions, as in critical incident stress debriefing according to Mitchell. Another example in the area of medicine is the medical decreasing of serum cholesterol by Fibrats for the primary prevention of coronary heart disease. The outcome variables of school-oriented psychotherapies are often based upon plausible theories and not on clinical relevance (morbidity, mortality, life quality). It seems reasonable to teach and apply only those approaches which prove to be effective in randomized controlled studies. Interpersonal psychotherapy for depression is a very good example for an evidence-based evolution and validation of a disorder-specific psychotherapy. Comparable developments are taking place for dialectic behavioral therapy of borderline personality disorder and for group psychotherapy of attention deficit syndromes in adults.

NR6.2.
THE VERONA PARTNERSHIP PROGRAM FOR PREVENTION, REHABILITATION AND SOCIAL PROMOTION

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The mental health consumer movement initiated in the US in the early 1970s and spread to Europe, including Italy, in the following decade. The basic principles of this movement are: users control major governance positions; participation is totally voluntary; hierarchy is minimal; staff is responsible to membership and members control the staff; the approach is nonmedical and nonclinical, involving support and caring, education, counseling, advocacy, information and political action; meeting basic needs like housing, security and work is a major goal. In Verona, these principles inform a program conjointly run by a psychiatric self-help group, the Department of Mental Health and a nonprofit private agency. This new program, which started a decade ago and has been fully operational for the last five years, has the following goals: preventing the psychiatrization of social discomfort, especially in young adults; helping psychiatric users, especially the long-term ones, including a large proportion of

schizophrenics, to free themselves from the care system by promoting their initiative and supporting their efforts towards autonomy and self-determination; employing the principles of self-help in meeting basic needs like housing, work, social life and entertainment. Several studies have been performed on this initiative. They have shown that this approach may help contain in-patient stays and costs of care, enhance the insight in, and possibly protect against the increase of, unmet needs and improve satisfaction in relevant areas even in the case of severely-ill mental patients.

NRS6.3.
THE JOINT CRISIS PLAN ON THE USE OF COMPULSION IN PSYCHIATRIC TREATMENT: A RANDOMIZED CONTROLLED TRIAL

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This study aimed to investigate whether a form of advance agreement for people with severe mental illness can reduce inpatient service use and the use of compulsory admission or treatment. It was a single blind randomized controlled trial conducted in eight community mental health teams in Southern England. 160 people with an operational diagnosis of psychotic illness or non-psychotic bipolar disorder, who had experienced a hospital admission within the previous 2 years, were recruited. The Joint Crisis Plan (JCP) was formulated by the patient, the care co-ordinator, the psychiatrist, and the project worker, containing contact information, details of mental and physical illnesses, treatments, relapse indicators, and advance statements of preferences for care in the event of future relapse. Admission to hospital, bed days, and use of the Mental Health Act over 15-month follow-up were the main outcome measures. Use of the Mental Health Act was significantly reduced for the intervention group, 10/80 (12.5%) of whom experienced compulsion versus 21/80 (26.5%) of the control group (p=0.028). Consequently, those in the intervention group spent significantly less time under compulsory treatment, i.e. a mean of 14 compared to 31 days (p=0.04). 30 people (24%) in the intervention group had any admission to hospital versus 44 (35%) in the control group; this was of borderline significance (p=0.07). The difference between the two groups in bed days was not significant (p=0.15). In conclusion, the intervention showed little evidence for decrease in admissions but coercive treatment was approximately halved. This is the first structured clinical intervention that appears to reduce compulsion in mental health services.

NRS6.4.
IS PRIVACY THE NEW BARRIER TO QUALITY CARE?

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As an abstract concept, health privacy is not binary; patients, physicians and regulators alike enthusiastically endorse the protection of personal health information. Its operational characteristics, what we protect and how we protect it, however, have profound implications for the practice of millennium medicine, particularly psychiatry. This paper explores: a) the extent to which regional (European Union) and national (USA and Australia) organizations are moving from "confidentiality" (or disclosure-centric) to "privacy" (or collection-centric) models for protecting health information; b) how competing interests in the health information domain, such as attempts to reduce medical or medication errors, improve access through the use of technologically-mediated care and increase health care efficiency, are shaping regulatory choices; c) the extent to which the specific properties of the client-psychiatrist relationship may require discrete treatment from privacy and confidentiality regimes and how some systems attempt to achieve that by providing additional legal protection for "process" notes; and d) how "privacy" litigation may be poised to become part of the medical malpractice landscape.

NRS6.5.
THE ROLE OF THE GATEWAY PROVIDER IN ACCESSING PSYCHIATRIC SERVICES

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This paper examines the central influence of a gateway provider on access to treatment for mental health problems in two populations of youth: American Indians and inner city African American and white youth. The gateway provider may be a professional, an informal provider, or, for American Indian youth, a traditional healer who first identifies a problem and sends a youth to psychiatric treatment. The first study was based on interviews with 800 inner city youth (85% African American and 15% white) and 222 of their providers; the second study was conducted in 400 American Indian youth and 190 of their providers. In both studies youth and provider data were merged. Structural equation modeling (SEM) was used to analyze both models. In the study of inner city youth, 55% of the variance in psychiatric service provision was explained by gateway provider perception of need (.54), knowledge of resources (.26), and burden (-.14). In the study of American Indian youth the SEM revealed that 42% of the variance in psychiatric services was determined by gateway provider assessment of youths' addictions or mental health problems (.36), perception of youth environment (.28), and resource knowledge (.27). In both studies, youth report of their own mental health problems contributed no variance in services. The values of all SEM indices were high, with the adjusted goodness of fit indices (AGFI) equaling .99. The results demonstrate the pivotal role of gateway providers in accessing psychiatric services.

NRS6.6.
THE PRESCRIPTION OF PSYCHOTROPIC DRUGS IN RESIDENTIAL FACILITIES. A NATIONAL SURVEY IN ITALY

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The PROGRES project is a two-wave project aimed to survey Italian residential facilities (RFs). In this presentation we report on the prescriptions of psychotropic drugs to 2,962 patients living in 265 RFs. Structured interviews about patients' sociodemographic and clinical characteristics were conducted with RF managers and staff; additional information was obtained from clinical records. Conventional antipsychotics and second-generation antipsychotics were prescribed to 65% and 43% of the sample respectively. Benzodiazepines were prescribed to two-third of the sample, while antidepressants were the class of psychotropics least used. Haloperidol was the most frequent-

ly prescribed compound. Polypharmacy was common: on average each treated patient was assuming 2.7 drugs (±1.1). Antipsychotic polypharmacy was also common. The most common prescription profile was represented by the association between one second-generation antipsychotic and one benzodiazepine (7.0%). Many prescriptions were loosely related to specific diagnoses: for instance, mood stabilizers were prescribed to many patients who did not have a diagnosis of bipolar disorder, whereas 1/3 of patients with bipolar disorder did not receive mood stabilizers. Antiparkinsonian drugs were prescribed to approximately 1/4 of the sample (n=762). Mild and severe adverse events in the last month were reported for 9.9% and 1.4% of the sample respectively. Almost 15% of patients in drug treatment were suffering from mild to severe tardive dyskinesia. In conclusion, patterns of psychotropic drug prescriptions to severe patients living in RFs are only in part satisfactory and offer much room for improvement. Studies are also needed to identify the most effective strategies to improve prescribing practice.

NRS6.7.
OVERPRESCRIPTION OF PSYCHOTROPIC DRUGS: AN EPIDEMIC

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I would like to discuss the implications of a single case, in the context of the statistics on psychotropic drug prescription. On her third birthday, a child was found to have suffered liver failure and brain damage as a result of the simultaneous prescription of 14 medications, including 8 psychotropic drugs. The prescribing doctors, pharmacists, and caretakers were found to be negligent in an 8 million dollars civil suit. In my own experience of cases, it is incredibly easy for a physician to add one or more presciptions, but almost impossible to remove one, much less all of them. Another case is described in which 7 psychotropic drug prescriptions were removed, one by one, over a four year period, against resistence by the prescribing physicians, but much to the benefit of the patient.

NRS6.8.
TRAINING PSYCHIATRISTS TO TALK MORE EFFECTIVELY TO CLIENTS

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Compliance therapy is a mode of discourse combining facets of cognitive therapy, Rogerian counselling, information–providing and negotiating. It was developed at the Maudsley Hospital by David, Kemp and Hayward. It has been shown to both increase adherence to medication regimes and to reduce relapse in people with psychosis after discharge from hospital. However, the original studies were performed using just two therapists, who were not part of the usual treatment structure and functioned independently of it. The question remained as to whether these skills were easily transferable to psychiatrists. A 2-day package of compliance therapy training was developed. It combined group work, information about concordance and work with role players, giving participants an experience of using compliance therapy skills "live" in front of other colleagues. It was delivered to 48 psychiatrists in training. A questionnaire was performed before and after training. This demonstrated that trainees both felt more confident and had moved towards a more egalitarian notion of the client/doctor relationship. These findings were replicated when the training was delivered to a group of senior psychiatrists. Although this package was developed to enhance adherence to medication, its components seem to encourage a greater emphasis on both eliciting the patients' experience and encouraging informed choice. The training is relatively brief and likely to be cost effective.

NRS7.
PERSONALITY DISORDERS AND AGGRESSIVE BEHAVIOUR

NRS7.1.
DEMOCRATIC THERAPEUTIC COMMUNITIES FOR TREATING PERSONALITY DISORDER: CAN THEY BE SUCCESSFULLY REPLICATED?

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The Henderson Hospital in London was established in 1950 as the first democratic therapeutic community (DTC) for the treatment of individuals with personality disorder (initially 'psychopathic personality disorder'). The unit has been extensively quoted and replicated internationally and has been remarkably stable in its practice for 50 years. Recent research indicates some success in reducing offending behaviour. A decision was made to replicate the unit – to open two other units in parts of the country and try to offer the same treatment regime. Doubts had been expressed about the faithfulness of previous units following the same principles and the perceived 'uniqueness' and status of the Henderson was thought to present a barrier to faithful replication. An evaluation was undertaken of the practice of the original and both replications. This evaluation included a qualitative organisational study of the processes in the three units, a clinical assessment of referred clients and their passage through the units and an economic analysis of their practice. This presentation focuses on the clinical descriptions of those individuals referred for treatment and those accepted and their survival within the three regimes (taken as the primary outcome measure). Differences in survival outcome between the three units will be presented along with indications of baseline characteristics associated with improved survival. Practice differences identified in the organisational descriptions will be considered to understand the differences.

NRS7.2.
QUETIAPINE IN PSYCHOTIC PATIENTS WITH BORDERLINE PERSONALITY DISORDER: A CASE SERIES

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Classical antipsychotics are often used in psychotic, depressed and/or impulsive patients with borderline personality disorder (BPD), but their use is associated with significant side effects and problems with compliance. New antipsychotics are more likely to be well tolerated and to show a wider spectrum of efficiency. Encouraged by the positive side effect profile of quetiapine (no extrapyramidal side effects, no weight gain, no galactorrhoea) we initiated a case series with this drug in psychotic BPD. Currently (at least 14 days) psychotic outpatients with BPD were examined both before and 4 and 12 weeks after treatment with quetiapine (mean dose prescribed was 537.5±118.9 mg/day). 12 ambulatory female patients with BPD were examined. All

patients showed self injurious or recurrent suicidal behavior also triggered by psychotic experiences. For all variables (Clinical Global Impression, CGI; Global Assessment Scale, GAS; Barratt Impulsiveness Scale, BIS; Hamilton Scale for Depression, HAMD; Short Check List-90-P, SCL-90-P) Page's trend test was significant ($p<0.01$). Wilcoxon tests with adjusted alpha error showed significant improvements for all variables with the exception of HAMD as early as after 4 weeks. All variables showed significant improvement after 12 weeks compared to baseline. Between week 4 and 12, however, further significant improvement was observed only for HAMD, BIS and GAS. The correlation between the quetiapine dose and CGI at the last time point of measurement (after 10 months) was –0.632 ($p=0.027$), and the correlation between quetiapine and CGI total was –0.825 ($p=0.002$). A significant correlation could be shown between CGI score and quetiapine dose after 12 weeks.

NRS7.3.
A NEUROBIOCOGNITIVE MODEL FOR THE TREATMENT OF DECOMPENSATORY CRISES OF PERSONALITY DISORDERS

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We propose the existence of a specific condition we call "decompensatory crisis of a personality disorder". It can be defined as all those critical and acute situations that occur to an individual with a personality disorder, where all adaptive mechanisms used up to that point are exceeded, so that an alteration of reality testing occurs, or a marked decrease in frustration tolerance. This is in turn expressed by alterations in cognitive, affective, and impulse control areas. The individuals will present a repertoire of unadjusted conducts, characteristic of the personality disorder they suffer. A crisis model has been developed to ensure quick detection of the crisis and ensure short stays. This includes an integrative approach that combines cognitive behavioral therapy and pharmacological therapy. A study of 50 patients that presented this type of crisis helps sustain the model, as well as a follow-up study that shows the benefits of the use of a problem solving workbook with this population.

NRS7.4.
NEUROCOGNITIVE CHARACTERISTICS OF HOMICIDAL SCHIZOPHRENIC PATIENTS

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There is growing evidence that abnormal neurocognitive functioning plays an important role in violent non-psychotic behavior. Existence of poor performance on neurocognitive tests (especially on information processing, IP tasks) among schizophrenic patients is a consistent finding in research literature. The hypothesis was that IP impairment in homicidal schizophrenic patients would be more severe than in non-violent schizophrenic patients. Subjects were 42 schizophrenic patients who were hospitalized in a forensic psychiatric department after murder or attempted murder with severe injuries. They composed the extreme violent (EVS) group (age: 34.6±10.7 years, education: 9.1±3.2 years). The second group consisted of 105 male non-violent schizophrenic patients (NVS) who were demographically similar to the first group. IP was measured by a computerized neurocognitive battery ("CogScan", Anima Scan Ltd), which included 15 sub-tests: finger tapping test, inspection time, motion perception test, simple reaction time, choice reaction time, immediate and delayed memory for pictures, words and faces, stroop test, time-accuracy trade-off test, digit symbol substitution test (DSST), and continuous performance test. Statistical analysis was performed using Student t-test. EVS patients were significantly slower in inspection time ($p=0.0001$), but significantly faster in finger tapping test ($p=0.01$). No significant differences were found in recognition for pictures, words, and faces. However, the EVS group was significantly less accurate than the NVS group in working memory (DSST, $p=0.0001$). Significant differences were also found in selective attention ($p=0.0001$), and sustained attention ($p=0.001$), where EVS patients performed worse than the NVS patients. These results suggest that IP in EVS is significantly more impaired than in NVS. Most remarkable are the differences in selective and sustained attention. Further research is suggested in investigating these impairments as a predictor of future violence in schizophrenic patients.

NRS7.5.
RE-OFFENCES OF FORENSIC PATIENTS ASSUMED TO BE STILL DANGEROUS

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Research in risk assessment is confronted with the false-positive problem: in order to analyze the validity of predictions about violent behavior, persons assumed to be still dangerous would have to be released into the community to test whether they really commit a violent act or not. Such a "true experiment" would present an unacceptable risk to society. This explains why the rate of incorrect release decisions because of "false-positive" predictions cannot be examined. However, one Federal Constitutional Court's decision created a special situation in Germany. Patients who were confined under the law of the German Democratic Republic and were treated under German Federal Law after the German unification had to be released from forensic hospitals immediately. Thus, all patients, both those considered dangerous and those considered non-dangerous, were given the opportunity for re-offending. We examined the outcome of all patients discharged from forensic-psychiatric institutions because of this Constitutional Court's decision (32 patients) in comparison to a group of patients who were conditionally released because of an assumed good prognosis (31). The results of the study showed that a large proportion of patients assumed to be still dangerous did not re-offend after their release from high-security settings (false-positive rate about 85%). Implications for psychiatric care of forensic patients are discussed.

NRS7.6.
THE PRIMROSE PROJECT

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The PRIMROSE project (Innovative Prison Service Provision for Women with Complex Needs who pose a Significant Danger to the Public) identifies the complexities of developing and delivering a hybrid healthcare initiative through partnership working. The presentation describes a collaborative venture by the National High Secure Women's Service based at Rampton High Security Hospital, Nottinghamshire Healthcare NHS Trust and the HM Prison Service, Durham, which seeks to: a) work collaboratively with existing mental health service providers at HM Prison Service, Durham to consolidate cur-

rent quality standards for the care of vulnerable women prisoners at high risk of suicide; b) establish a clinical programme at HM Prison Service, Durham to survey the needs of women who primarily pose a risk of serious harm to the public emanating from severe clinical disorders of the personality, and deliver clinical interventions to this patient population.

NRS8.
PSYCHOTIC DISORDERS (II)

NRS8.1.
THE LONGITUDINAL ANALYSIS OF THE IMPACT OF ANTIPSYCHOTIC MEDICATION ON THE INCIDENCE AND THE COSTS OF INPATIENT TREATMENT IN PEOPLE WITH SCHIZOPHRENIA

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The study examines the impact of antipsychotic medication on the incidence and the costs of inpatient treatment in patients with schizophrenia. In a prospective longitudinal study, the incidence and the costs of inpatient treatment, the type of antpsychotic medication, as well as the clinical and social characteristics of 307 outpatients with schizophrenia were assessed five times during 2.5 years. A random-effect logit model and a random effect tobit model were used to analyse the impact of antipsychotic medication type on the incidence and the costs of inpatient treatment. Selection effects were controlled by means of propensity-scores. Patients who received antypsychotic treatment with conventional, new atypical or depot neuroleptics had a lower incidence of inpatient treatment and in the case of inpatient treatment caused lower costs in comparison to patients without antipsychotic treatment. No significant differences between the effects of conventional, new atypical or depot antipsychotics were found. These data suggest that antipsychotic treatment reduces generally the incidence and the costs of inpatient treatment. An extension of the use of clozapine or new atypical antipsychotics to all patients with schizophrenia will not generally improve the treatment effectiveness regarding to the incidence and the costs of inpatient treatment.

NRS8.2.
PLASMA LEVELS AND DURATION OF AN ADEQUATE TRIAL WITH CLOZAPINE IN TREATMENT-REFRACTORY SCHIZOPHRENIA

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Clozapine is a medicine of last resort in refractory schizophrenia and schizoaffective disorder. Therefore it is important to know how to classify a trial with clozapine as adequate. A systematic review on plasma levels and adequate duration of a trial with clozapine revealed 19 trials investigating clozapine levels. These were classified according to predefined methodological quality criteria. All five trials with only minor methodological problems revealed a clozapine plasma threshold of 350 to 400 µg/l. In addition, three of four methodological well designed trials showed significantly more responders above this threshold in comparison to lower levels. A meta-analysis of these four trials shows 35 responders out of 115 patients (30%) with plasma levels below the threshold and 47 responders out of 64 patients (73%) above the threshold. Research into optimal duration of a trial with clozapine is more difficult to interpret because of methodological heterogeneity. The trials should follow up the patients for at least six months. Two trials investigated time to response after dose escalation. The third trial linked time to response to clozapine plasma levels. We conclude that after reaching a stable clozapine level the clinical effect will be observable within eight weeks.

NRS8.3.
NEW COGNITIVE OUTCOMES OF DRUG TREATMENT: CLOZAPINE IMPROVEMENT OF SOURCE MONITORING BIAS IN RESISTANT SCHIZOPHRENIA

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Some studies in the last decades investigated and confirmed the role of the source monitoring deficits in schizophrenic patients, in particular those affected by positive symptoms of Schneiderian quality, but limited data are available about their change in response to effective drug treatment. Our study aimed to determine whether antipsychotics were effective in reducing source monitoring deficit and whether changes in this aspect of cognition were related to reduction of delusions. The sample consisted of 26 schizophrenic patients (DSM-IV criteria) who were poor responders to classical antipsychotics and to risperidone, switched to risperidone and clozapine, respectively. Patients were assessed by the Positive and Negative Syndrome Scale (PANSS), a source monitoring task (Keefe et al., 2002), and a battery including the evaluation of cognitive functions known to be defective in schizophrenia, the Brief Assessment of Cognition in Schizophrenia (BACS), before and after 8 weeks of drug switching. A statistically significant reduction of PANSS delusion score and of misattribution of self-generated items to external sources (seen or heard) was found after 8 weeks of treatment, with the only statistical contribution of patients with active delusions at baseline for the source monitoring variable change. Source monitoring change in patients treated with antipsychotics might be used as a biological marker of antipsychotic activity.

NRS8.4.
ATYPICAL ANTIPSYCHOTIC AGENTS IN THE TREATMENT OF SCHIZOPHRENIA WITH OBSESSIVE-COMPULSIVE SYMPTOMS

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Obsessive-compulsive (OC) symptoms have been observed in a substantial proportion of schizophrenic patients. There are some reports describing the appearance de-novo or re-emergence of preexisting OC symptoms under atypical antipsychotic agents (AA). However, there are also reports describing a positive effect of AA in OC-schizophrenic patients. The complex nature of the treatment response in this group of schizophrenic patients is as yet unclear. The effects of AA on OC symptoms may vary, with evidence of improvement in some, and worsening among others. Based on our experience with clozapine and olanzapine as sole agents and in combination with serotonin reuptake inhibitors, we suggest some factors that may predict response to AA in schizophrenic patients with significant OC symptoms. Schizophrenic patients who began to exhibit OC symptoms within the course of the psychotic process might be successfully

treated with AA alone. When OC symptomatology precedes the development of schizophrenic process, AA alone may be inefficient and may even worsen OC symptoms, so they should be used concomitantly with specific antiobsessive agents. There is a definite dose-related pro-obsessive influence of clozapine, but not of olanzapine, that may be explained with their different receptorial affinity. Further controlled investigations of various AA in larger cohorts of OC-schizophrenics are needed to substantiate our observations and to elaborate the most effective and safe therapeutic approaches to these difficult-to-treat patients.

NRS8.5.
ATYPICAL ANTIPSYCHOTICS RECONSIDERED: HAS HALOPERIDOL WITHOUT PROPHYLACTIC ANTICHOLINERGIC MEDICATION BEEN A MISLEADING COMPARATOR IN CLINICAL TRIALS?

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Over two-thirds of all clinical trials evaluating atypical antipsychotics have used haloperidol *without* prophylactic anticholinergic medication as the comparator. This review has three parts. First, we compare six-week results of two major olanzapine trials: one which used haloperidol with prophylactic benztropine (n=309) as the comparator and the other which used haloperidol with anticholinergics as needed (n=1,966). Next, studies are reviewed that assessed the risk of akinesia in treatment with conventional antipsychotics without prophylactic anticholinergic medication, and evaluated the potential for confusing this side effect with treatment resistant negative symptoms. Finally recent meta-analyses are reviewed with a focus on studies that used haloperidol as comparator with and without prophylactic anticholinergics. While olanzapine adherence was similar in the two large trials, haloperidol adherence was far worse in the trial that did not use prophylactic anticholinergics, but was no different from that of olanzapine in the trial that did. When haloperidol was given with prophylactic benztropine, olanzapine had virtually no advantages. Previous research suggests that in the absence of prophylactic anticholinergics 20% of patients may develop akinesia with inactivity and withdrawal that can mimic secondary symptoms of schizophrenia, but show no pseudo-parkinsoniam symptoms. Examination of the results of two recent meta-analyses show that, although limited in number, studies that used prophylactic anticholinergics with haloperidol were unfavorable to atypicals, unlike those the used haloperidol alone. In conclusion, failure to use prophylactic anticholinergic medication with haloperidol may have biased randomized clinical trials in favor of the atypical antipsychotics.

NRS8.6.
PREVALENCE OF METABOLIC ABNORMALITIES IN SCHIZOPHRENIC PATIENTS TREATED WITH ANTIPSYCHOTICS

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Epidemiological studies have demonstrated an increased risk for diabetes in schizophrenic patients treated with certain atypical antipsychotics, particularly clozapine, olanzapine and quetiapine. In the current analysis we describe the prevalence of baseline metabolic abnormalities in a cohort of schizophrenic patients. The cross-sectional study population is derived from a naturalistic cohort of treated schizophrenic patients, being followed prospectively for 1 year. Extensive metabolic data are being collected. Preliminary data on 100 non-diabetic schizophrenic patients, stable on medication (90% on atypical antipsychotics) for at least 6 months, have been analyzed so far. The metabolic syndrome (Adult Treatment Panel III criteria) is present in 23% of patients. 25% of patients are overweight, 39% are obese. The prevalence of individual metabolic risk factors is: 45% hypertriglyceridemia, 44% increased waist circumference, 29% reduced high density lipoprotein, 20% hypertension, 10% impaired fasting glucose. In 4% of patients, results of an oral glucose tolerance test (OGTT) met the criteria for diabetes and 16% of the cohort exhibited impaired glucose tolerance. 35% of patients had post-glucose hyperinsulinism and delayed insulin release, sometimes with a tendency to reactive hypoglycemia. In this epidemiological study on the prevalence of metabolic disturbances in schizophrenic patients, the high prevalence of the metabolic syndrome and the observed abnormalities in OGTT may be related to early stages of metabolic complications of antipsychotic treatment. The prospective nature of the study will identify the predictive value of the observed abnormalities as well as the association of these events with atypical antipsychotic use and anthropomorphic measures.

NRS9. MOOD DISORDERS (II)

NRS9.1.
LITHIUM AND ATYPICAL ANTIPSYCHOTICS IN THE MAINTENANCE TREATMENT OF BIPOLAR DISORDER: A 2-YEAR OPEN-LABEL STUDY

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Lithium has been showing a good efficacy in preventing recurrences in bipolar disorder (BD) (although it is not so effective in rapid cycling forms or in dysphoric mania), but is associated with a low therapeutic index and a long onset of response. There is increasing evidence that novel antipsychotics (e.g. olanzapine) are efficacious both in the acute and in the maintenance treatment of BD. The aim of this study was to compare the efficacy of lithium and novel antipsychotics (in monotherapy or in combination) in the maintenance treatment of BD. The sample consisted of 30 subjects (14 males, 16 females) with a DSM-IV diagnosis of BD (15 type I and 15 type II) randomly assigned to 3 groups matched for clinical and demographic characteristics (age, onset, duration of illness and recurrence indexes). Group 1 was assigned to lithium, group 2 to lithium and novel antipsychotics (olanzapine or quetiapine) and group 3 to novel antipsychotic monotherapy. Patients were euthymic at the start of the study and were assessed by the Brief Psychiatric Rating Scale (BPRS) and the Clinical Global Impression (CGI) from the baseline every 2 months for a 2 year follow-up period. BPRS scores remained stable over time in the 3 treatment groups ($F=2.09$, $p=0.08$) with no differences among groups ($F=0.88$, $p=0.42$). However, considering CGI scores, group 2 showed a better improvement ($F=3.91$, $p=0.03$). In summary, novel antipsychotics as monotherapy showed a similar efficacy to mood stabilizers on psychopathology scores. However, atypical antipsychotics appeared to be better on global functioning scores over time. Confirmation of these preliminary data in larger samples and with longer follow-up is warranted.

NRS9.2.
MENSTRUAL FUNCTION IN WOMEN TAKING MOOD STABILIZERS

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We examined reproductive function in women aged 18-45 with bipolar disorder taking mood stabilizing medications to determine whether receiving valproate impacted menstrual function or reproductive/metabolic hormone levels. Women completed menstrual cycle questionnaires and provided blood samples for measurement of a range of reproductive endocrine and metabolic hormone levels. Eighty women participated in completing the questionnaires and 72 of them provided blood samples. Fifty-two women (65%) reported current menstrual abnormalities; 40 (50%) reported menstrual abnormalities that preceded diagnosis of bipolar disorder. Fifteen women (38%) reported developing menstrual abnormalities since treatment for bipolar disorder. Fourteen of these 15 developed abnormalities since treatment with valproate (p=0.04). Of these 15 patients reporting menstrual abnormalities since starting medication, 12 (80%) reported changes in menstrual flow (heavy or prolonged bleeding), and five (33%) reported changes in cycle frequency. Reproductive and metabolic values outside the normal range across groups included elevated 17-alpha-OH progesterone levels, luteinizing hormone: follicle stimulating hormone ratios and homeostasis model assessment (HOMA) values and low estrogen levels. Three of the 50 women (6%) taking valproate met criteria for polycystic ovarian syndrome (p=0.20). Rates of menstrual disturbances are high in women with bipolar disorder and, in many cases, precede the diagnosis and treatment for the disorder. Treatment with valproate additionally contributes significantly to the development of menstrual abnormalities. Women with pre-existing menstrual abnormalities may represent a group at risk for reproductive dysfunction while treated for bipolar disorder.

NRS9.3.
ANTIDEPRESSANT-INDUCED MANIA IN BIPOLAR DISORDER: PREDICTIVE CLINICAL VARIABLES IN A CASE-CONTROL STUDY

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Antidepressant-induced mania (AIM) occurs quite frequently in patients with bipolar disorder (BP). In this study we evaluated which clinical variables could be predictive of AIM. One hundred patients with a DSM-IV-TR diagnosis of BP I or II, who had had at least one depressive episode treated with antidepressants, were selected. Patients were subdivided into two subgroups according to the presence (n=13) or absence (n=87) of manic/hypomanic episodes occurring during antidepressant treatment. As possible predictive clinical variables we considered: gender, diagnostic subtype, age at onset, duration of untreated illness, number of spontaneous hypomanic and manic episodes, number of depressive episodes, previous suicidal attempts, the presence of mood stabilizers, the presence of psychotic symptoms during spontaneous episodes, the presence of positive family history for psychiatric disorders in first-degree relatives. Data were compared between the two groups using Student's t test on the continuous variables and chi-square test on categorial variables. The absence of mood stabilizer treatment during antidepressant therapy was the only variable significantly associated with the development of AIM ($p<0.05$). These results confirm previous data on AIM and the protective effect of mood stabilizers. We are now expanding the sample in order to confirm these preliminary results, analyze the influence of other clinical and biological variables, and design a predictive model for this important and limiting antidepressant therapy side effect.

NRS9.4.
NATURALISTIC STUDY OF EFFICACY OF MOOD STABILISERS IN BIPOLAR AFFECTIVE DISORDER

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The main aim of this study was to compare different treatment strategies used by clinicians in Coventry, UK, in the management of bipolar affective disorder during a three-year period in a naturalistic setting. The study, which was retrospective, was conducted between January 2003 and April 2004. The study group included 118 patients with the ICD-10 diagnosis of bipolar affective disorder aged 18 to 65 years who were seen at Caludon Centre, Coventry, UK, in 1999 and followed up for three years. Patients were divided into two groups, depending on the type of treatment at the time of entry, i.e. mood stabilisers (lithium, sodium valproate, carbamazepine) versus antipsychotics (typical, atypical, depot). Data was collected from their medical notes regarding changes in treatment, clinical symptoms and social functioning. The primary outcome measure was the number and severity of relapses. The secondary outcome measures included service utilisation, treatment-related side effects and mortality figures. Similarities and differences within and between the groups were evaluated using survival analysis of the time to relapse and other parametric and non-parametric tests.

NRS9.5.
PREDICTING TREATMENT RESULTS OF DEPRESSION

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As response rates of depression treatments are still far from optimal, it is important to study possible differential effects in subpopulations. In this study, patterns of recovery were investigated in the pooled data on 313 patients with mild to moderate depression, all randomized for treatment with an antidepressant, short psychodynamic support therapy or combined therapy. Factors related to the effectiveness of treatments were: gender, age and education level, former medication use, and comorbid somatic or anxiety symptoms. Personality pathology did not significantly affect the result of depression treatment. The overall positive and negative predictive value of the model was 49% and 89% respectively. Differential effects of treatment conditions were found. In psychotherapy younger patients and women had better results, patients with comorbid anxiety and patients who had previously used antidepressants reacted significantly worse. In combined therapy patients who had previously used medication, patients with somatic symptoms and patients with recurrent depression had lesser treatment effects. Surprisingly, patients with lower education levels appeared to benefit more. For pharmacotherapy alone no significant predictor of outcome was found. It is concluded that a number of easily identifiable sociodemographic characteristics and depression characteristics are related to treatment results. The high predictive values suggest considerable clinical potential in deciding which treatment modality is most appropriate for which patient.

NRS9.6.
GENDER DIFFERENCES IN AGE OF ONSET OF BIPOLAR I DISORDER AND FAMILIAL LOADING

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There is growing evidence that individual treatment response of bipolar patients depends on genetic factors, like family history (FH), and gender differences in clinical traits, including age of onset (AO). In genetic studies, AO was proposed as a definition criterion for more homogeneous phenotypic subgroups which might enhance the chance of identifying the genes of bipolar disorder and developing more effective treatments. But it seems that AO in itself is a heterogeneous variable. The objective of this study was to investigate the effect of gender, FH and psychotic symptoms on AO in bipolar I illness. AO was analyzed in two independent samples – a Romanian (n=242) and a German one (n=220) – which were pooled together (462 patients: 218 males, 244 females). The probands were recruited from consecutive hospital admissions without regard to FH and diagnosed according to DSM-IV. FH-type showed a strong effect on AO in the total sample ($p<0.0001$); the effect of FH was highly significant in bipolar females ($p<0.0001$) and not significant in bipolar males ($p=0.25$). When comparing females and males, sporadic females had a 3-year later AO than sporadic males ($p=0.01$). In familial cases, females had a younger AO than males in the group with FH of bipolar and schizoaffective disorder ($p=0.04$) but not in the group with FH of recurrent unipolar depression. Among females, sporadic patients had a later AO than patients with FH of bipolar disorder ($p<0.0001$) but they did not differ from females with FH of recurrent unipolar depression ($p=0.18$). The presence of psychotic symptoms (delusions and hallucinations) in probands was not related to AO or to FH-type. In conclusion, the influence of FH on bipolar onset seems to be stronger in females than in males. Similar findings were reported for schizophrenia, suggesting that AO across the major psychoses might be controlled by interacting gender and family specific factors.

NRS10.
PSYCHOTIC DISORDERS (III)

NRS10.1
BODY ORIENTED PSYCHOTHERAPY FOR CHRONIC SCHIZOPHRENIA PATIENTS WITH NEGATIVE SYMPTOMS – A RANDOMISED CONTROLLED EXPLORATORY TRIAL

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Despite recent developments of somatic treatment (newer atypical antipsychotics), many schizophrenia patients experience persistent symptoms and full remissions are infrequent. Negative symptoms in particular appear to be relatively treatment resistant. It has been suggested that these symptoms are significant for the prognosis/course of the illness. Recent studies on different aspects of body experience in schizophrenia established the diagnostic and therapeutic importance of this psychopathological dimension. Hereby, a relationship between "anergia" ("emotional withdrawal", "motor retardation", "blunted affect" and "disorientation") and abnormal bodily sensations was identified. The historical and theoretical background for body-psychotherapy in schizophrenia and the results of a randomized controlled exploratory trial in the effectiveness of body oriented psychotherapy on anergia/negative symptoms in patients with chronic schizophrenia will be presented.

NRS10.2.
MULTIPLE FAMILY GROUPS, SCHIZOPHRENIA, AND CAREGIVER OUTCOMES

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Long-term family psycho-education, a form of intensified case management, has been shown to be effective in the management of schizophrenia, particularly in preventing relapse and re-hospitalization. In most of these studies patients have been recruited as inpatients during an acute phase of the illness. In a five year National Institutes of Health (NIH) funded study, one hundred six outpatients diagnosed with schizophrenia or related disorders receiving services from a large community mental health center were randomly assigned to receive two years of standard care (SC, n=51) or standard care plus multiple family groups (MFG) (n=55). Patient outcomes included symptoms, relapse, hospitalization, and outpatient service use. Family caregiver outcomes included burden, distress, health behaviors, and medical service use. One year patient outcomes indicated that MFG was associated with negative symptom reduction, reduced relapse rate, and community hospitalization status. Three year outcomes revealed a reduction in outpatient service use as well as state hospitalization status. For difficult patients, improved outcomes were associated with high treatment integrity. Caregiver outcomes revealed that, one year following randomization, MFG was associated with a decrease in distress (depression, anger expression, and perceived stress), and an improvement in dietary behaviors (milk, fruit, and dietary diversity). Unlike patient outcomes, caregiver outcomes were not associated with treatment integrity. Four year medical chart data are currently being analyzed to determine whether medical service utilization was impacted. Taken together, these results provide further support for the effectiveness of MFG in managing schizophrenia in the community. The results also suggest that MFG confers psychological and physical health behavior benefits to family caregivers.

NRS10.3.
A MULTIMODAL APPROACH IN SCHIZOPHRENIA

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In patients with schizophrenia intensive care may be a creative moment: within a few days of pharmacological intervention the patient often reappears with all of his existential and dynamic coordinates. At present our service offers the following: a) psychopharmacological treatment, b) psychodynamic approach, c) evaluation of the family dynamics and possible support therapy. Special attention is paid to the diagnostic process: a) descriptive DSM-IV-TR diagnosis, b) empirical-relational approach according to Pao, c) Kernberg's Structural Interview, d) psychotherapy process descriptors. We will discuss

clinical cases confirming the important role of a multimodal approach where psychodynamic psychotherapy, medication and a rehabilitation program are important not only to recover lost capacities, but also to modify the patient's feeling towards external and internal objects.

NRS10.4.
THE ITALIAN STUDY WOMEN AND SCHIZOPHRENIA (SIDeS): FIRST RESULTS

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The goals of the study Women and Schizophrenia (SIDeS) are, on one hand, to check if the gender-oriented approach to pathologies, in particular to schizophrenia, is used by Italian departments of mental health and, on the other hand, to create a database for follow-up longitudinal studies on particular patients, in order to study specific gender problems in pharmacological, psychological, and rehabilitating treatments. The study is a cross-sectional and multicentred examination based on a naturalistic approach, with the following inclusion criteria: patients over 18 years old of both sexes with a diagnosis of schizophrenia according to ICD-10 or patients who take antipsychotics. The sample has been chosen using the temporal cluster method. During a period of three months in 2003, about 800 patients were gathered from 14 departments located in 10 different Italian regions. For each department a service card with general information and items on frequent gender-oriented practices has been filled out. The patient card shows personal and behavioral information (smoking, alcohol, drugs, sexuality), information on the disease and on pharmacological and other kinds of treatments, for a total amount of 149 variables. An analysis conducted on the initial results shows that in Italian psychiatric centers a correct gender-oriented approach, based on evidence from the literature, still needs to be achieved. Regarding treatments, some differences relating to the sex variable were observed. Work at different levels is recommended to improve the appropriateness of psychiatric treatments as regards gender.

NRS10.5.
1000 DISCHARGES IN 3 1/2 YEARS: A CRISIS ORIENTED TREATMENT FOR ACUTE INPATIENT WOMEN

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Almost four years ago, a new tendency in treating critical acute inpatient women has been implemented at the Neuropsychiatric Hospital for Women "Braulio A. Moyano" of Buenos Aires, Argentina. Since then, the number of chronic patients has been reduced to half the original count. This was obtained by challenging the until then static archaic principles of psychiatric hospitalization that prevailed in Argentina for near a century. A quick, comprehensive and updated treatment modality has allowed the Acute Inpatient Service to discharge over 1000 patients in this period of time. The strategy consists of integrating pharmacological and psychotherapeutic treatments, aiming at resolving the patient's main crisis, with the maximum effective contact, and fast acting symptom relief. A crisis model has been developed along with this treatment modality to provide quick detection of the crisis and ensure short stays.

NRS10.6.
FAMILIES AND MENTAL HEALTH PROVIDERS: STEPS TO PARTNERSHIP. EDUCATIONAL STRATEGIES WITHIN THE BRAZILIAN PROGRAM TO FIGHT STIGMA BECAUSE OF SCHIZOPHRENIA

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The Brazilian site of the WPA Global Program against Stigma and Discrimination because of Schizophrenia was launched in early 2001 in São Paulo, the country's largest city. The Project, under the responsibility of the Brazilian Psychiatric Association, shares the WPA Global Program mission and general strategies. Initial surveys conducted in 2001 with patients and caregivers revealed that stigma experiences were strongly related to lack of information, orientation and support groups. Also, the experience of other participant sites and the literature on partnership in mental health supported the significance of collaboration between families/users and the mental health service providers for the development of sustainable anti-stigma programs. Within this framework, a set of strategies was designed to foster the empowerment of families, caregivers and users, aiming to support their active involvement in actions and to develop capacity and leadership to enable mutual support and advocacy. Thus, establishing a partnership with users and caregivers has been a primary goal of the Brazilian Project. This presentation will address the issue of partnership from the perspective of the educational strategies developed within our Project. Since 2002, a team consisting of mental health professionals, family members and users has been in charge of organizing and evaluating the educational meetings, named "Talking About Schizophrenia", offered twice a year in the first year, and scheduled to be delivered every three months in 2003. Six meetings organized until the present time reached around 600 persons in the community - mainly consumers, family members, mental health professionals and members of the clergy. The meetings were evaluated with the Portuguese version of the Canadian Presentation Evaluation Form, developed by the Calgary site of the WPA Global Program. With this presentation, we will attempt to: a) present a profile of the participants and offer a brief evaluation of this action in the context of the Brazilian efforts related to the Global Program; b) summarize the learnings from this activity: what did we learn about expectations and views of families and users? What do the caregivers want from the mental health system? c) discuss the issue of partnership between users, families and mental health providers from the perspective of education and support groups.

NRS11.
CHILD AND ADOLESCENT PSYCHIATRY (I)

NRS11.1.
THE INTERFACE BETWEEN PAEDIATRIC PRACTICE AND THE LAW

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Children are presenting increasingly frequently with complex physical and mental diseases where the treatment and management strategies have given rise to concerns about the legality and ethical constraints within which professionals operate. The expression of differing wishes by parents, children and doctors raises important and complex issues, which require resolution in the interest of the child. We have established a series of colloquium discussions in Newcastle

upon Tyne, which bring together senior clinicians and senior lawyers to discuss cases of this nature. Examples include girls treated for cancer who wish to store germinal tissue where parents object; cases where patients object to genetic screening of their children when this will reveal information about their own genetic status; cases where a child's right to information is contested and many others. Legal and health professionals are united in their view that the child's interests are paramount. However there are many differences in the decision making process followed by the two professions. The meetings have provided rich discussions of differing approaches and how best to bring these together productively. Many dimensions of these issues were discussed, including the need to support health service professions in following courses of action that are often fraught with difficulty. Suggestions about the development of guiding principles are made and will be presented for discussion.

NRS11.2. THE HEALTH-RELATED QUALITY OF LIFE OF CHILDREN SUFFERING FROM ATTENTION-DEFICIT/HYPERACTIVITY DISORDER AND THE COSTS TO SOCIETY

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The objective of this study is to estimate the health related quality of life (HRQoL) of attention-deficit/hyperactivity disorder (ADHD) children and the societal costs for the Netherlands. An initial population of 10,000 children aged 6-8 years were rated by their school teachers on a scale to determine the probability of ADHD. A total of 150 children with low scores and 150 with high scores for externalising items were invited for detailed assessment of the burden of illness of ADHD for the patient and their relatives. We applied a prospective follow-up study design. We planned to collect data on health care utilization and HRQoL of three categories of children: 50 ADHD children in the community (group 1), 100 clinical ADHD children (group 2) and 50 controls with no ADHD (group 3), at four moments in time (baseline, 6 months, 12 months and 18 months). The Child Health Questionnaire (CHQ-50) was used for measuring the HRQoL. Additionally, health care utilization and productivity loss of the mother of the respondents were assessed. At baseline a total of 165 questionnaires were distributed for the three groups. The response rates were: group 1, 94% (n=33); group 2, 90% (n=64) and group 3, 78% (n=47). In group 1, 33% of the respondents were identified as ADHD by a paediatrician. Results on HRQoL and costs will be presented. This is the first study on HRQoL and costs from a societal perspective in the Netherlands including an ADHD population in the community.

NRS11.3. ATTENTION-DEFICIT/HYPERACTIVITY DISORDER IN OMANI YOUTH

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This study aimed to explore the characteristics of attention-deficit/hyperactivity disorder (ADHD) among the Omani youth. At the child and adolescent psychiatry clinic of the Sultan Qaboos University Hospital, a questionnaire consisting of the diagnostic criteria for ADHD (DSM-IV), in addition to other variables, was filled by the parents of the referred patients. The study extended from February 2000 to September 2003. Two hundred and twenty-one cases of ADHD were investigated, diagnosed and treated. Boys constituted 70% of the patients. The mean age was 8.1 years (SD 2.8). Parental consanguinity was high (48%). One hundred and fifty (67.9%) cases exhibited both inattention and hyperactive-impulsive behavior, while 45 (20.4%) had inattention only. The remaining 26 (11.8%) were hyperactive and impulsive. Seventy-two (32%) of the patients suffered from head injuries; among them 77.8% were caused by falling from heights. The intelligence level of the patients was normal in 27.6% of cases, while 66.5% suffered from mental retardation. The majority (79.6%) of the cases had comorbidity, of whom 141 had a single comorbidity – mainly mental retardation (103 cases). One hundred and thirty nine patients were enrolled in normal schools, 41 were preschoolers, 35 were not enrolled in any school, and 6 were attending special schools for mentally handicapped. About half of the patients (49.3%) were not given medication, as they required further investigations, while 29.8% were treated with a psychostimulant (methylphenidate), and 14.5% were given tricyclics. These data suggest that a significant number of Omani youth is affected by ADHD, which emphasizes the importance of public awareness, in addition to provision of facilities for diagnosis, treatment and follow-up.

NRS11.4. NON-PHARMACOLOGICAL APPROACHES TO HELPING CHILDREN DIAGNOSED WITH ADHD AND THEIR FAMILIES

S. Timimi
Lincolnshire Partnership NHS Trust, Lincolnshire, UK

This presentation will review the literature on non-pharmacological approaches to helping children diagnosed with ADHD and their families. Firstly, I will present evidence regarding the physical and psychological dangers associated with the use of stimulants in children. All too often balanced information about risks as well as benefits are not provided to parents who are making the difficult decision of whether to put their children on a stimulant or not. When parents are given the full picture, many (in my experience the majority) decide that they do not wish their child to take a stimulant, in which case we need to be aware of effective non-pharmacologically centred approaches that can be used as an alternative. Many psychiatrists (in my experience the majority!) are not aware that a whole raft of effective non-pharmacological interventions are available and backed by scientific evidence. These include systemic interventions, lifestyle changes, specific behavioural management strategies and examining value systems. I will also present my own work in this area and the impact local initiatives incorporating these multiple perspectives has had on local levels of stimulant prescribing.

NRS11.5. TRAVELLERS: A SCHOOL-BASED TARGETED MENTAL HEALTH PROMOTION PROGRAMME FOR EARLY ADOLESCENTS

P. Dickinson, D. Thomas, M. Agee
University of Auckland, New Zealand

This presentation outlines the conceptual background, theoretical framework (e.g., mental health promotion, metaphor, meaning making, emotional literacy, cognitive strategies, coping and social support) and findings from phase two of the Travellers project – a target-

ed, selective mental health promotion programme designed to enhance protective factors for young people who are at increased risk for the development of mental health problems. The Travellers programme will be described in terms of adolescent mental health concerns; emerging mental health promotion theory and practice; and prevention and early intervention models. The key elements of Travellers will be described. The programme was trialled in ten secondary schools over two years as an experimental design with 302 participants (females, n=164, males, n=138) and a matched usual care comparison group (n=202; females, n=114, males, n=90). The Travellers programme provides a means of early identification and selection of young people who may benefit from participating in an early intervention programme. The programme has achieved a statistically significant reduction in participants' distress ($p<0.05$) which was maintained at six month follow-up. Qualitative data from young people post programme was overwhelmingly positive. School counsellors and school managers reported that Travellers was an appropriate and acceptable school-based programme. Targeted interventions provided within a supportive school environment can contribute to enhancing protective factors such as connectedness, personal and interpersonal coping strategies, increased help-seeking behaviour, and young people feeling more positive about themselves and their lives.

NRS11.6.
CHILDREN'S PERCEPTIONS OF STRESSFUL SITUATIONS IN THEIR LIVES AND THE WORLD – THEIR MEANING MAKING AND OUR UNDERSTANDING

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Manukau Institute of Technology, Auckland, New Zealand

When assessing how stressed children are and what those stressors might be, we have frequently neglected to ask the children themselves, preferring instead to present them with pre-determined stressor lists usually compiled by professionals and frequently adapted from adolescent and adult stressor lists. This paper presents the case for a study that consults children themselves about their understanding of the words 'stress' and 'stressors', and their perceptions of stressful situations in their lives. Additionally it examines the provision of alternative communication tools (in addition to, or other than, verbal language) which may provide opportunities that facilitate children's ability to process their experiences, develop their emotional vocabularies and express themselves. The paper also considers ways to facilitate our understanding, as professionals, of how children communicate and what they are telling us. Results from a study with one particular group of children in a school will document some of the events and situations that they find stressful as well as show their methods of communicating this information to adults. Furthermore, two case studies will highlight and illustrate alternative communication tools with which children can make meaning of, and attempt to communicate to adults, what they perceive as stressful in their lives.

NRS12.
PSYCHOTIC DISORDERS (IV)

NRS12.1.
A POLYDIAGNOSTIC ASSESSMENT OF SCHIZOPHRENIA IN 155 FIRST-ADMISSIONS: TREATMENT IMPLICATIONS

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The diagnostic criteria for schizophrenia by eight different systems (ICD-8, Research Diagnostic Criteria, DSM-III, DSM-IV, Feighner Criteria, Flexible System (broad and narrow), and Vienna Criteria) were applied to 155 first-admission patients from the Copenhagen Prodromal Study. The rate of schizophrenia differed significantly from one study to another, and the number of 'core schizophrenia' cases was remarkably low, suggesting schizophrenia to be a conventional diagnosis. Validity measures applied to ICD-9 and ICD-10 schizophrenia demonstrate the superiority of concurrent validity of the former. The implications for early detection and treatment are discussed.

NRS12.2.
CROSS-CULTURAL STUDY OF CAUSAL BELIEFS AND TREATMENT CONCEPTS OF SCHIZOPHRENIC PATIENTS FROM WESTERN EUROPE AND THE MIDDLE EAST

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Illness concepts represent cognitive interpretations and predictions of health status and they are an expression of the patient's cultural background. To our knowledge up to the present day no studies investigated illness concepts of schizophrenic patients from an Arabic-Islamic cultural background. We investigated the hypotheses that schizophrenic patients in Jordan compared to patients in Germany: a) have a greater belief in fate being responsible for schizophrenic illness; b) perceive schizophrenic illness as more threatening; c) have less trust in medication; d) believe less in prophylaxis preventing recurrence of illness. Altogether 47 schizophrenic patients (F20.0; ICD-10) were included in the study. 24 Jordanian and 23 German patients were consecutively recruited in public psychiatric hospitals in Jordan (Fheis) and Germany (Bonn, Düren). The two groups were comparable with regard to age, gender and formal education. Patients were investigated by a semi-structured interview, a repertory grid investigation and the illness-concept-scale for schizophrenic patients. Schizophrenic patients in Jordan have a greater belief in fate being responsible for illness and perceive schizophrenic illness as more threatening. There were no differences between the two groups with regard to trust in medication and the belief in prophylaxis.

NRS12.3.
COGNITION, DELUSIONS AND ATYPICAL ANTIPSYCHOTICS

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Schizophrenia is a complex disorder with diverse clinical presentations. There is abundant evidence that neuropsychological dysfunc-

tion is a core deficit and a phenotypic marker in schizophrenia. Cognitive dysfunction is: a) present before or at the onset of illness; b) present in virtually all patients; c) relatively stable and present when symptoms are in remission; and d) present in non-psychotic biological relatives of patients or individuals at risk of the illness. Schizophrenic patients show deficits in a variety of cognitive domains, including executive function, attention, memory and language. Cognitive impairment tends to be independent of the symptoms of the illness. Different dimensions of symptom clusters, such as negative symptoms, psychotic symptoms, and disorganized behaviour, have been found to have dissimilar relationships with cognitive performance. In general, cognitive deficits are more strongly related to negative symptoms and/or disorganized behaviour, whereas the psychotic dimension has comparatively weaker relationships with neuropsychological performance, although specific findings vary among studies. Neurocognitive abilities, rather than symptoms, are consistently linked to functional outcome. This raises the possibility that treatments producing improvements in cognitive function might prove to have synergistic effects with psychosocial interventions. The atypical antipsychotics may be effective in this area and the various medications may have different neurocognitive profiles. Positive symptoms may be linked to impaired verbal memory. Delusions and hallucinations can be regarded as resulting from a failure of reality discrimination, or reality distortion, whereby internal events or thoughts are misattributed to external sources. Studies aimed at evaluating the relationship between cognitive deficits and positive symptoms and testing selective treatments are highly warranted, and preliminary data on cognitive substrates of delusions and their treatment will be presented.

NRS12.4.
IS ALEXITHYMIA RELATED TO NEGATIVE SYMPTOMS OF SCHIZOPHRENIA? PRELIMINARY LONGITUDINAL FINDINGS

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Some features of alexithymia resemble affective flattening, emotional blunting, and alogia, that are negative symptoms of schizophrenia. Previous studies showed an association between negative symptoms and alexithymia, but were limited by the use of cross-sectional designs. This study aimed to evaluate whether alexithymia is associated with negative and depressive symptoms and is related to the change of schizophrenic symptoms over time. A consecutive sample of 29 schizophrenic outpatients was evaluated at baseline and at 3, 6, and 12 months during appropriate treatment. They were assessed by the Positive and Negative Syndrome Scale (PANSS), the Montgomery-Asberg Depression Rating Scale (MADRS), the Global Assessment of Functioning (GAF), and the 20-item Toronto Alexithymia Scale (TAS-20) at each time point. The psychiatric scale scores showed a significant symptom improvement over time, while the TAS-20 scores remained stable over the study time. On regression analysis, the TAS-20 at baseline was the only predictor of alexithymia at the 12-month follow-up, after controlling for psychopathology. However, a high prevalence of alexithymia (65.5%) was found among schizophrenic patients. In conclusion, alexithymia seems to be unrelated to negative, positive, and depressive symptoms, which suggests that it is an independent construct from schizophrenia. The high prevalence of alexithymia among schizophrenic patients indicates, however, that alexithymia may play a role in schizophrenia that has not been yet elucidated.

NRS12.5.
USE OF ATYPICAL ANTIPSYCHOTICS IN ACUTE PSYCHOTIC INPATIENTS IN HOSPITAL PSYCHIATRIC WARDS IN CENTRAL ITALY

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The aim of this study was to examine the criteria and the outcome of the use of atypical antipsychotics (AAPs) in 730 acute psychotic inpatients (schizophrenia, bipolar and schizoaffective disorder) in 25 hospital psychiatric wards from Central Italy. Clinical interviews and Positive and Negative Syndrome Scale (PANSS) assessments were conducted at the beginning of treatment and at patients' discharge. A factor analysis of scores on the PANSS was performed to extract four factors (negative symptoms, positive symptoms, disorganized thought and anxiety/depression) and the mean changes in PANSS factor scores were analyzed. 53% of patients were treated with risperidone, 25.7% with haloperidol, 9.3% with clozapine, 9.1% with olanzapine and 2.9% with quetiapine. The presence of positive symptoms was the first criterion for the use of all AAPs, the second was the presence of disorganization for clozapine, and of negative symptoms for olanzapine, risperidone and quetiapine. In the analysis of mean changes in PANSS factor scores, the positive and negative symptoms factors showed a greater improvement in patients after treatment with all AAPs compared to patients treated with haloperidol. These results confirm even in acute patients with different psychotic disorders a wide range effect of new antipsychotics, in accordance with clinical expectations.

NRS12.6.
INVOLUNTARY TREATMENT WITH CLOZAPINE IN TREATMENT RESISTANT SCHIZOPHRENIA

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Lack of insight and opposition against treatment is a frequent phenomenon amongst psychotic patients, especially the most seriously affected. We wanted to assess the results of involuntary treatment with clozapine, by a retrospective chart review. 17 psychotic patients with long-standing illnesses were eligible for involuntary treatment with clozapine because of treatment resistance (n=16), severe suffering of the patient (n=15) or his environment (n=4), assaultiveness (n=10), self-harm/suicidality (n=4), self-neglect (n=3) or stopping to eat (n=2). Eligible patients got the choice between oral or intramuscular injection treatment with clozapine. Seven patients complied after all with oral treatment. Treatment tolerability was good in most patients with clozapine injections and there were no unexpected side effects. Mean Clinical Global Impression-Severity (CGI-S) score decreased significantly from 6.4 before initiation of clozapine to 4.6 at the end of the acute treatment phase and 4.4 at last observation (whether on or off clozapine). No patient showed deterioration while on clozapine. Seven of 17 patients were considered as responders (Clinical Global Impression-Improvement, CGI-I of 1 or 2) at the end of the acute treatment phase. At last observation 10 of the 11 patients still on clozapine were classified as (very) much improved, although the patients on clozapine were followed up for a mean of 16.7 months. Custodial restriction at last observation was reduced in 11 patients and not changed in 6. No patient needed more custodial

restriction at last observation in comparison to baseline. In conclusion, involuntary treatment with clozapine may be feasible and effective in seriously ill, treatment resistant psychotic patients.

NRS13.
CHILD AND ADOLESCENT PSYCHIATRY (II)

NRS13.1.
INPATIENT MANAGEMENT OF MULTI-IMPULSIVE ANOREXIA AND BULIMIA

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For clinical researchers of bulimia, the last two decades have been a therapeutic success; however, when bulimia or the bulimic form of anorexia nervosa becomes associated with addictive or self-damaging behaviour, treatment response is poor. Treatment remains empirical and response perplexing to the rational clinician. This paper will describe the development of a new inpatient and partial hospitalisation programme. The paper will briefly describe the individual therapeutic approaches used by a multidisciplinary team, and the way that they are harnessed for therapeutic effect. The management, including self-audit, will be emphasised, and the ethos and working practices of the team briefly stated. The body of the programme will describe the managerial techniques used. Outcome results at the end of treatment, at one year, and at five years will be presented (in terms of binge-eating, self-induced vomiting, alcohol and drug abuse, and self-damaging behaviour). Clinical indicators of poor outcome will be given.

NRS13.2.
ENVIRONMENTAL PSYCHOLOGY AND HOME VISITS IN EATING DISORDERS – A NEGLECTED FIELD OF FAMILY THERAPY

F. Túry
Institute of Behavioural Sciences, Semmelweis University, Budapest, Hungary

Environmental psychology is a new discipline in applied psychology, and its role is underestimated in the family therapeutical practice. The presentation will summarize the basic concepts of environmental psychology, which is the theoretical background in the interpretation of home visits. Home visits can serve as a good strategy in the process of family therapy. In our practice the visits at home of eating disordered patients have become a routine part of the therapeutical process. The experiences of visits at home of 15 patients with eating disorders will be presented. There are two ways in which home visits may be useful for family therapy. On one hand there is a good opportunity to introduce in vivo structural tasks. Information about the personal boundaries are useful in the planning of therapeutical interventions. On the other hand the visit can serve as a tool for strengthening the psychotherapeutic relationship: changing the traditional doctor role, warming family atmosphere, entering into the personal spaces. Therapists become participating observers as in cultural anthropology. The observation of personal boundaries on the basis of environmental psychology, structural family therapy, and the cognitive-behavioural point of view provide important information relating to the family context of the pathological behaviour.

NRS13.3.
CZECH ADOLESCENTS AND EATING DISORDERS

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In a questionnaire study, 60% out of 725 schoolgirls (average age of 14.5 years) from Prague and Ceske Budejovice (a small town) were not satisfied with their bodies, and 60% stated that they would like to lose weight. 2% of girls vomited regularly every week and 1.8% at least once a month. In risk attitudes and behaviour there was no difference between girls from Prague and Ceske Budejovice and between students of 8th and 9th grades. There was a negative correlation between the scores on Eating Attitude Test-26 (EAT-26) and a scale of perfectionism, and a positive correlation between EAT scores and a measure of self-confidence. The group of girls with risky eating attitudes turned out to be at higher risk also concerning use of addictive substances. They smoked cigarettes and marijuana and drank alcohol more often. They also went to shopping centres more often. Girls with high EAT score assessed the atmosphere in their family as less harmonic and helpful, and their relationship to the father as unsatisfactory. Their mothers were treated in psychiatry more often, their mothers and sisters dieted more often and in the families of these girls an exceptional performance was appreciated more often.

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NRS13.4.
AN INTEGRATIVE APPROACH TO ANOREXIA AND BULIMIA: PRELIMINARY DATA OF A RESEARCH PROJECT

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This research project aims to test a therapeutic strategy that could improve the prognosis of anorexic and bulimic syndromes, reducing their tendency to chronicity. Twenty-four patients suffering from anorexia nervosa (n=12) or bulimia nervosa (n=12) diagnosed according to DSM-IV were divided into two homogeneous groups: an experimental group, which received a medical-nutritional treatment and a family psychotherapy, and a control group, which received a medical-nutritional treatment only. We have measured three sets of parameters: a) clinical parameters, strictly connected with the anorexic and bulimic symptoms (as indicated by the DSM-IV diagnostic criteria); b) individual parameters, concerning eating behaviour and psychological characteristics of the patients (Eating Attitude Test, EAT; Body Uneasiness Test, BUT; Machover Human Figure Drawing Test; Corman Family Drawing Test); c) relational parameters, concerning family interactional dynamics (using a modified version of the Wyltwick Family Tasks). All these parameters have been tested and evaluated before and after the therapeutic process both in the experimental group and in the control one. Up to now we have evaluated 2/3 of the total research samples and we can present preliminary data only. The results already obtained show a clear improvement of the anorexic and bulimic symptoms in the patients of the experimental group, correlated with a parallel improvement of the dysfunctional family interactive models and the patient's psychopathological characteristics. This improvement was not found in the control group.

NRS13.5.
VIOLENCE, GENDER AND NARRATIVE COMPETENCE IN ADOLESCENCE

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The adolescents' ability to tell a coherent and meaningful narrative about the world and their view of self is both a means and a measure of development and outcome. The adolescent who is able to represent experiences and internal states in words may have a better outcome than those who, unable to represent their inner world in any meaningful way, will act out in violent and self destructive ways. This is a study of the relationships between adolescent violence, gender, and narrative competence. The research design has involved the analysis of over 200 subjects admitted to an adolescent treatment program. I found a clear inverse correlation between symptom intensity as measured by the Short Check List-90 (SCL-90) and violent behavior. When all forms of violence to the self and/or others were combined, the incidence for males and females was nearly identical. The narrative ability of the adolescent is being investigated, using a structured and scored autobiography collected during, and one year following, hospital admission. Correlations will be made with violent behavior and gender as well as with other clinical, demographic and diagnostic variables. As the research progresses, it shows a consistent relationship between violence, symptoms, and narrative capacity.

NRS13.6.
YOU CAN'T TREAT TRAUMA IF YOU DON'T KNOW ABOUT IT: A NEW ZEALAND TRAINING PROGRAMME

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This paper first summarises the international research literature showing that the majority of trauma histories, including sexual and physical abuse in childhood and adulthood, are not known by mental health staff. The research about how clinicians currently respond to disclosures of childhood abuse will be presented. Research investigating the reasons for the apparently poor standards of clinical practice in these two areas will be presented, including New Zealand research. These include fear of vicarious traumatization, fear of distressing the client and lack of training in how to ask sensitively and how to respond to disclosures appropriately. Policy guidelines (that all mental health clients must be asked about trauma, and all staff must be appropriately trained), and a training programme – currently operating in Auckland, New Zealand - will be presented, along with a plan of evaluation of the training programme.

NRS13.7.
RISK-TAKING BEHAVIOR AND SUICIDE AMONG YOUNG ADULTS. TOWARD A DEFINITION OF SUICIDE SPECTRUM

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Risk taking behavior is defined as a group of behaviors that is distinguishable from overt self-destructive behavior by the criteria of time and awareness. The effect of the behaviors is long-term, and the person is usually unaware of or does not care about the effect of the behavior. Our study aims at assessing the correlation between risk taking behavior and suicidality among young adults. We surveyed 183 University students (81 males and 102 females). The following scales were administered to each participant: Physical Risk Assessment Inventory (PRAI), for assessing a variety of health and sport risk behaviours; Beck Hopelessness Scale and Reasons for Living Inventory (RFL), both assessing suicide risk. We also administered a self-reported questionnaire to investigate whether or not the individual thought of or attempted suicide in the last 12 months or in his lifetime. Principal components analysis was performed. 3% (n=5; 4 men and 1 woman) of participants attempted suicide in the last 12 months (1.1% more than once); only one subject out of five had attempted suicide sometime in the past. Men engaged in risk-taking behaviors more often than women. Those who thought of or attempted suicide in the last 12 months were at higher risk of suicide and engaged in health risk behavior more often than others, but engaged in high-risk sports less frequently.

NRS13.8.
DANCE/MOVEMENT THERAPY IN CHILDREN AND YOUNG ADOLESCENTS WITH EMOTIONAL AND BEHAVIOURAL DISORDER AND/OR NOCTURNAL ENURESIS

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A randomised controlled trial, preceded by a pilot study and followed six months later by a follow-up assessment, has been conducted with children suffering from emotional and behavioural disorder and/or nocturnal enuresis (primary or secondary), according to ICD-10 research criteria. They were assigned at random to two groups. Group A (n=11) received dance/movement therapy; group B (n=10) did not receive any therapy or medication. The intervention took place over 7 weeks time (2 sessions/week). Each session lasted 90 minutes: 60 minutes of dance movement and 30 minutes of verbal feedback. There was no statistically significant change between the pre- and post-intervention assessment in the control group, versus a statistically detectable amelioration on some of the parameters in post-intervention assessment in the dance/movement group, as well as a long-term effect of amelioration in the dance/movement group on the six month follow-up assessment.

NRS14.
CULTURAL AND PREVENTIVE PSYCHIATRY

NRS14.1.
MANAGEMENT OF OVERSEAS AND LOCAL PATIENTS IN INNER LONDON

F. Carranza
Gordon Hospital, London, UK

Globalisation has had an impact on the world economy. The effects have extended to areas such as health, with events and changes in one country having an impact in other parts of the world. The geographical mobility among patients with mental illness is high, and this is also reflected in the number of these individuals who travel whilst unwell, or become ill whilst in a foreign country. This study compares data from the admission of overseas patients and local resident patients to a psychiatric unit in London. It was conducted in 31 local residents and 31 overseas visitors admitted to a psychiatric hospital between 1 January and 31 December 1999 under the care of the mental health team based in the area of Westminster in central London.

Statistical methods were used to analyse the data. Differences were found in multiple parameters related to the admission, assessment, treatment, and discharge. These data have financial, ethical, legal, medical, and social implications relevant to patients, care service providers, and other organisations, which will be discussed in the presentation.

NRS14.2.
MIGRATION AND MENTAL HEALTH: A REVIEW

D. Bussé
Centres Assistencials Emili Mira i López, Diputació de Barcelona, Spain

We reviewed the literature on migration and mental health. 120 papers were selected. Overall, the interest in this field has recently declined in the USA, whereas it increased in Northern Europe and Canada. North American studies traditionally looked at the existing differences between groups of Native-American, Afro-American, Hispanic, Caribbean and European origin compared with the population of Anglo-Saxon origin. The studies focused on general psychiatric morbidity and more specifically on psychosis, post-traumatic stress disorder, suicide, somatoform and affective disorders. In Europe (specially in the UK, the Netherlands and Scandinavian countries) research focused on Afro-Caribbean, Middle East and Mediterranean communities. We had little access to Mediterranean and third world publications. New world conflicts, new refugees and different trends in migration are affecting the topics and theories in this research area.

NRS14.3.
PREVENTIVE PSYCHIATRY IN INDUSTRY

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For the past twenty years, world-wide manufacturer S.C. Johnson, Inc. has participated in a program designed to give unlimited high-quality mental health treatment to its employees. The emphasis of this program is preventive medicine through early identification and treatment of psychiatric disorders for all workers. Care includes no-cost psychotherapy and minimal-cost continuing medical psychiatric care for employees, dependents and retirees. Over three thousand patients have been treated with no appreciative loss of work time. Only three disabilities have been issued and the average number of hospitalizations (including dependents) has remained two per year. The majority of treated employees (95%) have remained with the company. The efficacy of early intervention thus saving millions of corporate dollars in lost time, retraining, and repatriating is clearly demonstrated and documented. As a result of this unique approach, all parties benefit: the corporation through significant cost savings, the employees by improved mental health, and the health care provider who is able to provide complete services without the restrictions imposed by complicated insurance criteria and conditions.

NRS14.4.
PREVENTION OF SCHIZOPHRENIC DISORDERS

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Preventing schizophrenic disorders is a social, economic, human and medical priority for public health. This requires a reconsideration of the meaning of early vulnerability as a stable trait of mental functioning, which includes a first level of interaction between genetic and organic factors, constitutional strength of basic psychophysiology functions of the infant and early social maladaptive environment. This interactive level is responsible for a pathological Self-organisation, a cognitive deficit and environmental dysfunctions which initiate a second level of interaction toward the onset of full psychosis or a schizophrenic spectrum disorder. A key concept of early vulnerability is that there is a continuous interchange between brain and mind. Early brain abnormalities could promote a maladaptative neuro-psychological development, but they could be the consequence of severe early parenting/environmental failures. A comprehensive epigenetic and neuro-developmental model is proposed to set up pragmatic interventions to reduce incidence (primary prevention), prevalence (early secondary prevention) and severity of schizophrenic disorders (early tertiary prevention). This includes promotion of a positive mental health attitude and reduction of causal risk factors, destigmatisation, genetic counseling, prevention of pregnancy and obstetric complications, neurodevelopmental assessment in infants and children at risk, familial premorbid prevention, prevention of mental illnesses in children with a schizophrenic parent, cooperation with school and teachers, identification of schizotaxia in adolescents and young adults, and early identification of mental states at risk, prodromal states, transition psychosis, and early psychotic onset.

NRS14.5
PRIMUM NON NOCERE

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Societal and political expectations, legal imperatives and financial considerations significantly influence psychiatry in subtle and direct ways. Psychiatry has advanced in its scientific approach but the current philosophies of service provision obscure the primacy of basic tenets, among others the imperative of Primum Non Nocere, by failing to keeping the patient central and phenomenology accurate. When a person's thinking, feeling, memory and behaviour is disrupted, the manifestation is signaled in society. A psychiatrist reads the signals and formulates the symptoms. Clusters of symptoms are recognized clinically, socially, economically and politically as syndromes, which are "managed" in establishment ways. Encapsulated within a "diagnosis", additional attributes can be ascribed which may debase valid mental functioning. Primum Non Nocere demands that the doctor correctly determine the diagnosis by considering each element before he makes any individual attribution and subsequent collection of attributes. Incorrect attribution at any step may result in error. An error diverts the way forward and the view backward. Collectivism may multiply the error. Social, legal, political and economic paradigms, individually and collectively, intrude between the patient and the doctor curtailing the exercise of Primum Non Nocere, increasing the risk of harm to the patient, as well as the doctor who carries the substantive liability for diagnosis and prescription. To what degree has "first do no harm" unwittingly become "legally liable harm", "friendly harm" or "calculated harm"? Meaningful adherence to discipline specific ethical and phenomenological expertise will protect against the perversion of the profession by opportunistic institutions.

NRS14.6. CHARACTERISTICS AND TRAUMATA OF SEXUAL OFFENDERS

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Forensic psychiatric studies indicate that persons in prison and psychologically disturbed sexual offenders have a high degree of traumatic experiences. In addition, the diagnosis of a personality disorder, particularly cluster B according to DSM-IV, has been discussed in recent publications as predicting sexual offences. The aim of this study was to investigate the extent to which the diagnoses and traumata of sexual offenders differ from those of non-sexual offenders. Against this background, 51 male, forensic psychiatric patients at two forensic clinics in Mecklenburg/West Pomerania, Germany, were examined using a structured interview to record their traumata. Various self-evaluation questionnaires served to ascertain dissociative and general psychopathology and interpersonal problems and to specify their temperament. These data enabled us to compare the variables recorded for sexual and non-sexual offenders. No links were found between sexual offences and forensic or socio-demographic variables. Nor was it possible to identify any differences in dissociative and psychopathological factors between sexual offenders and non-sexual offenders. However, the comparison between these groups showed that the former more frequently reported sexual abuse in their biographies and the diagnosis more frequently indicated a narcissistic personality disorder. But the logistic regression analysis controlled for age pointed to only sexual abuse in childhood as a significant factor. To summarise, our data show that sexual abuse in a person's own earlier history was the only pointer to committing a sexual offence. This supports the idea that one's own traumatic experiences are reproduced later and indicates the significance of dealing with traumatic experiences in childhood for this group of offenders.

NRS14.7. PERSONALITIES OF PEOPLE WITH MENTAL RETARDATION

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We were observing 250 persons with moderate and severe mental disability living in institutions in Prague. Their were usually admitted for psychiatric care because of emotional and behavioral disorders. The average age was 35.6 years; in the group there were 150 men and 100 women. We found the diagnosis of personality disorder according to ICD–10 extremely difficult. We also did not find the generally used rating scales useful. On the other hand, it is necessary to recognize personality disorders in mentally retarded persons in order to establish the proper diagnosis and treatment. We created a new questionnaire based on clinical descriptions of mood disorders and behavioral abnormalities which are characteristic of personality disorders. The questions were answered by tutors and medical staff who were in everyday and long lasting contact with the patients. Weekly observations of the psychologists and psychiatrists were also included. We classified 55% of the clients as having personality abnormalities and 10% as having a personality disorder. In the next phase of our research we will evaluate our findings by using the Standardized Assessment of Personality devised by Mann et al.

NRS15. NEW AND TRADITIONAL APPROACHES IN MENTAL HEALTH CARE IN DEVELOPING COUNTRIES

NRS15.1. BAREFOOT COUNSELING: A POST-PSYCHIATRIC INTERVENTION

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Post-psychiatry deals with linking service development to the context, values and partnerships with users. In Pakistan psychiatric diagnosis and treatment are stigmatized, inaccessible, unaffordable, and unacceptable to the majority. There is also skepticism regarding pharmacotherapy. In this study, literate women from a semi-urban low middle class community were minimally trained in counseling skills in 11 sessions of 3 hours each. A baseline survey was conducted to identify anxious and depressed women in the same community, who were randomized into an intervention and a control arm. The community counselors then provided weekly one hour sessions for 8 weeks to the subjects in the intervention arm. Two independent tests used to compare the improvement from baseline to after 8 weeks of counseling between the intervention (n=70) and the control arms (n=91) gave a p value of <0.000. The subjects reported that counselors were empathic, that sharing problems with them was easier than talking to family members, and that counseling had led to increased self-awareness, self-worth and had reduced tension in their lives. The study suggests that literate community women can be trained, be accepted by their community and prove beneficial as counselors. The reliability of this innovative intervention needs to be explored.

NRS15.2. FAITH HEALERS, PSYCHIATRISTS, MENTAL ILLNESS AND EPILEPSY AS VIEWED BY THE SOCIETY – A SURVEY IN RURAL INDIA

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In rural India almost all psychiatric cases and epileptics consult faith healers. The national health program, of India aims at the integration of epilepsy and mental health care system through community clinics. For the success of this program, people's ability to detect mental illness and epilepsy and their choice of mode of treatment are important. To study this, a survey was conducted in villages over a random sample of 200 youths (20-30 years), 200 housewives and 200 elders (50-60 years) through a semi structured questionnaire designed to gain information about the attitude of all groups regarding faith healers, psychiatrists, epilepsy and mental illness. We found that faith healers are very popular for the treatment of epilepsy and mental illness. 98% think that depressive illness is not a disease of the body. 90% consider that any type of fit is a serious medical problem. 98% fail to differentiate between epileptic fits and other fits. 98% disagree about marriage negotiations with mentally ill and epileptics. Society is lacking in scientific knowledge about mental illness and epilepsy. A well-planned scientific publicity is essential for the improvement of attitude of the people about mental illness and epilepsy in India.

NRS15.3.
AT PEACE WITH THE INNER SELF – FOLLOWING THE CHINESE WAY

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The doctrine of *Tao* (harmony with the nature, inaction and contentment) and the concept of fatalistic voluntarism (fatalism and relational fatalism) have guided the Chinese to cope with life events, especially unpleasant ones. A study aiming to explore the ways Chinese women with schizophrenia (n=135) cope with their mental illness was conducted in Hong Kong and its neighbouring city Shenzhen. Most of the subjects believed that the illness was part of the predetermined destiny of their life and the outcome of their illness was not in their control. They understood that they could not escape the influence of fate and were inclined to accept life as it is and accommodate both pleasant and unpleasant events. The strong belief in external control of events stimulated the women to find ways to adapt and cope with their illness. By following the flow of nature, these women were able to endure life in the face of disappointment, discrimination, privation and uncertainty. The fatalistic and activistic attitudes also enable these women to do everything in their power to counteract the present difficulties, maintain hope for the future and be at peace with the inner self. They faithfully followed the treatment regime hoping that their illness could be cured. Consequently the women were more adaptive to the illness without losing their ego strength. The study highlights the role of culture in moderating illness experience. The findings also provide clinicians with directions in modifying clinical practice and approach in assisting Chinese women to make adjustments to their illness, to rehabilitate and to restore health.

NRS15.4.
EFFECT OF RAJAYOGA MEDITATION ON PSYCHOACTIVE SUBSTANCE ABUSE/DEPENDENCE

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A retrospective study was carried out on overseas meditation practitioners who visited the international headquarters of the Brahma Kumaris spiritual institution in 1994-95, to assess the efficacy of Rajayoga meditation (RM) to overcome psychoactive substance abuse/dependence. Three hundred eighty foreigner males and females, including 216 Europeans, having a maximum of eight kinds of substance abuse/dependence for a duration ranging from two months to forty years, were interviewed. Data was collected personally by giving structured questionnaire. The majority of meditation practitioners (93%) abstained completely from all the substances within one month period of practice of RM and without taking concurrent psychiatric treatment. This suggest that RM is a successful method to overcome substance abuse/dependence.

NRS15.5.
OCCULTISM AND PSYCHIATRY: IMPLICATIONS IN CLINICAL PRACTICE

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The Mind's direct power to effectuate changes in oneself or others or in the physical world had obvious limitations. This led to the seeking of occult knowledge by which dormant psychological powers could be harnessed to produce effects (like "healing") that appeared magical. However, most spiritual teachers in India did not favour such practices, as they distracted seekers from real spiritual progress. Actually, there is a hierarchy of these hidden powers and forces. Ordinarily, "occultists" work with powers at the lower end of the hierarchy. In India, many psychiatric patients consult such occultists believing that their illness has been caused by "hostile" forces. Such "hostile" forces may be subjective psychological formations that arise in the individual or in the cultural matrix or stimulated by "perceived" ill-will of persons significant to the subject. In their attempt to "correct", occultists unleash disruptive forces that can further endanger a disbalanced state. Working with these lower powers often make the occultists perverse and vindictive. Moreover, many cheats practice in the disguise of occultists exploiting the belief-structure of people. There are higher powers and forces at the other end of the occult hierarchy. This "higher" occultism necessitates an experiential growth in consciousness and can provide transpersonal insights to enrich our intervention strategies. This paper cites examples of how those patients who are the "beau-ideal" of occultists can be understood and managed in a clinical setting without dismantling their belief-structure and without compromising scientific treatment. This necessitates a metapsychological understanding of the structure and nature of the human being from a consciousness perspective.

NRS15.6.
THE HUMAN DATA BASE PROJECT

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The Human Data Base Project has been conceived as a tool for the improvement of health and quality of life of the population. The fundamental principle of this project is the protection of human rights, such as the right to freedom, to privacy, to peace, to education, to justice, to feeding, to distribution of income, to work, to leisure and to a healthy environment, against militarism and oppression. This project has two main objectives. Initially, to propose the guidelines for the construction of the Human Data Base, as well as accessory databases, and to delineate work stations for inclusion of data. The more important objective, however, is to study the benefits to health and quality of life of the people of the construction of a database like this, beginning with a pilot study in the city of Porto Alegre.

POSTER SESSIONS

PO1.
PSYCHOTIC DISORDERS

PO1.1.
THE SCHIZOPHRENIA DIAGNOSIS AS A BASIS FOR TREATMENT IN A POLYDIAGNOSTIC PERSPECTIVE

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In a review of more than 70 polydiagnostic studies on schizophrenia, the rate of schizophrenia by each definition, the interrater reliability,

the concordance between the definitions, and the validation findings were compared. The number of patients by each definition varies considerably, largely dependent on the inclusion/exclusion of affective syndromes and the duration of illness required. Disappointingly few validation studies were found. Schizophrenia by modern criteria (DSM-IV and ICD-10) appears to be poorly validated and arbitrarily demarcated. The choice of schizophrenia definitions for treatment studies is a neglected issue considering its psychopathological and prognostic implications. 'Core schizophrenia', a subgroup shared by the majority of current definitions, is not representative of schizophrenia at large because of a bias towards e.g. male sex and poor outcome. For lack of a single valid definition, the polydiagnostic method is preferable.

PO1.2.
PREDICTORS OF OUTCOME: PRELIMINARY DATA ON COURSE, PSYCHOPATHOLOGY AND TREATMENT FROM THE COPENHAGEN PRODROMAL STUDY

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Preliminary data of the 4-year follow-up of 155 first admission patients included in the Copenhagen Prodromal Study from 1998 to 2000 is presented. The study aims at finding psychopathological and treatment variables that can serve as predictors of outcome and of future schizophrenic psychosis. At inclusion the patients were diagnosed according to ICD-10 and fell into three equally sized groups: schizophrenia spectrum psychosis, schizotypical disorder and a group of patients with predominantly personality or affective disorders. Patients were investigated with several psychopathological scales with special emphasis on abnormal subjective experiences (basic symptoms; Bonn Scale for Assessment of Basic Symptoms, BSABS) and anomalous self-experience, e.g. changes in self-awareness, sense of corporeality, stream of consciousness and self-demarcation. The follow-up investigation includes reinvestigation on all previously used psychopathological scales (among others the Schedules for Clinical Assessment in Neuropsychiatry, SCAN; the Positive and Negative Syndrome Scale, PANSS; the BSABS and the Global Assessment of Functioning, GAF) and an assessment of cognitive functions including measurements of reaction time, memory function, cross-modal integration, executive functions and estimates of IQ. A throughout history of treatment, social functioning and psychopathology is established from the interview and all available hospital charts. Data on potential predictors of outcome and risk of psychosis, and on diagnostic stability are presented.

PO1.3.
DIMENSIONAL STRUCTURE OF MAJOR PSYCHOSES

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The symptoms of major psychoses aggregate in factors, each supposed to have a specific pathophysiological substrate and thus providing a more reliable target for genetic research and drug therapies. Up to now models of one to eight dimensions have been reported. In the present study we tested some of the most replicated models in a large sample of patients diagnosed with schizophrenia, bipolar and delusional disorders. 1294 inpatients who fulfilled DSM-IV criteria for the diagnosis of schizophrenia (n=460), bipolar (n=726) and delusional disorders (n =108) were assessed using the operational criteria for psychotic illness checklist with a lifetime perspective. Confirmatory factor analysis was used to test the following models: 1) unique psychotic dimension, 2) positive-manic items, negative-depressive items, 3) the previous model with the addition of a disorganized factor, 4A) positive, negative, depressive and manic dimensions, 4B) same as previous model, with loss of pleasure (anhedonia) and loss of energy (apathy) included among depressive instead of negative symptoms, 5) same as previous model, except for the addition of a disorganized domain. The four and five factor models fitted the data much better than simpler ones. Between the two four factor models, 4B emerged as more appropriate than 4A. The five factor solution displayed the best fit. In conclusion, our confirmatory factor analysis in a large sample of psychotic subjects showed that major psychoses symptomatology is composed by five factors: mania, positive, disorganization, depression and negative symptoms.

PO1.4.
VISUAL ILLUSIONS, CONNECTIVITY AND PSYCHOTIC TRAITS

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Illusions are misperceptive phenomena which have been recently claimed to be a prodromal manifestation of psychosis. The aim of this study was to investigate the neural networks implicated in the genesis of apparent motion illusions in humans and the relationships between their local connectivity and psychotic traits. Thirteen healthy controls were selected and underwent a functional magnetic resonance imaging (fMRI) protocol, while watching apparent motion stimuli, set at two different frequencies (4 and 30 Hz) and randomly intermixed with four control conditions (two static stimuli, fixation cross and blank screen); stimulus onset asynchronicity was of 6 seconds and each stimulus was presented 40 times. In the same imaging session, a diffusion tensor imaging (DTI) sequence was run on each subject, in order to evaluate the fractional anisotropy (FA), an index of local connectivity; furthermore, all subjects were administered the Minnesota Multiphasic Personality Inventory (MMPI-2). The median split method was used on MMPI-2 Schizophrenia, Paranoia and Psychopathic Deviate scales to identify sub-groups of volunteers with high or low scores for psychotic traits. In the right V5 area, FA showed a significant increase in subjects with higher scores for psychotic traits, with respect to those with low scores. A possible model of misperceptive phenomena is discussed.

PO1.5.
SOCIAL COGNITION AS A MEDIATING FACTOR BETWEEN NEUROCOGNITIVE DOMAINS AND FUNCTIONAL OUTCOME

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In recent years cognitive remediation has become an important approach in the treatment of schizophrenia. Integrative models try to

explain the association of deficits in neurocognitive domains and functional outcome. Social cognition may be a possible mediating factor between them. The integrated psychological therapy (IPT) for groups was one of the first comprehensive therapy programs to target deficits in these areas. The IPT subprogram "cognitive differentiation" (CD) focuses directly on neurocognition (concept formation/executive functioning, etc.) and the IPT subprogram "social perception" (SP) represents one segment of social cognition. The other subprograms of IPT improve social competence. The aim of this meta-analytic study was to examine whether schizophrenia patients receive additional benefits from CD when combined with SP in comparison to CD alone. For this purpose 22 independent IPT studies including CD and SP were selected and quantitatively reviewed. The most salient results indicate favourable mean effects of neurocognitive variables and functional outcome when CD and SP are combined. Nevertheless, both treatment conditions (CD/SP and CD alone) obtain superior effects compared to control groups. Moreover, improvements in some specific neurocognitive domains of schizophrenia (attention, memory, and executive functioning) and in social cognition variables (social perception) can be identified. In summary, the results indicate some evidence of the probable mediating function of social cognition between neurocognition and functional outcome. Further experimental studies are necessary to investigate additional differential treatment effects of basic neurocognition and social cognition (insight, social schema, coping skills, etc.).

PO1.6. THE QUATRO PROJECT: A RANDOMIZED CONTROLLED STUDY TO EVALUATE THE EFFECTIVENESS OF ADHERENCE THERAPY ON THE QUALITY OF LIFE OF PEOPLE DISABLED BY SCHIZOPHRENIA AND THEIR CARERS

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In this controlled study, 400 participants aged 18-70 and with an ICD-10 diagnosis of schizophrenia are randomly assigned to two types of intervention: adherence therapy, a cognitive-behavioural psychological intervention, and health education, used as control treatment. Both treatments will be administered in eight individual sessions given within 4-8 weeks. Participants are recruited in four European community psychiatric services (London, Amsterdam, Verona and Leipzig) and are followed up for 12 months. At baseline and follow-up assessments, standardised instruments to measure clinical and social outcome, quality of life of participants and their carers, use of services and costs are used. The primary outcome measure for data analysis is the quality of life of participants and their carers. Secondary outcome measures include psychopathology, disability, social adjustment, the use of services and costs of care, adherence to treatment and attitudes towards medication. At mid-term, the progress of the study is on schedule: the targeted number of participants has been practically achieved in the four centres, treatments are under completion while follow-up interviews are underway. The recruitment of the proposed number of participants with a diagnosis of schizophrenia in four different European countries has proven feasible; experimental and control treatments have been well accepted as well as the battery of standardised instruments used for baseline and follow-up evaluations. The study is producing high-quality data and a set of standardised instruments to be used in the evaluation of relevant dimensions of outcome in five European countries.

PO1.7. AN EARLY INTERVENTION APPROACH TO TREATMENT OF FIRST EPISODE PSYCHOSIS: TWO YEAR OUTCOME

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The Canadian Health Care system lends itself to development of a model that can address two principal issues in early intervention: improved treatment and reduced delay in treatment. A model of early intervention in psychosis was developed in 1997 in one urban location and recently (2002) transposed to a large urban setting (Montreal). The key components of the model are quick access, prompt comprehensive assessment in a setting of client's choice, emphasis on engagement, protocol of medication (novel antipsychotics as first line) and psychosocial interventions, continuity of care and assertive case management with emphasis on reintegration through utilisation of non-mental health community resources for a period of two years and a lower level intensity treatment and follow-up for an additional three years. In addition, the program includes active case identification and continuous evaluation of symptoms, medication side effects, suicidal behaviour, cognition, quality of life and employment/education. 47% of patients entering the programme received their initial care as out-patients with no negative impact on subsequent utilization of in-patient resources; 74% and 82% were in remission by years 1 and 2; relapse rates were relatively low (17% at 1 year and 27% at 2 years); time to remission was associated only modestly with duration of untreated psychosis (r=.23) but more significantly with pre-morbid social adjustment in early and late adolescence; time to relapse was associated significantly and inversely with time to remission and social pre-morbid adjustment in early and late adolescence. Duration of untreated psychosis showed a decline two years following open and improved access to the program. A more active community case identification program resulted in recruitment of more severely ill patients with no significant change in duration of untreated psychosis.

PO1.8. AN INDIVIDUALIZED PROGRAMME OF COGNITIVE AND PSYCHOSOCIAL INTERVENTION IN PSYCHOTIC PATIENTS

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In patients with schizophrenia, the acquisition of social skills may be hindered by the presence of cognitive dysfunctions. Moving from this observation, it has been proposed that cognitive training increases compliance to psychosocial interventions and improves functional outcome. The present study was aimed to evaluate functional outcome in patients with schizophrenia participating in a rehabilitation

programme, combining individualized cognitive and psychosocial interventions (social skills training, SST). To develop and test the feasibility of the cognitive and psychosocial interventions, a pilot study was carried out in a small group of severely ill schizophrenic patients. The developed programme was then applied in a group of 15 chronic stabilized patients with schizophrenia, who were randomized to either the SST programme or the combined SST and cognitive training. In the first four months, treatment compliance has been excellent in both groups. Only two patients, one for each group, dropped out from the study: one experienced a clinical relapse (from the combined SST and cognitive training group) and the other one was able to resume previously interrupted university courses (from the SST group). Preliminary results of the comparison between the two groups on cognitive functioning, psychopathology and functional outcome will be presented and discussed.

PO1.9.
EFFICACY OF REHABILITATION PROGRAMS FOR SEVERE PSYCHIATRIC PATIENTS

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The aim of the study is to evaluate whether the rehabilitation approach proposed by the manual VADO (Evaluation of Abilities and Definition of Objectives) can be considered more effective than routine intervention in reducing the disabilities of schizophrenic patients. The study is taking place in residential units and day-care units afferent to eight psychiatric services randomly selected throughout Italy. Two professionals for each unit were trained in the VADO approach. Each unit recruited consecutively 10 patients who met the following criteria: a) age not over 49 years; b) diagnosis of schizophrenia, schizotypal disorder or delusional disorder; c) a score for the global functioning ≤ 70 on the Personal and Social Functioning Scale (FPS); d) absence of severe disabling somatic illness, psycho-organic syndromes and mental retardation. Patients were randomly assigned to the study or control group. Each patient will be evaluated at baseline and at six months for: a) global functioning level through the FPS; b) psychopathology through the Brief Psychiatric Rating Scale; c) quality of life through the WHOQoL (brief version); d) satisfaction for the intervention received. A special schedule will also point out all the rehabilitation activities the patient went through. 75 patients were recruited. 37 of them will receive the VADO approach and 37 will receive the routine intervention. The results and their implications will be discussed.

PO1.10.
TRENDS IN PHARMACOLOGICAL TREATMENT IN PATIENTS WITH SCHIZOPHRENIA 1989-1995-1998-2001

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Despite numerous international efforts towards evidence-based guidelines for the psychopharmacological treatment of patients with schizophrenia, the transfer of such guidelines into clinical practice has remained unsatisfactory. We evaluated whether our efforts to promote such recommandations have led to measurable changes in the treatment practice in our hospital by investigating three primary hypotheses: a) polypharmacy has become less common in recent years; b) conventional neuroleptics have been replaced by second generation antipsychotics and c) dosing regimes have changed towards lower doses. We have therefore collected data from the clinical records of all inpatients with ICD-9/ICD-10 diagnosis of schizophrenia hospitalized at the Department of Psychiatry at Innsbruck's University Hospital in the years 1989, 1995, 1998 and 2001. Data from 1989 to 1998 showed a significant decrease in the use of two or more antipsychotics given simultaneosly. The increasing availability of second generation antipsychotics led to a rapid change from conventional to novel antipsychotics. There has also been a significant decrease in the use of concomitant anticholinergic medication. In 2001 treatment strategies were comparable to 1998. Monotherapy, lower doses and a predominant use of second-generation antipsychotics are standard in schizophrenia treatment in our hospital.

PO1.11.
COMPLIANCE IN SCHIZOPHRENIA: PSYCHOPATHOLOGY, SIDE EFFECTS AND PATIENTS' ATTITUDES TOWARDS THE ILLNESS AND MEDICATION

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In a cross-sectional study we have investigated the influence of several factors on compliance in schizophrenia outpatients: patients' attitudes towards the illness and antipsychotic medication, adverse effects, carers' and relatives' attitudes towards illness and medication. Patients suffering from schizophrenia (ICD-10) with a duration of illness of at least one year, and whose discharge from an inpatient ward has been at least 6 weeks prior to inclusion in the study, were investigated. We used a semistructured compliance interview, the Positive and Negative Syndrome Scale, the UKU Side Effect Rating Scale, the St. Hans Rating Scale and the Hillside Akathisia Scale. 52.5% of the investigated patients were fully compliant, 39.3% partially compliant and only 8.2% were non-compliant. We found positive correlations between compliance and the patients' feeling of a positive effect of the drug on the illness, between compliance and negative symptoms as well as between compliance and antipsychotic-induced psychological side effects. Most patients considered other illnesses such as diabetes, rheumatoid arthritis, epilepsy or cancer to be worse than schizophrenia.

PO1.12.
THE FUTURE OF PHARMACOTHERAPY OF SCHIZOPHRENIA AND THE NICE GUIDELINES

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In June 2002 the National Institute for Clinical Excellence (NICE), UK, has issued guidelines stating that, based on current evidence, atypical antipsychotics should be considered as first-line medications to treat patients with schizophrenia. Further, typical and atypical antipsychotics should not be prescribed concurrently, and depot preparations should be prescribed for reasons of compliance and individual preference. This study looks at current practice to be quantitatively assessed against published guidelines. Patients with schizophrenia served by the Chester City Mental Health Team were identified. A retrospective analysis of case notes including clinic letters over a two year period was carried out in order to obtain details of prescribed medications and other significant information. Out of 86 patients who entered the study, 17 (19.8%) were excluded as they were not current-

ly being treated by the team and 8 (9.3%) were found not to be suffering from schizophrenia. This produced a final sample of 61 patients. 46 patients (75.4%) were receiving monotherapy and 13 (21.3%) were on combination treatment. The majority of patients receiving depot antipsychotics were doing so because either compliance has been identified as an issue (7 patients, 38.9%) or because the patients had expressed a preference for depot medication (4 patients, 22.2%). Of patients with a previously established diagnosis of schizophrenia, 38 (64.4%) are currently receiving atypical antipsychotic drugs. The atypical antipsychotics were the most commonly prescribed drug class. This was followed by depot medications. The majority of patients in the sample were receiving monotherapy. However, some were receiving a combination of antipsychotics. The study also highlights reasons for prescribing depot preparations. The future of pharmacotherapy of schizophrenia in the wake of NICE guidelines will be discussed.

PO1.13. COST-EFFECTIVENESS OF ANTIPSYCHOTIC TREATMENTS: A NEW METHODOLOGICAL APPROACH. DATA FROM THE EUROPEAN SCHIZOPHRENIA OUTPATIENT HEALTH OUTCOMES (SOHO) STUDY

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The study aimed to examine the cost-effectiveness of different antipsychotic treatments in a naturalistic, multi-country setting. The European Schizophrenia Outpatient Health Outcomes (SOHO) is a 3-year, prospective, outpatient, observational study of health outcomes associated with antipsychotic treatment. The study is being conducted in 10 European countries. 10,206 patients were eligible for enrolment after they initiated or changed antipsychotic treatment for clinical reasons at baseline. Patients were assessed at baseline, 3, 6 and 12 months thereafter. Treatment patterns were at the discretion of the treating psychiatrist. Resource use, effectiveness and quality of life data were collected at each time point. Patients were grouped by treatment received: olanzapine, risperidone, quetiapine, amisulpride, clozapine, oral typicals, depot typicals. Resource use data include inpatient days, day-hospital, outpatient visits to a psychiatrist and antipsychotic and concomitant medication. Unit costs were collected across participating countries. Clinical effectiveness was measured by the Clinical Global Impression-Severity (CGI-S). Quality of Life (QoL) was measured using the EuroQol-5 Dimensions (EQ-5D) questionnaire. UK general population data were used to convert QoL scores to utilities. Econometric modelling was used to estimate incremental changes in costs, effectiveness and QoL between the 7 treatment groups, adjusting for patients' exogenous characteristics and the influences of site. Treatment effects were allocated to the medication the patient was receiving prior to each assessment period. This innovative methodological framework to estimate cost-effectiveness and cost-utility ratios is currently being performed and results will be presented and discussed. Methodological issues regarding pooling of data across countries will also be explored and discussed.

PO1.14. CONTINUATION DETERMINANTS OF ANTIPSYCHOTIC TREATMENT IN THE OUTPATIENT SETTING: 12-MONTH RESULTS FROM THE SCHIZOPHRENIA OUTPATIENT HEALTH OUTCOMES (SOHO) STUDY

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The study aimed to report how choice of antipsychotic treatment determines patients with schizophrenia remaining on their initial treatment during the first twelve months. The Schizophrenia Outpatient Health Outcomes (SOHO) study is a 3-year, prospective, outpatient, observational study of health outcomes associated with antipsychotic treatment. Treatment continuation, defined as maintenance of the antipsychotic prescribed at baseline with no antipsychotic additions, was assessed using a logistic regression adjusting for baseline covariates. 8,530 patients initiating treatment with a single antipsychotic medication were followed for twelve months. 5,367 (62.9%) remained on their baseline antipsychotic. Treatment continuation varies with the baseline antipsychotic: olanzapine (65.8%), risperidone (61.2%), quetiapine (42.3%), amisulpride (49.8%), clozapine (70.5%) and oral typical antipsychotics (67.5%). A logistic regression, adjusting for baseline covariates, show an increased likelihood of medication success on olanzapine compared with risperidone (odds ratio: 1.18; 95% CI: 1.03-1.35), quetiapine (2.15;1.78-2.60), amisulpride (1.68;1.25-2.26) and oral typicals (1.33;1.09-1.63), and a decreased likelihood compared with clozapine (0.51;0.39-0.68). Baseline covariates influencing patients' treatment continuation were: body mass index, pre-baseline antipsychotic medication, reason for changing medication, overall/depressive Clinical Global Impression (CGI) score and alcohol dependency. In conclusion, treatment discontinuation represents an important clinical endpoint that reflects clinician and patient judgments about enduring efficacy and tolerability. Olanzapine and clozapine appear to be associated with a higher probability of antipsychotic treatment maintenance.

PO1.15. PREDICTORS OF TREATMENT OUTCOMES IN PREVIOUSLY UNTREATED PATIENTS WITH SCHIZOPHRENIA: RESULTS FROM THE EUROPEAN SCHIZOPHRENIA OUTPATIENT HEALTH OUTCOMES (SOHO) STUDY

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The study aimed to identify predictors of outcome after 12 months of antipsychotic treatment in 919 patients with schizophrenia who had never been previously treated with antipsychotics, and who initially received olanzapine, risperidone or a typical antipsychotic. Data were extracted from the Schizophrenia Outpatient Health Outcomes (SOHO) study, a 3-year, large, prospective, observational study of schizophrenia treatment in 10 European countries. Analyses were adjusted for baseline differences between treatment cohorts (cohorts were defined based on the drug initiated during the baseline visit) and took into account clinical and socio-demographic factors that may

influence outcome. A stepwise selection criterion based on a chi-squared test (difference between the –2 log likelihood of the full and reduced model) was applied in order to remove the terms that did not appear to have significant influences in predicting the different endpoints. Baseline predictors of Clinical Global Impression (CGI) status, at 12 months, were: antipsychotic treatment (odds ratio: 1.70; 95% CI: 1.11,2.61), negative (0.79;0.70,0.90) and positive (1.13;1.00,1.28) CGI symptom scores, hostile behaviour (0.51;0.34,0.77), employment status (0.61;0.43,0.88), current substance abuse (0.15;0.05,0.41), gender (0.91;0.66,1.27), EuroQol-5 Dimensions Visual Analogue Scale (EQ-5D VAS) (0.99;0.98,0.99) and extrapyramidal symptoms (3.65;1.53,8.70). Likewise, baseline predictors of EQ-5D VAS status, at 12 months, were: antipsychotic treatment (difference: 2.73; 95% CI: 0.43,5.03), gender (-1.31;-2.72,0.10), housing status (2.20;0.62,3.79), EQ-5D VAS (0.22;0.17,0.27), negative (-2.28;-3.07,-1.48), cognitive (0.85;0.05,1.66), and overall (-0.67;-1.90,0.56) CGI score. In conclusion, in this study we found that several baseline characteristics, in particular choice of initial antipsychotic treatment, of patients with first-episode schizophrenia can be important predictors of CGI and EQ-5D VAS outcomes after 12 months of antipsychotic treatment.

PO1.16. CONFERENCE REPORT: BELGIAN CONSENSUS ON METABOLIC PROBLEMS ASSOCIATED WITH ATYPICAL ANTPSYCHOTICS

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The recently published consensus for the management of metabolic complications associated with second generation antipsychotics (SGA) might not be sufficiently sensitive: in light of our data, it seems that screening with fasting glucose misses a number of patients with impaired glucose metabolism, and taking into account the possibility of possible reversal of the metabolic complication with early withdrawal of the incriminated medication, metabolic screening should be more frequent during the first 6 months; also, the importance of the hyperlipidemia demands more frequent monitoring. Therefore, a workshop was convened by Belgian psychiatrists, diabetologists and pharmacists to formulate appropriate recommendations for practicing psychiatrists when initiating and maintaining therapy with SGA. The consensus statement issued recommendations for the management of the basic metabolic risk in every schizophrenic patient (risk factors and metabolic disorders to screen for and to follow), choosing the SGA, the follow-up of patients on SGA, attitude in case of SGA-associated glucose metabolism disorder. The need and the way to inform patients about the metabolic effects of SGA were discussed. Close collaboration between the psychiatrist and the general practitioner or the endocrinologist was strongly advised. Recommendations for non-schizophrenic patients treated with SGA were also proposed. Recommendations and consensus have been reached on the management of weight gain and dyslipidemia while on SGA therapy.

PO1.17. CLINICAL EFFICACY AND TOLERABILITY OF ANTIPSYCHOTIC TREATMENTS IN LATIN AMERICAN PATIENTS WITH SCHIZOPHRENIA

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The Intercontinental Schizophrenia Outpatients Health Outcomes (IC-SOHO) is a 3-year global, prospective, observational study examining health outcomes associated with antipsychotic treatment in outpatients with schizophrenia. The aim of this study is to summarise efficacy and tolerability results in Latin American (LA) patients following 12 months of antipsychotic therapy. Treatment efficacy was determined through the improvement in the Clinical Global Impression-Severity (CGI-S) rating scale. Tolerance to treatment was recorded by the clinician via adverse event questionnaires. Data were adjusted for baseline differences and multivariate comparisons were performed between patients prescribed olanzapine, risperidone or a typical antipsychotic as monotherapy at baseline. Patients in the olanzapine group (n=1269) were significantly ($p<0.001$) more likely to respond to antipsychotic treatment than patients in the risperidone (n=388), or typical (n=420) treatment groups. In terms of treatment efficacy, the olanzapine patients showed greater improvements in overall, negative, cognitive and depressive symptom severity compared to risperidone ($p<0.05$), and were superior to typicals in all CGI-S domains ($p<0.001$). Risperidone performed better than typical treatment in all CGI-S domains. The likelihood of extrapyramidal symptoms, tardive dyskinesia, impotence/sexual dysfunction and loss of libido was significantly ($p\leq0.001$) lower at 12 months for olanzapine patients compared to patients taking risperidone or typical therapy. Weight gain was observed in each treatment group, however patients in the olanzapine group gained significantly ($p<0.001$) more weight when compared with the other treatment groups. Results from this sample confirm that olanzapine is an effective and well-tolerated treatment for the symptoms of schizophrenia.

PO1.18. PHENOTHIAZINES AS RISK FACTOR FOR EXCESS MORTALITY DURING THE 2003 FRENCH HEAT WAVE

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France witnessed a heat wave between 1st and 20th August 2003, which was associated with excess mortality compared to the previous three years. The increased mortality rate cumulated in 14,802 deaths, 60% greater than the same period in 2000-2002. A 30% increased mortality was seen in people aged 45-64, whereas in people aged at least 75, a 70% jump was noted. Highest mortality rates were found in retirement homes (2X), hospitals (1.5X) and private clinics (1.2X).

This increased mortality rate was likely multifactorial (age, sex and high temperatures), although high prevalence of phenothiazine use may also have contributed. We investigated this hypothesis by examining the use of two commonly prescribed anxiolytic and sedative neuroleptics, cyamemazine and alimemazine, in the psychiatric hospital center of Paul Guiraud of Villejuif. Between 1st and 20th August 2003, 435 out of 530 hospitalized patients (82%) received a phenothiazine: 263 of 435 (60.5%) received alimemazine, and 172 of 435 (39.5%) received cyamemazine. Mean annual mortality rate calculated from 1998 to 2002 for hospitalized patients was 5.8 deaths per year (1.83/1000 hospitalized patients). In 2003, with 11 deaths with a peak occurrence during the 3 weeks of the heat wave, the rate increased to 3.47/1000. This represents a 90% increase in mortality rate from preceding years. Besides age, gender and increased temperatures, it appears that other variables such as overuse of phenothiazines, which impair thermoregulation, may have contributed to elevated mortality observed during the heat wave in France.

PO1.19. SUDDEN UNEXPECTED DEATHS WITH PSYCHOTROPIC AGENTS, WITH FOCUS ON RELATIONSHIP TO ENVIRONMENTAL HIGH TEMPERATURES

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Psychiatric patients have elevated risk for sudden unexpected deaths (SUDs), which are defined as unintentional deaths occurring in otherwise healthy individuals, or occurring in individuals with stable medical problems not associated with lethality. The association between SUDs and psychopharmacotherapy merits investigation since these agents may contribute to SUDs. The recent increased mortality observed in French patients prescribed neuroleptics during the heat wave in August 2003 led our focus to thermoregulatory mechanisms contributing to SUDs. PubMed database (1990 through October 2003) revealed three classes of agents associated with SUDs: antipsychotics, antidepressants and sedative-hypnotics. Proposed mechanisms included: hyperthermia/autonomic instability; cardiotoxicity; electrolyte imbalances; and respiratory drive blunting. SUDs occur as consequence of illness (either directly or indirectly) or following treatment (directly or indirectly). Antipsychotics may produce autonomic instability with temperature dysregulation, febrile catatonia, heatstroke and neuroleptic malignant syndrome. Hyperthermia and temperature dysregulation may also occur with benzodiazepines and tricyclic antidepressants (TCAs). TCAs and antipsychotics (including atypicals) may cause cardiac arrhythmias, dyslipidemia, weight gain and diabetes; SUDs may result from concomitant smoking. Bupropion also causes SUD. Electrolyte disturbances secondary to syndrome of inappropriate antidiuretic hormone secretion can cause cardiovascular fatality: agents implicated include antidepressants (TCAs, selective serotonin reuptake inhibitors, monoamine oxidase inhibitors, and newer agents); antipsychotics (typical and atypical); mood stabilizers, and sedative-hypnotics. Blunting of respiratory drive, especially with alcohol, may cause SUDs with benzodiazepines, loxapine and clozapine. In conclusion, psychotropic medications, including the newer agents, may be associated with SUDs via several mechanisms. Temperature dysregulation appears to be an underappreciated cause of SUDs.

PO1.20. ATYPICAL ANTIPSYCHOTICS: EXPERIMENTAL EFFICACY OR CLINICAL EFFECTIVENESS?

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The study aimed to assess, through a systematic review, atypical versus typical medication in the treatment of schizophrenia, based on an approximation of the circumstances that arise in daily clinical practice with these patients. The outcome measure in this review was all-cause discontinuation of treatment during the course of the trial. A second outcome was specific discontinuation for adverse events. The included studies were high-quality randomized controlled trials which compared any of the four clinically best-established atypical antipsychotics (quetiapine, olanzapine, risperidone or clozapine) against either of two typical antipsychotics regarded as the gold standard (haloperidol or chlorpromazine). The electronic search yielded 1042 references. One hundred and forty-nine relevant reports were then selected. The meta-analysis (7754 subjects) indicated a favorable effect for atypical medication where dosage was flexible, both in the short, RR 0.70 (0.64 to 0.76), p <0.00001, and in the long term, RR 0.72 (0.65 to 0.80), p <0.00001. This favorable effect of atypical medication disappeared, however, in studies relying on fixed dosage. This same dose-dependency result was also in evidence for subjects who discontinued due to some adverse event. In conclusion, based on high-quality clinical trials, there is evidence to show the greater efficacy of atypical antipsychotics (at least those assessed in this review) versus classic antipsychotics in the treatment of schizophrenia, though only where flexible doses (closer to standard clinical practice) can be used and not where dosages are fixed (closer to an experimental control situation).

PO1.21. ANTIPSYCHOTICS AND NEW PRESCRIPTIONS FOR INSULIN AND ORAL HYPOGLYCEMICS

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This study aims to detect the increase in risk of diabetes mellitus from exposure to second generation antipsychotics (SGAs) (clozapine, risperidone, olanzapine, quetiapine) compared to first generation antipsychotics (FGAs) among seriously and persistently mentally ill patients in a large state hospital system. Using a case-control study design, and using new prescription of an anti-diabetic medication to identify new cases of diabetes mellitus, odds ratios were calculated for exposure to different antipsychotics. Cases and controls were identified for the period January 1, 2000 to December 31, 2002 using a database containing drug prescription information from the inpatient facilities operated by the New York State Office of Mental Health. Eight controls for each case were matched by calendar year, length of observation period, ethnicity, age group, and diagnosis. Among 15,563 unique patients receiving antipsychotics, 7,546 met our entry criteria of being hospitalized at least 60 days and not prescribed anti-

diabetic medication in the past as documented in the database. Using conditional logistic regression and adjusting for gender and age, statistically significant elevations in risk were observed for patients receiving more than one SGA (OR=3.26, 95% CI=1.76-6.05), clozapine (OR=2.14, 95% CI=1.09-4.20) or quetiapine (OR=4.10, 95% CI=2.06-8.17), compared to exposure to FGAs alone. Although not statistically significant, odds ratios for olanzapine (OR=1.59, 95% CI=0.87-2.90) and risperidone (OR=1.59, 95% CI=0.85-2.99) were also elevated. In conclusion, exposure to multiple SGAs, clozapine or quetiapine increased the risk of developing diabetes mellitus, as defined by receiving a new prescription for an anti-diabetic agent.

PO1.22. DOSING OF SECOND GENERATION ANTIPSYCHOTIC MEDICATION IN A STATE HOSPITAL SYSTEM

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The study aimed to describe the dosing of second generation antipsychotics (clozapine, risperidone, olanzapine, quetiapine, ziprasidone, and aripiprazole) among inpatients in state-operated psychiatric centers in New York State, and to contrast this to dosing recommendations made in the manufacturers' product labeling. Information on patients and their antipsychotic medication treatment was extracted from a database containing drug prescription information from the inpatient facilities operated by the New York State Office of Mental Health. The principal period covered was April 1, 2003 through June 30, 2003. Dosing trends were calculated by examining the second quarter of calendar years 1997-2003. There were marked difference in dosages used compared to the Food and Drug Administration (FDA)-approved dosage ranges recommended in the product labeling. Specifically, the average daily dose of olanzapine was 22.63 mg (n=1463), exceeding the 20 mg maximum recommended by the manufacturer. 43.7% of patients prescribed olanzapine received a daily dose greater than 20 mg. Among the patients prescribed quetiapine (n=801), 28.5% received a daily dose exceeding 750 mg. In contrast, patients prescribed risperidone (n=1287) received an average daily dose of 4.53 mg, substantially lower than the maximum of 16 mg evaluated during the registration studies. Examining dose trends over time, it appears that the divergence from product label recommendations occurred gradually and are possibly reflective of additional clinical experience with patients not normally included in dose-finding registration studies. In conclusion, recommended dose ranges obtained during drug registration trials do not necessarily reflect clinical realities. Phase IV clinical trials that specifically target more difficult-to-treat patients are needed.

PO1.23. RETROSPECTIVE ANALYSIS OF RISK FACTORS IN PATIENTS WITH TREATMENT-EMERGENT DIABETES DURING CLINICAL TRIALS OF ANTIPSYCHOTIC MEDICATIONS

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Recent reports have described new-onset diabetes during treatment with atypical antipsychotics. In this retrospective analysis, we assessed the short-term (generally less than 1 year exposure with a median exposure time < 6 months) risk of treatment-emergent diabetes (TED) among patients with schizophrenia during clinical trials of antipsychotic medications. From a large non-diabetic cohort of patients with schizophrenia (n=5013), the relationship between baseline random glucose level and baseline risk factors for diabetes, weight gain, and the impact of therapy assignment on the risk of TED were assessed. At study entry, approximately one third of patients identified with TED possessed baseline random glucose levels >140 mg/dl and approximately two thirds possessed multiple risk factors for diabetes. Both baseline random glucose and the presence of multiple pre-existing risk factors for diabetes appeared to have a major impact on the risk of TED. The impact of treatment-emergent weight gain on the short-term risk of TED was relatively small and did not achieve statistical significance. Patients treated with olanzapine did not have a significantly greater risk of short-term TED compared to a pooled cohort of patients receiving other interventions (risperidone, haloperidol and placebo). These data suggest that, overall, the risk factors for diabetes in patients with schizophrenia overlap those in the general population. These results also suggest that many patients identified with TED may actually have had pre-existing glycemic abnormalities or a high baseline burden of risk factors for diabetes.

PO1.24. FASTING LIPID PROFILES OF PATIENTS WITH SCHIZOPHRENIA TREATED LONG-TERM WITH OLANZAPINE, RISPERIDONE, OR TYPICAL ANTIPSYCHOTICS

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The study aimed to compare fasting lipid profiles of stable, normoglycemic patients with schizophrenia or schizoaffective disorder treated long-term with olanzapine, risperidone, or typical antipsychotics. This cross-sectional study included 184 stable, matched (sex, body mass index) patients who had been treated continuously for 1 year with olanzapine (7.5-25.0 mg/day; n=67), risperidone (2.0-7.5 mg/day; n=65), or typical antipsychotics (various agents, doses; n=52). Patients with fasting blood glucose higher than 110 mg/dL were excluded from the analysis. Blood samples were collected after an 11-hour observed fast. Fasting lipids (triglycerides, TG; cholesterol, lipoproteins), glucose, insulin, insulin sensitivity, and predicted 10-year cardiovascular disease (CVD) risk (Framingham model) were compared. Overall, the three treatment groups were well matched. The olanzapine group had significantly higher mean (but not median) fasting TG levels than the risperidone group. However, three influential outliers were identified in the olanzapine group; no significant differences were observed when these values were removed. No significant between-group differences were observed in mean cholesterol levels (total; low density lipoprotein, LDL; high density lipoprotein, HDL), LDL particle size, or total cholesterol/HDL ratio. Very low density lipoprotein (VLDL), apolipoprotein B, and LDL particle concentration were significantly higher during olanzapine than risperidone treatment. No significant differences were seen in fasting glucose, insulin, insulin sensitivity, or predicted 10-year CVD risk. In conclusion, for these stable patients with schizophrenia on long-term antipsychotic therapy, modest but significant differences in fasting TG levels and some qualitative differences in lipoproteins were observed between olanzapine and risperidone groups. The cross-sectional study design and TG outliers limit the interpretation of these findings. Nonetheless, predicted 10-year CVD risk was comparable between treatment groups.

PO1.25.
IS COGNITIVE IMPROVEMENT WITH ANTIPSYCHOTIC TREATMENT PSEUDOSPECIFIC?

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While cognitive deficits of schizophrenia appear to improve with olanzapine (OLZ) treatment, the relationship between this improvement and other changes in symptoms and side effects (i.e. positive, negative, and extrapyramidal symptoms (EPS)) has not been determined. Cognitive deficits and positive symptoms have repeatedly been demonstrated to be independent dimensions of schizophrenia; however, there is substantial evidence that some aspects of cognition are related to negative symptoms or EPS (measured by the Simpson-Angus Scale). Using post-hoc path analyses, we investigated the relationship between cognition, derived from a cognitive battery composite score, and Positive and Negative Syndrome Scale (PANSS) negative and positive scores as well as EPS. Three double-blind, randomized OLZ versus haloperidol studies were included, resulting in a heterogeneous overall sample (OLZ, n=311) including first-episode, early-phase, and stabilized chronic schizophrenia patients. In the first-episode study, at 24 weeks there was a cognitive effect size of 0.48, with the direct therapy effect accounting for 85.1% ($p<0.05$) of the last observation carried forward (LOCF) change in cognitive measurements while the other three aspects combined accounting for only 14.9% of the improvement. In two studies (first-episode and early-phase) at 52 weeks, cognitive composite score effect sizes ranged from 0.12-1.42, where therapy accounted for more than 81% of improvement beyond baseline. In the third study of stabilized patients, therapy only accounted for 64% (NS) of the cognitive effect, with EPS accounting for 27% ($p<0.05$). In conclusion, cognitive treatment effects appear to be autonomous from most other symptoms. The effect of EPS on overall cognition status remains unclear.

PO1.26.
SEXUAL DYSFUNCTION IN ANTIPSYCHOTIC-TREATED OUTPATIENTS WITH SCHIZOPHRENIA

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Although sexual dysfunction is common in antipsychotic-treated male outpatients with schizophrenia, little is known about its clinical consequences. A systematic sample of 144 male outpatients with schizophrenia or schizoaffective disorder, aged 18 to 70 years, treated with antipsychotic monotherapy (haloperidol, olanzapine, risperidone, or quetiapine) for at least 6 weeks, but not treated with other medications with known sexual side effects, were assessed using the Changes in Sexual Function Questionnaire (CSFQ), Quality of Life Interview (QLI), Brief Psychiatric Rating Scale (BPRS), Calgary Depression Scale (CDS), and Global Assessment Scale (GAS). Current sexual dysfunction was reported by 45.5% of study patients. The rate of sexual dysfunction was similar in patients treated with quetiapine (40.0%), haloperidol (41.8%), risperidone (53.3%), and olanzapine (59.0%). Compared to patients without sexual dysfunction, those with sexual dysfunction reported significantly poorer quality of life in general ($p<0.02$) and less satisfaction with the amount of enjoyment in their lives ($p=0.004$). They were also significantly less likely to have a romantic partner (16.4% vs. 39.7%, $p=0.003$), but not less likely to be married (6.6% vs. 8.2%, $p=0.72$). Patients with and without sexual dysfunction did not significantly differ in overall symptom severity (mean BPRS: 46.0 vs. 43.3), severity of depressive symptoms (mean CDS: 2.7 vs. 2.5), or global function (mean GAS: 46.0 vs. 43.3). In conclusion, sexual dysfunction is common in male patients with schizophrenia treated with haloperidol, olanzapine, risperidone, or quetiapine, and is associated with impaired self reported quality of life. Psychiatrists should routinely monitor male patients with schizophrenia for sexual side effects.

PO1.27.
CONTRIBUTION OF DRUG ATTITUDE, INSIGHT AND COGNITIVE DEFICIT TO ANTIPSYCHOTIC TREATMENT COMPLIANCE IN SCHIZOPHRENIA

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Poor medication compliance in subjects with psychosis has a high prevalence and a negative impact on clinical outcome. A poor level of insight has been found to be a major contributor to poor medication compliance. Other studies suggested a correlation between poor insight and cognitive deficits of schizophrenia, with contrasting results on the role of executive functions. These variables may be in complex reciprocal relationships, which may explain behaviours like decreased drug attitude and compliance even in front of clear benefits deriving from drug taking in schizophrenic patients. The aim of our study was to test this hypothesis investigating the correlation between drug attitude and compliance, cognitive performance and awareness of illness, psychopathology and drug effects. 60 schizophrenic patients consecutively admitted to a psychiatric ward are included in this prospective study. Patients are evaluated at admission and discharge with the Positive and Negative Syndrome Scale (PANSS) for psychopathology, the Drug Attitude Inventory-30 (DAI-30) for medication compliance, the Scale to Assess Unawareness of Mental Disorder (SUMD) for awareness of illness, psychopathology and effects of drug treatments. A neuropsychological battery (Wisconsin Card Sorting Test, Brief Assessment of Cognition in Schizophrenia, Source Monitoring Task) is administered at admission to evaluate executive functions, verbal and working memory, verbal fluency, psychomotor coordination, attention and source monitoring. Data presented will be analyzed with a multivariate method with DAI-30 scores as independent variable.

PO1.28.
A PHARMACOECONOMIC MODEL COMPARING TOLERABILITY OF OLANZAPINE, RISPERIDONE, HALOPERIDOL, AND ZIPRASIDONE IN SPAIN

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The frequency of adverse events (AEs) associated with antipsychotic drug use is high. Using a pharmacoeconomic model developed to assess the economic impact of these treatment-related AEs, this study assessed the AE-related costs associated with current antipsychotic drug use in Spain. A cost-effectiveness model was developed using a Markov modeling approach simulating 12 months of treatment in a cohort of schizophrenics initiating treatment with haloperidol, risperidone, olanzapine or ziprasidone. Equivalent efficacy among

the antipsychotics was assumed. Conditional probabilities of developing any of four adverse events was calculated. Treatment was modified (decreased dose, medication switch) according to incidence of AEs and physician judgment, obtained from a local cross-sectional study and clinical trials previously published. Only direct medical costs (during 2002) from a third-party payer perspective were computed. Results are shown as annual cost per month with psychotic symptoms controlled. Univariate sensitivity analysis was performed. Initiating treatment with ziprasidone showed the most favorable cost-effectiveness ratio - i.e., the dominant option (showing lower costs and the greater number of months with symptoms controlled) versus the comparators. The annual cost per patient per month with symptoms controlled was Euro 1,035 with ziprasidone versus Euro 1,084, Euro 1,087, and Euro 1,090 with haloperidol, risperidone, and olanzapine, respectively. Results are robust to one-way sensitivity analysis. In conclusion, AEs associated with antipsychotic drug use produce a considerable economic impact. These results emphasize the need to consider how ziprasidone's favorable tolerability profile can produce a positive impact not only on the clinical aspects of schizophrenia but also on health care budgets.

PO1.29.
CLOZAPINE, BUT NOT HALOPERIDOL, REVERSES SENSORIMOTOR GATING IMPAIRMENTS MEDIATED BY KAPPA OPIOID RECEPTOR ACTIVATION IN RATS

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The recent discovery of new highly selective ligands for kappa opioid receptors (KOR) has strengthened the evidence that KOR play a role in the modulation of cognitive processes and their activation induces perceptual distortions and hallucinatory effects. Since the deficit of sensorimotor gating is generally regarded as the psychophysiological substrate for such anomalies, the present study was directed at assessing the role of KOR on sensorimotor gating, by testing the effects of the activation and the blockade of KOR on the behavioral paradigm of prepulse inhibition (PPI) of the acoustic startle reflex (ASR), a highly dependable model for the evaluation of informational filtering. To this aim, we examined whether the selective KOR agonist U50488 (1.25, 2.5, 5 mg/kg, s.c.) was able to disrupt PPI in rats. Interestingly, both the doses of 2.5 and 5 mg/kg of the KOR agonist significantly impaired sensorimotor gating, and this effect was prevented by the selective KOR antagonist nor-binaltorphimine (NBI, 10 mg/kg, s.c), providing compelling evidence that KOR selective activation induces attentional deficits. Remarkably, the same effect was also reversed by the atypical antipsychotic clozapine at the doses of 5 and 10 mg/kg (i.p.), but not by the typical antipsychotic haloperidol (0.1 and 0.5 mg/kg). Taken together, our results highlight a role for KOR in sensorimotor gating mechanisms and suggest they might represent a putative new target in the treatment of psychotic disorders unresponsive to typical antipsychotics and with prevalence of negative symptoms.

PO1.30.
EEG ABNORMALITIES ASSOCIATED WITH ANTIPSYCHOTICS: A COMPARISON OF QUETIAPINE, OLANZAPINE AND HALOPERIDOL

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In this study the effects of the atypical antipsychotics quetiapine and olanzapine, and the typical antipsychotic haloperidol, on EEG patterns were retrospectively investigated in 81 patients under a stable monotherapy with either drug (quetiapine: n=22, olanzapine: n=37, haloperidol: n=22). These three subgroups were compared with a control group of healthy subjects (n=30) which were matched regarding sex and age. Diagnoses of patients (DSM-IV) were schizophrenia (n=61), brief psychotic disorder (n=9), schizoaffective disorder (n=8), and delusional disorder (n=3). There were no statistically significant differences regarding demographic characteristics between the groups. Digital EEG recordings were retrieved from a database and visually assessed by two independent investigators, one blinded regarding medication. One patient from the quetiapine group (5%), 13 olanzapine patients (35%), five of the haloperidol patients (23%) and two subjects of the control group (7%) had an abnormal EEG. Epileptiform activity was observed in four patients (11%) of the olanzapine group, and none in the others. EEG abnormalities were statistically significantly increased with dose in the olanzapine group, in contrast to patients treated with haloperidol, quetiapine or healthy subjects. In conclusion, EEG abnormalities seem to occur rarely in patients treated with quetiapine, comparable to the control group, but significantly more often with haloperidol and olanzapine, possibly due to different receptor profiles of these substances. To our knowledge, this is the first electrophysiological investigation comparing the new atypical antipsychotics quetiapine, haloperidol and olanzapine with a control group.

PO1.31.
RELATIONSHIP BETWEEN ANTIPSYCHOTIC TREATMENT AND SUBCORTICAL BRAIN VOLUMES: AN MRI STUDY OF SCHIZOPHRENIA

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Previous structural brain imaging studies have reported a volumetric increase of the subcortical structures in the brain of patients with schizophrenia. A role of chronic antipsychotic treatment in determining this abnormality has been hypothesized. In the present study, relationships between antipsychotic treatment and the volume of subcortical structures were investigated in a sample of 65 subjects with a DSM-IV diagnosis of schizophrenia. Fifteen patients were treated with standard neuroleptics, 38 with novel antipsychotics and 7 with both types of drugs; drug daily doses were expressed as chlorpromazine equivalents. The magnetic resonance images were obtained from an imaging protocol consisting of two conventional spin echo sequences, each including 15 oblique axial slices; the volumes of putamen, globus pallidum, caudate nucleus, and thalamus were obtained and normal-

ized for intracranial volume. When subjects with schizophrenia were compared to age- and sex-matched healthy controls, all the evaluated subcortical structures, with the exception of the left caudate, showed an increased volume in the patient group, which was statistically significant for the pallidum and thalamus. No relationship was found between the observed volumetric increase in thalamus and pallidum and the medication dose. ANOVA revealed no significant effect of the type of antipsychotic medication (novel vs. standard antipsychotics) on the basal ganglia volumetry. At least in chronic and stabilized patients with schizophrenia, volume increase in subcortical structures seems to be independent of antipsychotic treatment.

PO1.32. MRI FINDINGS IN SCHIZOPHRENIA: RELATIONSHIPS WITH DIAGNOSTIC SUBTYPE AND TREATMENT WITH ANTIPSYCHOTIC DRUGS

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The term "deficit syndrome" (DS) refers to a diagnostic subtype of schizophrenia, characterized by the presence of primary and enduring negative symptoms. Structural brain imaging studies, comparing patients with DS with those with nondeficit schizophrenia (NDS) and with healthy controls, have reported discrepant findings. In the present study neuromorphological abnormalities in DS and NDS and their relationships with antipsychotic treatment were evaluated. Sixty-five patients with a DSM-IV diagnosis of schizophrenia (34 DS and 31 NDS) and 27 healthy controls were enrolled. Each subject underwent a conventional spin echo MRI examination. Patients with DS received a lower dose of antipsychotic drugs. Gray matter volumes were decreased in frontal and temporal lobes in the whole patient group, when compared to controls. The volume of right thalamus was larger in NDS than in DS patients, while both cerebellar hemispheres showed a volumetric increase in the latter with respect to the former group. Thalamic and lateral ventricles volumes were increased in the NDS group, with respect to healthy controls. The right cerebellar hemisphere was larger in DS patients than in healthy controls. ANCOVA revealed that the volumetric abnormalities found in DS vs. NDS patients were not related to the dose or type of antipsychotic treatment or to the illness duration. Structural neuroimaging of schizophrenic subjects revealed significant differences between the two subgroups, lending support to the hypothesis that the two syndromes have different etiopathogenetic mechanisms.

PO1.33. PREDICTORS OF CLOZAPINE RESPONSE IN SCHIZOPHRENIA: A NEURAL NETWORK ANALYSIS

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Clozapine is the first antipsychotic drug shown to be effective in treating schizophrenia resistant to neuroleptics. However, only a limited number of schizophrenic patients have benefits from clozapine, and they must cope with toxicity risks. Treatment outcome prediction is then of great importance, also because clozapine treatment was recently found to be effective in a number of neurological and psychiatric conditions. Unfortunately, the available studies are not able to suggest significant predictive variables or groups of variables, probably because of the complex relationships between response and different individual characteristics. Artificial neural networks (ANN) are systems of cybernetic analysis able to analyze data series, extracting complex relationships among variables that are related in non-linear ways to one or more dependent variables. A number of applications of ANN systems to the analysis of clinical psychopharmacology data sets are already available in literature. The aim of our study was to evaluate, in a naturalistic study on 124 subjects treated with clozapine, factors significantly contributing to the long-term prediction of clozapine response, by means of an ANN system of analysis with back-propagation methodology. ANN extracted 45 significant contributors that clustered in 4 prototypes of response able to explain quantitative probability of different qualitative patterns of response. This methodology is able to make predictions of individual response and not only of average, group response.

PO1.34. CONTEXT-DEPENDENT INFORMATION PROCESSING IN PATIENTS WITH SCHIZOPHRENIA AND ITS RELATIONSHIP WITH COMT GENOTYPE

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Neurocognitive deficits are features of schizophrenia. Failure in contextual information processing (CIP) has been hypothesized as being the single function responsible for cognitive impairments, through an involvement of the prefrontal cortex. Dopamine (DA) plays a role in cognitive functioning in humans. Catechol-O-methyltransferase (COMT) plays an important role in modulating the activity of prefrontal cortex, through a functional polymorphism (Val108/158 Met) which accounts for a significant variation in DA catabolism. In this study we investigated the processing of "context information" in schizophrenics compared to healthy controls. We examined the effects of genotype on this cognitive domain. 37 patients (27 with schizophrenia, 10 with schizophreniform disorder according to DSM-IV), drug-free from one week (1 month if treated with depot neuroleptics), treated with olanzapine, and 37 normal controls matched on sociodemographic characteristics were tested. The subjects performed the AX-Continuous Performance Test (CPT) test. We evaluated number of target AX, errors (BX, AY) and *d'context* (a more specific index of sensitivity to context). The number of BX was significantly higher in patients ($p=0.003$), *d'context* was lower ($p<0.001$); there was no difference in AY ($p=0.42$). No meaningful relationship has been detected between deficit of CIP and COMT genotype in patients ($p=0.70$). These results suggest deficit of context processing in schizophrenia. The lack of association between this deficit and COMT genotype suggests that a variation, genetically determined, of prefrontal DA catabolism does not modulate deficit of CIP in schizophrenia. These results may be explained given the functional heterogeneity of frontal lobe and its complex modulation. Moreover, it is not clear that frontal DA systems are the principal or unique targets of variability in COMT expression that affect cognition. The results of this study may suggest a specific role of COMT genotype in working memory.

PO1.35.
POSSIBLE IMPACT OF POLYMORPHISMS OF METABOLIZING ENZYMES ON THE THERAPEUTIC OUTCOME OF OLANZAPINE IN PATIENTS WITH SCHIZOPHRENIA

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Olanzapine is a psychotropic agent which demonstrates antipsychotic activities by antagonizing selectively monoaminergic receptors. Cytochrome P4501A2 (CYP1A2), flavin-containing monooxygenase 3 (FMO3), and cytochrome P450 2D6 contribute to the metabolism of the drug. More than 20% of patients do not respond very well to olanzapine treatment and 10% of patients have an increase in disease symptomatology. The possible impact of polymorphisms of these enzymes on olanzapine therapeutic outcome is not known. Therefore we determined some known polymorphisms of CYP1A2, FMO3, and CYP2D6 in 95 patients with schizophrenia to assess their impact on response to olanzapine therapy or olanzapine-related adverse events. The Scale for the Assessment of Negative Symptoms, the Scale for the Assessment of Positive Symptoms and the Brief Psychiatric Rating Scale were used at baseline and 6 weeks after treatment. We found a borderline significant impact of FMO3 158K (p=0.030) and CYP1A2*1F (p=0.036) polymorphisms on therapeutic response to olanzapine for positive symptoms. There was no significant effect of CYP2D6 genetic polymorphisms on therapeutic outcome of olanzapine therapy. Our preliminary results suggest that genetic polymorphisms of metabolizing enzymes involved in the metabolism of olanzapine may influence the success of treatment.

PO1.36.
THE ROLE OF THE CYP2D6 GENOTYPE IN MAINTENANCE THERAPY WITH ZUCLOPENTHIXOL DECANOATE

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We studied the relations between the CYP2D6 genotype, zuclopenthixol serum concentrations, extrapyramidal symptoms, and adjusting to the right dose during maintenance therapy with zuclopenthixol decanoate. Blood samples were taken just before administrating zuclopenthixol decanoate and 5 days later. On day 0, we assessed zuclopenthixol serum concentration, CYP2D6 genotype, liver enzymes, serum creatinine, Extrapyramidal Symptoms Rating Scale (ESRS) score, and Clinical Global Impression (CGI) score. On day 5, we assessed zuclopenthixol serum concentration, ESRS score and CGI score, number of dose adjustments of zuclopenthixol decanoate in the past and use of anticholinergics. Of the 23 patients, 10 were extensive metabolisers (EMs), 11 intermediate metabolisers (IMs) and 2 poor metabolisers (PMs). IMs were adjusted to a lower dose than EMs (234 mg vs. 380 mg, p=0.03). The dose frequency and the zuclopenthixol serum concentrations were comparable. The number of dose adjustments in IMs was higher than in EMs (3.9 vs. 1.5, p=0.009). The zuclopenthixol serum concentration on day 5, corrected for the dose, was higher in IMs than in EMs (factor 1.8, p=0.013). The zuclopenthixol serum concentration after 14 days, corrected for the dose, was also higher in IMs than in EMs but this was not significant. This was also the case for the use of anticholinergics in the past and the ESRS scores. The variation in the different genotype groups is very large in all measured parameters. In conclusion, knowledge of the CYP2D6 genotype in combination with measuring zuclopenthixol serum concentrations can be of use in adjusting patients to the right dose of zuclopenthixol decanoate. The optimal dose can be 200 mg/14 days in IMs and 300 mg/14 days in EMs. However, adjusting the dose on the basis of clinical effects remains important.

PO1.37.
GENETICS OF CLOZAPINE-INDUCED WEIGHT GAIN: BETA-3 ADRENERGIC RECEPTOR AND G-PROTEIN BETA-3 SUBUNIT/PROTEIN KINASE G TRANSDUCTION PATHWAY POLYMORPHISMS

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Clozapine, the prototype of atypical antipsychotics, has high affinity for many G-protein coupled receptors. In particular, it is an antagonist at the beta-3 adrenergic receptor (beta-3) and the Trp64Arg polymorphism in this receptor has been postulated to be involved in the mechanism of obesity. This receptor is a G-protein coupled one and the C805T polymorphism in the G-protein beta-3 subunit (GNB3) may contribute to obesity. In addition, the homologous of human protein kinase G gene (PRKG1) in Drosophila affects food-search behavior. We tested the hypothesis that clozapine-induced weight gain is associated with genetic variation in beta-3 and this signal transduction pathway. Eighty patients with a DSM-III-R diagnosis of schizophrenia were prospectively assessed for clozapine-induced weight gain. They were subsequently genotyped for the Trp64Arg in beta-3, C805T in GNB3 and C2276T in PRKG1 genes. A modified analysis of covariance model was utilized to detect differences in mean weight gain among various genotypic groups. We observed a trend for beta-3 (p=0.10) and no significant results with regard to GNB3 (p=0.33) and PRKG1 (p=0.31). However, further investigations in larger and independent samples are required.

PO1.38.
PREDICTION OF CHANGES IN MEMORY PERFORMANCE BY PLASMA HOMOVANILLIC ACID LEVELS IN CLOZAPINE-TREATED PATIENTS WITH SCHIZOPHRENIA

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Cognitive dysfunction in schizophrenia has been demonstrated to be dependent, in part, on dopaminergic activity. Clozapine has been found to improve some domains of cognition, including verbal memory, in patients with schizophrenia. This study tested the hypothesis that plasma homovanillic acid (pHVA) levels, a peripheral measure of central dopaminergic activity, would predict the change in memory performance in patients with schizophrenia treated with clozapine. Twenty-seven male patients with schizophrenia received clozapine

treatment for 6 weeks. Verbal List Learning-Delayed Recall (VLL-DR), a test of secondary verbal memory, was administered before and after clozapine treatment. Blood samples to measure pHVA levels were collected at baseline. Baseline pHVA levels were negatively correlated with change in performance on VLL-DR; the lower baseline pHVA level was associated with greater improvement in performance on VLL-DR during treatment with clozapine. Baseline pHVA levels in subjects who showed improvement in verbal memory during clozapine treatment (n=13) were significantly lower than those in subjects whose memory performance did not improve (n=14). The results of this study indicate that baseline pHVA levels differentiate between patients with schizophrenia who respond to treatment with clozapine with regard to memory performance and those who do not.

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PO1.39. CLOZAPINE-INDUCED DIURNAL SLEEPINESS IS INFLUENCED BY CLOCK GENE POLYMORPHISM

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Diurnal sedation or sleepiness is one of the major complaints in patients treated with clozapine, an atypical antipsychotic indicated for subjects who are affected by schizophrenia who are resistant or intolerant to typical antipsychotics. This side effect is not present in all patients and is not dose-related and often persists for the first weeks of treatment. Persistent diurnal sleepiness could be related both to clozapine's sedative side effects, mainly due to antihistaminic and antiadrenergic properties and to other mechanisms. The pattern of occurrence suggests that sedative effects might precipitate diurnal sleepiness by interacting with biological traits like wake-sleep patterns. One of the candidate genes studied in disorders of the wake-sleep rhythms is the CLOCK gene polymorphism. We studied a CLOCK gene polymorphism (3111 T/C substitution) in 101 patients affected by major psychosis. Among C homozygous subjects, 70% suffered from persistent diurnal sleepiness (p=0.015) versus 28.6% of heterozygous and 23.8% of T (wild type) homozygous. A logistic regression with sleepiness as dependent variable, using genotype and clozapine plasma levels as independent variables, confirmed the significant effect of CLOCK genotype on diurnal sleepiness (p=0.0093) with no influence of clozapine plasma levels. This observation supports our hypothesis of a possible involvement of the CLOCK gene polymorphism in the diurnal sedation during clozapine treatment, which can hamper its usefulness in clinical pratice.

PO1.40. INFLUENCE OF 5-HT2C PROMOTER GENE POLYMORPHISM AND 5-HT2C RECEPTOR ON CLOZAPINE-INDUCED WEIGHT GAIN

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Body weight gain is a common side effect of some typical and atypical antipsychotic drugs, including clozapine, with associated poor treatment compliance and morbidity rate because of obesity, cardiovascular disease and diabetes. The molecular mechanisms responsible for antipsychotic drug-induced weight gain are unknown. A number of studies focused on the interactions of antipsychotic drugs with 5-HT2C serotonin receptors and on polymorphic genes coding for receptor structure and expression, with contrasting results. The aim of this study is to investigate the relationship between the genetic variants of the 5HT2c receptor gene and 5-HT2c receptor promoter gene and clozapine-induced body weight change in a group of patients diagnosed with a major psychosis. A total of 133 patients diagnosed with major psychosis were followed in this study over a period of 6 months after starting a clozapine monotherapy. Body weight change, body mass index and clozapine plasma levels were followed up monthly. Analysis showed a significant association between -759C/T polymorphisms of the 5-HT2C promoter gene and the 68G/C polymorphisms of 5HT2C receptor gene in patients with clozapine-induced weight gain (p=0.0048) when considered together only for a possible additive effect of both mutations. The effect was strongest in the male patients and not apparent in the female patients. Our findings suggest that genetic control on 5HT2c receptor expression and structure may interact in determining weight gain susceptibility in patient treated with clozapine.

PO1.41. VALPROATE PREVENTS L-METHIONINE-INDUCED GABAERGIC EPIMUTATIONS: IMPLICATIONS FOR SCHIZOPHRENIA

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Cortical GABAergic inhibition orchestrates the intermittent firing of pyramidal neuron populations by releasing a) GABA on $GABA_A$ and $GABA_B$ receptors, and b) reelin on dendritic spine postsynaptic density, where it modulates the translation of spine resident mRNA. In brain of schizophrenia (SZ) patients, the expression of GAD_{67} and reelin mRNAs and proteins in GABAergic neurons is downregulated, but the expression of DNA-methyl-transferase 1 (DNMT1) is increased. Theoretically, this reelin and GAD_{67} decrease follows the epigenetic hypermethylation of CpG islands expressed in the respective promoters, mediated by DNMT1. In mouse frontal cortex (FC), reelin promoter hypermethylation and the downregulation of reelin and GAD_{67} expression can be elicited by a protracted (7 to 15 days) L-methionine (MET) treatment (5.5 mmol/kg/s.c.). This treatment also disrupts the prepulse inhibition of startle (PPI) and the mouse social interaction in a novel environment. Hence, MET-induced mouse endophenotypes appear to model SZ symptoms. The histone (H) deacetylase inhibitor valproate (VPA, 1.5 mmol/kg/s.c.) enhances H acetylation in mouse FC, which leads to a remodeling of the chromatin associated with the reelin promoter. Co-administration of VPA and MET downregulates the reelin promoter hypermethylation, normalizing reelin and GAD_{67} mRNA expression and reverting the alterations of both sensory gating and social interaction. The epigenetic mouse model described above may open exciting new perspectives for pharmacological interventions on epigenetic mechanisms operative in SZ, by elucidating whether the beneficial actions of VPA in SZ are related to pharmacological interactions involving chromatin remodeling complexes containing DNMT1 or inducing DNA demethylation.

PO1.42.
LACK OF ASSOCIATION OF SEROTONIN TRANSPORTER GENE POLYMORPHISM (5-HTTLPR) WITH ANTIPSYCHOTIC-INDUCED WEIGHT GAIN IN KOREAN PATIENTS WITH SCHIZOPHRENIA

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We investigated the association of sex, age, baseline body mass index (BMI) and 44 bp insertion/deletion polymorphism in 5-HT transporter-linked polymorphic region (5-HTTLPR) with antipsychotic-induced weight gain in patients with schizophrenia. We studied 161 subjects fulfilling the DSM-IV criteria for schizophrenia, who had taken antipsychotics for at least 12 weeks. We recorded sex, age, BMI, body weight, the type of antipsychotics and the duration of antipsychotic medication. We examined the genotype distribution and allele frequency of 5-HTTLPR, using polymerase chain reaction (PCR) of genomic DNA with primers flanking the promotor regions of the 5-HTT gene. There was a significant increase of body weight (mean 2.37 kg at 12 weeks, mean 6.92 kg at 78 weeks) in patients who were female, under 30 years old and under 25 of BMI. Subjects receiving atypical antipsychotics had a significant increase of body weight. We found no significant association between the genotype distribution and allele frequency of 5-HTTLPR and antipsychotic-induced weight gain.

PO1.43.
StoRMI - DIRECT SWITCHING TO LONG-ACTING INJECTABLE RISPERIDONE IN PATIENTS WITH SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER: RESULTS FROM GERMANY

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This open-label trial investigated the maintained efficacy and safety of long-acting injectable risperidone in patients with schizophrenia and other psychotic disorders switched directly from any oral or depot antipsychotic. We present a subgroup analysis of patients from Germany. Adult patients stable on their antipsychotic regimen for at least 1 month were switched to long-acting risperidone (25 mg, increased to 37.5 mg or 50 mg, if necessary) injected every 14 days for 6 months without oral risperidone run-in. Of 356 patients (55% male, mean age 42 years), 290 had schizophrenia (mostly paranoid) and 58 had schizoaffective disorder. Most patients were switched from atypical or conventional depot antipsychotics. The most common reasons for switching were non-compliance (40%), insufficient efficacy (28%) and side effects (27%). Mean Positive and Negative Syndrome Scale (PANSS) total score at baseline was 73. 64% of the patients completed the trial. There were significant reductions in mean scores for total PANSS, and for all PANSS subscales and symptom factors from baseline to endpoint ($p<0.01$). Improvement of at least 20% in total PANSS was seen in 42% of patients. Global functioning (GAF), quality of life (Short Form-36) and patient satisfaction also improved significantly ($p<0.001$). At endpoint, 50% of the patients received 25 mg long-acting risperidone, and approximately 25% received 37.5 and 50 mg, respectively. No unexpected adverse events occurred. Extrapyramidal symptoms improved significantly from baseline to endpoint. In conclusion, direct switching to long-acting injectable risperidone was safe and well tolerated. Patients showed significant improvement in symptoms after being switched from their previous antipsychotic treatment.

PO1.44.
EFFICACY AND TOLERABILITY OF RISPERIDONE FOLLOWING A SWITCH FROM DIFFERENT ANTIPSYCHOTICS

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The study aimed to evaluate the efficacy and tolerability of oral risperidone following a switch from different antipsychotic treatments. This was a 3-month prospective multicenter observational study. Outpatients ≥ 18 years were switched to risperidone due to lack of efficacy or tolerability of their previous antipsychotic medication. Efficacy was assessed using the Brief Psychiatric Rating Scale (BPRS), the Clinical Global Impression of Change (CGI-C) and the Global Assessment of Functioning (GAF). Adverse events (AEs) were recorded at each visit. 1,150 patients were enrolled (54.5% female, mean age 45.4±17 years). The most frequent diagnoses were paranoid schizophrenia (48.2%), other forms of schizophrenia (20.9%) and delusional disorder (8.6%). Reasons for switching were insufficient efficacy (91%), lack of tolerability (67.5%) and poor compliance (18.3%). 78.9% of the patients were switched from conventional antipsychotics (mainly haloperidol, n=314) and 14.9% from atypical antipsychotics (mainly olanzapine, n=156). Mean risperidone dose at endpoint was 3.8 mg/day. BPRS total score improved significantly from baseline to endpoint (62.1±16.1 to 36.9±13.5, $p<0.0001$). Global functioning also improved significantly (44.3 to 63.3, $p<0.0001$). 68.2% of the patients were rated very much or much improved in the CGI-C. 88 patients (7.7%) had at least one AE. Extrapyramidal symptoms were reported in 2.1% and somnolence in 0.6%. In conclusion, switching to oral risperidone from conventional and atypical antipsychotics in patients with psychotic disorders was associated with significant clinical improvement and better global functioning. Tolerability was good after switching to recommended doses of risperidone.

PO1.45.
EFFECTS OF FLUPENTHIXOL AND RISPERIDONE ON DIFFERENT DIMENSIONS OF CHRONIC SCHIZOPHRENIA

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In a recent randomized, double-blind, multi-centre head to head comparison over 6-month treatment, the first generation antipsychotic drug flupenthixol proved to be non-inferior to the second generation antipsychotic risperidone in 153 non-acute schizophrenic patients with marked negative syndrome. The goal of the present study was to re-analyze the effects of both treatments as measured by the Positive and Negative Syndrome Scale (PANSS) in a more sophisticated manner by using a multidimensional factor approach. Principal component analysis (PCA) was based on last observation carried forward data of those 107 patients who participated at least eight weeks in the study, thus fulfilling the a priori defined 'valid for efficacy' criterion. In

line with the literature, PCA yielded a 5-factor solution with a negative, excitement, cognitive, depression/anxiety and positive component. All factor scores except the already initially very low scoring excitement component improved highly significantly in both groups and no comparison revealed a significant group difference. In each group, effect size (ES) was large for improvement of negative symptoms, medium for depression/anxiety and cognitive component and small for positive symptoms, as expected for a non-acute sample. For excitement and for all comparisons of changes between groups, ES was below 0.2. These results indicate that, besides the well established efficacy regarding positive symptoms, flupenthixol and risperidone are both comparably beneficial in the treatment of negative, affective and cognitive symptoms.

PO1.46.
IMPROVEMENT OF EXTRAPYRAMIDAL SYMPTOMS AFTER SWITCHING SCHIZOPHRENIC PATIENTS FROM CONVENTIONAL DEPOT NEUROLEPTICS TO LONG-ACTING INJECTABLE RISPERIDONE

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The study aimed to evaluate the change in extrapyramidal symptoms after switching from frequently used conventional depot neuroleptics to long-acting injectable risperidone (risperidone microspheres, Risperdal Consta) without oral risperidone run-in. This was a 12-week open-label prospective multicenter trial. After a run-in period of two treatment cycles on their conventional depot antipsychotic (either haloperidol decanoate, flupentixol decanoate, fluphenazine or zuclopentixol decanoate), symptomatically stable adult schizophrenic patients were switched to long-acting injectable risperidone administered by gluteal injections every 2 weeks. Extrapyramidal symptoms were assessed using the Extrapyramidal Symptom Rating Scale (ESRS) at baseline and at the end of the 12-week treatment period (endpoint). Adverse events, including extrapyramidal symptom-related events, were recorded at each visit. 166 patients (67% male, mean age 42.9±11.6 years) were enrolled. Most patients had paranoid (69.3%) or residual (15.7%) schizophrenia. The modal dose of risperidone was 25 mg in 86% of the patients and 37.5 mg in 14%. Median total ESRS score was 5.0 (range 0–43) at baseline, decreasing to 2.0 at endpoint. Median change in total ESRS was -2.0 ($p<0.01$ vs. baseline). Scores for parkinsonism, which were most pronounced at baseline, decreased significantly after switching from conventional depot antipsychotics to long-acting injectable risperidone (4.0 to 1.0, $p<0.01$). Overall, 5 of 166 patients (3.0%) experienced an extrapyramidal symptom-related adverse event during treatment with long-acting injectable risperidone. In conclusion, in this study, extrapyramidal symptoms as measured by ESRS decreased significantly after switching from conventional depot antipsychotics to long-acting injectable risperidone.

PO1.47.
RISPERIDONE FOR THE TREATMENT OF ACUTE SCHIZOPHRENIC EXACERBATIONS: FOCUS ON HOSTILITY AND AGITATION

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This study aimed to evaluate the efficacy and tolerability of risperidone in acutely exacerbated schizophrenic patients in a naturalistic design. This was a prospective multi-centre observational study. Acutely exacerbated schizophrenic inpatients were observed at baseline and on day 1, 3, 7, 14 and 28. Efficacy was assessed using the Brief Psychiatric Rating Scale (BPRS), BPRS agitation and hostility subscores, Clinical Global Impression (CGI) and CGI of change (CGI-C). Adverse events were assessed at each visit. 245 patients (48% male, mean age 41 years, paranoid schizophrenia in 72%) were enrolled. Mean observation time was 26 days. Mean daily doses of risperidone were 2.2 mg/day at day of admission, 2.9 mg/day at day 1 and 4.5 mg/day at endpoint. Benzodiazepine comedication was frequently used. Total BPRS improved from 66.0 to 38.3 (-27.8, $p<0.0001$ vs. baseline). A statistically significant improvement of BPRS agitation (12.0 to 6.2) and hostility (11.4 to 6.1) sub-scores was already observed at day 1 and maintained throughout the study ($p<0.001$, respectively). CGI improved significantly (6.4 to 4.8, $p<0.001$), and 79.2% of patients were rated 'very much' or 'much' improved on the CGI-C. Adverse events were reported in 15.9%, 2.9% of patients discontinued treatment with risperidone due to an adverse event. The incidence of extrapyramidal symptoms was low (7.8%). In conclusion, treatment of acutely exacerbated schizophrenic patients with oral risperidone was effective with a fast onset of action in general and especially on symptoms of agitation and hostility. The doses used in this naturalistic study correspond well to recent dosage recommendation for acute treatment.

PO1.48.
SWITCHING TO LONG-ACTING INJECTABLE RISPERIDONE: EFFICACY AND SAFETY IN PATIENTS WITH SCHIZOPHRENIA

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The maintained efficacy and safety of long-acting injectable risperidone in patients with schizophrenia or other psychotic disorder switched directly from oral or depot antipsychotic without an oral risperidone run-in was investigated in an open label study. We performed a sub-group analysis in patients with schizophrenia. Adult patients stable on their antipsychotic regimen for at least 1 month switched to long-acting risperidone (25 mg, increased to 37.5 mg or 50 mg, if necessary) injected every 14 days for 6 months. The previous regimen was continued concomitantly during the first 3 weeks. Among 119 patients, schizophrenia was classified as paranoid (n=91), disorganised or undifferentiated (both n=10), catatonic (n=2) or residual (n=6). Previous therapy was mainly atypical antipsychotics, and reasons for switching were non-compliance (34%), lack of efficacy (33%) and side effects (31%). There were significant reductions ($p<0.05$) from baseline to endpoint in mean total score on Positive and Negative Syndrome Scale (PANSS) and mean scores for negative and general psychopathology subscales, disorganised

thought and anxiety/depression factors. Improvement of at least 20% in PANSS score from baseline to treatment endpoint was seen in 24% of patients. Patient satisfaction, assessed by 5-point scale, improved significantly from baseline. There was a significant improvement in extrapyramidal signs; unexpected treatment-emergent adverse events were not reported. This subgroup analysis of the Switch to Risperidone Microspheres (StoRMi) trial demonstrated the maintained efficacy of injectable long-acting risperidone, which may even improve PANSS scores in patients with schizophrenia considered to be stable on their previous antipsychotic therapy. Patients reported high levels of satisfaction with the treatment, which was well tolerated.

PO1.49.
EFFICACY, SAFETY AND TOLERABILITY OF RISPERIDONE IN ADOLESCENTS WITH SCHIZOPHRENIA: AN OPEN LABEL STUDY

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Data on risperidone efficacy and tolerability in schizophrenia adolescents are scarce. We found only one prospective open label study in this population. The aim of this open label, prospective study, was to estimate the efficacy, safety and tolerability of risperidone treatment, in adolescents with first-episode schizophrenia. Subjects were adolescent inpatients, diagnosed with DSM-IV first-episode schizophrenia by the Schedule for Affective Disorders and Schizophrenia for Children - patient version (K-SADS-P). Most of the patients (10/11) were drug naïve. Improvement was assessed during the first 6 weeks of treatment using Positive and Negative Syndrome Scale (PANSS), Brief Psychiatric Rating Scale (BPRS), and Clinical Global Impression (CGI) scale. Side effects were monitored using Abnormal Involuntary Movement Scale (AIMS), Simpson Angus Scale (SAS), Barnes Akathisia Rating Scale (BARS) and UKU side effect scale. Eleven adolescents between 15.5 and 20 (mean 17.2±1.2) years of age were included in this study. Risperidone in an average dose of 3.14±1.60 mg/day produced a significant improvement on the PANSS score (28%; $p<0.01$), BPRS score (30.11%; $p<0.01$) and CGI score (31.36%; $p<0.01$). The major side effects were extrapyramidal side effects, somnolence and weight gain. In conclusion risperidone appears to be a safe, well-tolerated and effective antipsychotic medication in this sample of schizophrenic adolescents.

PO1.50.
DIRECT SWITCHING TO LONG-ACTING INJECTABLE RISPERIDONE: THE FIRST 1000 PATIENTS ENROLLED IN StoRMI

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The StoRMi (Switch to Risperidone Microspheres) trial investigates the maintained efficacy and safety of long-acting injectable risperidone in patients with schizophrenia and other psychotic disorders switched directly from oral or depot antipsychotic. The open-label, single-arm, multicentre (22 countries) study has been designed to yield subgroups of patients with similar characteristics (e.g. diagnosis; previous medication). Patients aged at least 18 years were required to be stable for at least 1 month on their previous antipsychotic regimen. Unlike previous phase III studies, patients were switched directly without an oral risperidone run-in. Long-acting risperidone (25 mg, increased to 37.5 mg or 50 mg, if necessary) was injected bi-weekly for 6 months. Of the first 1000 patients, the majority were male (62%) and Caucasian (90%), mean age 40 years (17–100 years) and mean body mass index (BMI) 27.3 kg/m^2. Diagnoses included schizophrenia (82%; 75% paranoid), schizoaffective disorder (12%) and schizophreniform disorder (2%). Approximately one-third of patients were hospitalised at study entry. Most common reasons for switching treatment were non-compliance, lack of efficacy and side effects. Previous therapy was mainly classical depot (40%) or atypical (44%) antipsychotics. Mean baseline Positive and Negative Syndrome Scale (PANSS) subscale scores: total, 72; positive, 15; negative, 21; general psychopathology, 36. Mean total Extrapyramidal Symptom Rating Scale (ESRS) score was 6.8. StoRMi is one of the largest trials of direct switching from any neuroleptic to a long-acting injectable antipsychotic in patients with schizophrenia or other psychotic disorder. It will allow analysis of treatment response in patients categorised according to a variety of criteria (e.g. age, previous antipsychotic, diagnosis).

PO1.51.
LONG-ACTING INJECTABLE RISPERIDONE FOR SCHIZOPHRENIA AND SCHIZOAFFECTIVE DISORDERS: DIRECT SWITCH FROM ATYPICAL ANTIPSYCHOTICS

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The StoRMi (Switch to Risperidone Microspheres) trial investigated the maintained efficacy and safety of long-acting injectable risperidone in patients with schizophrenia and other psychotic disorders switched directly from oral or depot antipsychotics without an oral risperidone run-in. A subgroup analysis assessed patients previously treated with an atypical antipsychotic. Adult patients stable on their antipsychotic regimen for at least 1 month were switched to long-acting risperidone (25 mg, increased to 37.5 mg or 50 mg, if necessary) injected at 14-day intervals for 6 months. Of 119 patients, 89 had schizophrenia, mostly paranoid, and 22 had schizoaffective disorder. Previous antipsychotic agents were risperidone (78%), olanzapine (19%) or quetiapine (5%). The most common reason for switching was non-compliance (53%). Early discontinuations (36%) were mainly for adverse events (12 patients) and insufficient response (9 patients). Significant reductions from baseline to endpoint were seen in mean scores for total Positive and Negative Syndrome Scale (PANSS), negative subscale, general psychopathology subscale and disorganised belief factor ($p<0.05$). Improvement of at least 20% in PANSS from baseline to treatment endpoint was observed in 31% of patients. By Clinical Global Impression (CGI), 13% of patients were 'not ill' at endpoint vs. 2% at baseline. The Global Assessment of Functioning (GAF) improved significantly from baseline to endpoint. Extrapyramidal side effects improved significantly and no unexpected adverse effects were reported. In conclusion, although patients were regarded as stable at trial entry, significant improvements were observed after switching from prior atypical antipsychotics to long-acting injectable risperidone. Long-acting injectable risperidone represents a new option for maintenance treatment that can improve the quality of treatment, thereby enhancing potential symptom remission.

PO1.52.
DIRECT SWITCHING TO LONG-ACTING INJECTABLE RISPERIDONE IN YOUNG PATIENTS (18–30 YEARS) WITH SCHIZOPHRENIA AND SCHIZOAFFECTIVE DISORDER

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The maintained efficacy and safety of long-acting injectable risperidone in patients with schizophrenia and other psychotic disorders switched from oral or depot antipsychotic without oral risperidone run-in was investigated (StoRMi trial). A subgroup analysis was performed in younger patients. Patients aged 18–30 years stable on their previous antipsychotic regimen for at least 1 month received long-acting risperidone (25 mg, increasing to 37.5 mg or 50 mg, if necessary) injected bi-weekly for 6 months. Of 119 patients, 101 had schizophrenia, mostly paranoid, and 11 had schizoaffective disorder. Previous therapy was mainly atypical antipsychotics (56%), and reasons for switching were non-compliance (47%), side effects (24%) and lack of efficacy (21%). Six patients discontinued early for adverse events and 11 for insufficient response; 70% completed the 6-month treatment period. Significant reductions from baseline to endpoint ($p<0.05$) were seen in mean scores for total Positive and Negative Syndrome Scale (PANSS), positive subscale, negative subscale, general psychopathology subscale, disorganised thoughts factor and anxiety/depression factor. Improvement of at least 20% in PANSS score from baseline to treatment endpoint was observed in 32% of patients. By Clinical Global Impression (CGI), more patients were 'not ill/borderline ill' at endpoint (31.5%) than at baseline (5.9%). Global Assessment of Functioning (GAF) and patient satisfaction improved significantly. There were no unexpected side effects and extrapyramidal side effects improved significantly. In conclusion, this subgroup analysis showed that long-acting injectable risperidone was effective in younger patients already stable on their previous antipsychotic regimen. Significant improvements were seen in all PANSS subscale scores, suggesting that the treatment may be beneficial for young patients by ensuring compliance and thereby continuity of treatment.

PO1.53.
DIRECT SWITCHING TO LONG-ACTING INJECTABLE RISPERIDONE IN PATIENTS WITH SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER (StoRMI): THE UK EXPERIENCE

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An open-label study (StoRMi) was performed to investigate the maintained efficacy and safety of long-acting injectable risperidone in patients with schizophrenia and other psychotic disorders switched directly from any oral or depot antipsychotic. A subgroup analysis was performed in patients from the UK. Adult patients stable on their antipsychotic regimen for at least 1 month were switched to long-acting risperidone (25 mg, increased to 37.5 mg or 50 mg, if necessary) injected every 14 days for 6 months without an oral risperidone run-in. The previous regimen continued concomitantly during the first 3 weeks. Of 119 patients, 90 had schizophrenia, mostly paranoid, and 19 had schizoaffective disorder. Mean total Positive and Negative Syndrome Scale (PANSS) score was 61.3 at baseline. The majority of patients switched from classical depot antipsychotics. Reasons for switching were lack of efficacy (44%), side effects (42%) and non-compliance (26%). There were significant reductions ($p<0.05$) from baseline to endpoint in mean scores for total PANSS, positive subscale, negative subscale, general psychopathology subscale and disorganised thoughts factor. Improvement of at least 20% in PANSS score from baseline to treatment endpoint was seen in 32% of patients. By Clinical Global Impression (CGI), more patients were 'not ill' at endpoint (19%) than at baseline (7%). Global Assessment of Functioning (GAF) and patient satisfaction improved significantly. Extrapyramidal side effects improved significantly and no unexpected adverse events were reported. 73% of the patients completed the 6 month treatment period. In conclusion, the efficacy of injectable long-acting risperidone was demonstrated not only through maintenance of the effects of previous antipsychotic therapy, but also by further improvements in symptom measures.

PO1.54.
SWITCHING TO LONG-ACTING INJECTABLE RISPERIDONE IN PATIENTS WITH SCHIZOAFFECTIVE DISORDER: EFFICACY AND SAFETY

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The Switch to Risperidone Microspheres (StoRMi) trial is an open label study to investigate the maintained efficacy and safety of long-acting injectable risperidone in patients with schizophrenia and other psychotic disorders switched directly from other antipsychotic agents without an oral risperidone run-in. A subgroup analysis was performed in patients with DSM-IV schizoaffective disorder. Adult patients stable on their antipsychotic regimen for at least 1 month were switched to long-acting risperidone (25 mg, increased to 37.5 mg or 50 mg, if necessary) injected every 14 days for 6 months. Of 119 patients, 58 were male and 61 were female. Previous therapy was atypical (44%), classical depot (41%) and classical oral (5%) antipsychotics. Only four patients discontinued the study early for adverse events and seven for insufficient response; 70% of patients completed the study. There were significant reductions ($p<0.05$) from baseline to endpoint in the mean scores for total Positive and Negative Syndrome Scale (PANSS), positive subscale, negative subscale, general psychopathology subscale, disorganised thoughts factor, hostility/excitement factor and anxiety/depression factor. Improvement of at least 20% in PANSS score from baseline to treatment endpoint was seen in 36% of patients. By Clinical Global Impression (CGI), more patients were 'not ill' at endpoint (13%) than at baseline (4%). There were significant improvements from baseline in both Global Assessment of Functioning (GAF) and patient satisfaction. Extrapyramidal side effects improved significantly and there were no unexpected side effects. In conclusion, this subgroup analysis demonstrates that long-acting injectable risperidone is effective in patients with schizoaffective disorder, providing further relief or improvement of symptoms in patients considered stable on their previous antipsychotic medication.

PO1.55.
EFFICACY AND SAFETY OF INJECTABLE LONG-ACTING RISPERIDONE IN OBESE PATIENTS WITH SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER

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The maintained efficacy and safety of long-acting injectable risperidone in patients with schizophrenia and other psychotic disorders switched directly from any oral or depot antipsychotic was investigated in an open-label trial. A subgroup analysis was performed in obese patients. Adult patients with a body mass index (BMI) of at least 30 kg/m^2, stable for at least 1 month on their antipsychotic regimen, were switched to long-acting risperidone. Long-acting risperidone (25 mg, increased to 37.5 mg or 50 mg, if necessary) was injected every 14 days for 6 months without an oral risperidone run-in. Of 119 patients, 87 had schizophrenia, mostly paranoid, and 24 had schizoaffective disorder. Mean weight and BMI were 98 kg and 33.6 kg/m^2, respectively. Previous therapy was mainly classical depot (45%) or atypical (44%) antipsychotics. Reasons for switching included side effects (40%), non-compliance (35%) and lack of efficacy (31%). Mean scores for total Positive and Negative Syndrome Scale (PANSS), negative subscale, general psychopathology subscale, disorganised thoughts factor and anxiety/depression factor decreased significantly ($p<0.05$) from baseline to endpoint. Improvement of at least 20% in PANSS score from baseline to treatment endpoint was seen in 31% of patients. By Clinical Global Impression (CGI), more patients were 'not ill' at endpoint (15.3%) vs. baseline (5.9%). There were significant improvements from baseline in Global Assessment of Functioning (GAF) and patient satisfaction. During the 6-month trial period, patients' weight and BMI remained stable. Extrapyramidal side effects improved significantly and no unexpected adverse events were reported. In conclusion, long-acting injectable risperidone provided similar improvements in symptoms among obese patients as have been reported for schizophrenia patients in general. Patient satisfaction with treatment was very high.

PO1.56.
LONG-TERM BENEFITS OF TREATMENT WITH LONG-ACTING RISPERIDONE IN PATIENTS WITH SCHIZOPHRENIA

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Of the 34 patients with schizophrenia who participated in a clinical study of long-acting risperidone, 16 chose to continue receiving long-acting risperidone in a long-term trial. Annualized hospitalization rates and treatment costs before and after receiving long-acting risperidone were compared with those of a group of 16 age- and sex-matched patients with schizophrenia who did not receive long-acting risperidone. The annual days in hospital and number of admissions were reduced in patients receiving long-acting risperidone from a median of 7.7 days (range 0–365) to 0 (range 0–173) ($p=0.012$) and admissions from a median of 0.3 (range, 0–1) to 0 (range 0–0.75) ($p=0.065$). In the control group, increases were seen in both hospital days (from 0 [range 0–28] to 13 [range 0–109]) and admissions (from 0 [0–1.3] to 0.28 [0–4.5]). Annual hospitalization costs were £763 in patients receiving long-acting risperidone and £4,008 in the control group and total annual costs (drug acquisition plus hospitalization) were £3,495 and £5,143, respectively. The results indicate that a reduction in rates of relapse may be expected in patients with schizophrenia who respond to long-acting risperidone and choose to remain on this form of medication.

PO1.57.
LONG-ACTING RISPERIDONE IN YOUNG ADULTS WITH SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER

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Early intervention with antipsychotics improves long-term outcome in patients with schizophrenia experiencing their first episode. Early in this illness, patients commonly discount the need for medication, resulting in partial compliance, residual symptoms, or relapse, which may result in loss of functioning. An open-label, 50-week study of long-acting risperidone enrolled young, symptomatically stable patients with schizophrenia or schizoaffective disorder. Based on DSM-IV information on first episode schizophrenia, men of no more than 25 years and women of no more than 30 years were included as those likely to have "early illness". A total of 110 adults (mean age 23.2±3.27 years) were enrolled. Mean Positive and Negative Syndrome Scale (PANSS) total scores significantly improved throughout the study (baseline 66.98±20.58, endpoint 57.19±18.60; $p<0.0001$). PANSS positive, negative, disorganized thoughts, uncontrolled hostility/excitement, and anxiety/depression scores improved significantly at endpoint. Extrapyramidal Symptom Rating Scale patient ratings and physician-rated parkinsonism scores decreased significantly at endpoint ($p<0.001$). Mean Visual Analog Scale pain scores were low throughout the study, and decreased further at endpoint ($p<0.0001$). Most common adverse events were insomnia (27.3%), psychosis (21.8%), anxiety (20.9%), hyperkinesia (20.0%), depression (17.3%), and headache (15.5%). These data suggest that long-acting risperidone can provide further symptom improvement in stable patients with early psychotic illness.

PO1.58.
LONG-ACTING RISPERIDONE: REDEFINING SYMPTOMATIC REMISSION IN SCHIZOPHRENIA

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Essential features of schizophrenia are defined as the presence and persistence of characteristic symptomatology. Symptomatic remission, however, is poorly defined. The objective of this analysis was to apply expert-proposed symptom remission criteria to data from a study of long-acting injectable risperidone. Data were from an open-label, 50-week study of long-acting risperidone in 578 stable patients with schizophrenia or schizoaffective disorder. Remission was defined as a score of no more than 3 (mild or less) concurrently on each of these items on the Positive and Negative Syndrome Scale (PANSS) for at least 6 months: delusions, conceptual disorganization, hallucinatory behavior, unusual thought content, mannerisms and posturing, blunted affect, passive/apathetic social withdrawal, and lack of spontaneity and conversation flow. Of 578 stable patients, 394 (68%) did not meet symptomatic remission criteria at study entry. After treatment, 82 (21%) of these patients met symptomatic remission criteria for at least 6 months with significant improvements in quality-of-life measures. Of 184 patients who met symptomatic remission criteria at baseline, 156 (85%) maintained it at endpoint, with significant efficacy benefits. In conclusion, many patients considered stable at baseline achieved a

predefined level of symptomatic remission after treatment with long-acting risperidone, suggesting that further study of these criteria is warranted.

PO1.59. PATIENTS SWITCHED FROM OLANZAPINE TO LONG-ACTING RISPERIDONE

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The study aimed to assess the safety and efficacy of switching 50 symptomatically stable patients with schizophrenia directly from olanzapine to long-acting injectable risperidone without a preliminary period of oral risperidone. After a 4-week run-in period during which the patients continued to receive olanzapine, long-acting risperidone (25–50 mg) was given every 2 weeks for 12 weeks. Concomitant olanzapine was given for the first 2 of the 12 weeks and then tapered and discontinued during week 3. Forty patients (80%) completed the study during which the mean dose of olanzapine was 15.2±8.8 mg/day. A clinical response (at least 20% reduction in Positive and Negative Syndrome Scale, PANSS total scores) was achieved by 44% of these stable patients. Mean PANSS scores were reduced from 60.4±1.7 to 57.8±2.2 at endpoint. Mean Clinical Global Impression - Severity (CGI-S) scores decreased from baseline to endpoint. Most frequently reported adverse events were insomnia (8 patients), rhinitis (5 patients), dizziness (4 patients), and psychosis (4 patients). No clinical adverse events associated with hyperprolactinemia were reported. The patients had a mean weight loss of 0.5 kg (1 lb) during the 12-week trial. In conclusion, stable patients who had been treated with olanzapine experienced clinical benefits with no unexpected adverse events when switched directly to long-acting injectable risperidone.

PO1.60. LONG-ACTING RISPERIDONE IN STABLE PATIENTS WITH SCHIZOPHRENIA SWITCHED FROM ORAL TREATMENT WITH QUETIAPINE

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Most atypical antipsychotics are administered by daily dosing regimens that can result in partial compliance and suboptimal outcome. This study assessed stable patients with schizophrenia who were switched directly from oral quetiapine to long-acting injectable risperidone. After a 4-week run-in period during which patients continued to receive quetiapine, long-acting risperidone (25–50 mg) was given every 2 weeks for 12 weeks. Concomitant quetiapine was given for the first 2 of the 12 weeks and then tapered and discontinued during week 3. Thirty-eight patients (84.4%) completed the study during which the mean dose of quetiapine was 382.8±255.8 mg/day. A clinical response (at least 20% reduction in Positive and Negative Syndrome Scale, PANSS total scores) was achieved by 35% of these stable patients. Mean PANSS total scores decreased from 62.0±1.8 at baseline to 59.6±2.4 at endpoint. Mean Clinical Global Impression - Severity (CGI-S) scores decreased significantly. Adverse events reported in more than 15% of patients were headache in 29% and insomnia, agitation, and anxiety each in 16% of patients. Movement disorder-related adverse events were reported by 4% of patients. No clinical adverse events associated with hyperprolactinemia were reported. Mean weight change was +0.3 kg (0.7 lb). In conclusion, stable patients with schizophrenia receiving quetiapine experienced clinical benefits with good overall tolerability when switched directly to long-acting risperidone.

PO1.61. INSIGHT IN STABLE PATIENTS WITH SCHIZOPHRENIA RECEIVING LONG-ACTING RISPERIDONE

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The study aimed to examine the relationship between level of insight and measures of clinical and functional status. In an open-label study, patients with schizophrenia/schizoaffective disorder received long-acting injectable risperidone every 2 weeks for up to 50 weeks. The Positive and Negative Syndrome Scale (PANSS) measured insight and psychotic symptoms. Insight scores were correlated to PANSS scores, Clinical Global Impressions-Severity (CGI-S) ratings, and functional scores (Short-Form 36 Health Survey, SF-36). Data were available for 614 patients. Mean insight scores significantly improved from 2.7±1.5 at baseline to 2.5±1.5 at endpoint (p=0.0002). Twenty-six percent of patients with impaired insight achieved normal or near normal insight after treatment. Improvements in insight were positively and significantly correlated to improvements in CGI-S ratings (r=0.368; p<0.001) and PANSS scores (positive symptoms, r=0.397, p<0.001; negative symptoms, r=0.369, p <0.001; anxiety/depressive symptoms, r = 0.238, p<0.001). SF-36 scores significantly improved (P<0.05) in patients with either improved or unchanged insight scores at endpoint. These findings showed substantial improvements in insight with long-acting risperidone in these stable patients, and a positive relationship between improvements in insight and improvements in clinical symptoms and functional status. Additional research is warranted.

PO1.62. TO WHAT EXTENT ARE IMPROVEMENTS IN PSYCHOPATHOLOGY ASSOCIATED WITH IMPROVEMENTS IN QUALITY OF LIFE IN PATIENTS TREATED WITH LONG-ACTING RISPERIDONE?

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The goal of this study was to examine the extent to which reduction in psychopathology was associated with improvements in quality of life. Data are from a 1-year open-label international multicentre trial (n=615) of long-acting injectable risperidone given every 2 weeks to adult symptomatically stable patients with schizophrenia. Data on perceived health status were collected every 3 months using the Short-Form 36 Health Survey (SF-36). Psychopathology was quantified using the Positive and Negative Syndrome Scale (PANSS). About 90% of the patients remained in the study for at least 3 months and 65% completed a full year of treatment. At endpoint there was significant improvement on the PANSS total (p<0.004) and SF-36 Mental component score (p=0.004). This improvement was evident starting at the first post-baseline assessment. Maximum likelihood factor analysis of the baseline data and change scores found that the four mental component scales of the SF-36 and the five PANSS scales

clustered into two distinct factors, one consisting of the PANSS scales and the other consisting of the SF-36 scales. The overlap of the two factors at baseline was 12% and for change to endpoint was 27%. In conclusion, patients perceived health status and symptomatology were improved and maintained on treatment with long-acting risperidone injection in symptomatically stable patients with schizophrenia. Patient reported improvement in well-being appears to be a different outcome dimension from investigator rated improvement of psychopathology. Given the importance of patients' perceived improvement in well-being, it should be used in addition to symptom measures to help measure treatment outcomes.

PO1.63. OPTIMAL DOSE OF RISPERIDONE FOR CHILD AND ADOLESCENT PATIENTS OF MULTIPLE CENTERS IN TAIWAN

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Risperidone is an atypical antipsychotic which was widely prescribed for many conditions of child and adolescent patients over 10 years. This open-label trial was to establish the optimal dose for child and adolescent patients in Taiwan. From July 2001 to March 2002, 152 child and adolescent patients were collected from multiple medical centers in north Taiwan. The subjects were within the range of 7-21 years old with a diagnosis of psychosis, mental retardation with disturbing behavior and Tourette syndrome. They received risperidone treatment for 12 weeks with a maintaining dose for at least 4 weeks, and their mean age, duration of illness, dose, combined drugs and side effects were recorded. Of the 152 cases, 110 were of psychosis, 29 were of Tourette syndrome and 13 were of mental retardation, treated with mean doses of 3.02±1.49 mg, 1.44±0.68 mg and 3.23±1.48 mg, respectively. No gender difference was demonstrated, and the most prevalent side effects were sedation, parkisonism, dizziness and weight gain. This trial suggested that the optimal dose of risperidone for child and adolescent patients with psychosis, Tourette syndrome and mental retardation in Taiwan might be slightly lower than in Caucasians.

PO1.64. SAFE AND EFFECTIVE CABERGOLINE TREATMENT FOR RISPERIDONE-INDUCED HYPERPROLACTINEMIA

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A previous pilot study showed the efficacy and tolerability of a low dose of cabergoline, a D2 agonist, in the treatment of risperidone-induced hyperprolactinemia. This study aimed to confirm results in an independent multicentric sample, also looking at the time course of prolactin concentrations and related clinical signs after cabergoline withdrawal. 34 male and female schizophrenic patients treated with risperidone and suffering from symptomatic hyperprolactinemia were treated with cabergoline 0.125-0.250 mg/week for eight weeks, with unchanged risperidone doses. Plasma prolactin concentrations were measured before and after cabergoline treatment and eight weeks after its withdrawal. Plasma prolactin levels decrease after 8 weeks of cabergoline treatment was statistically significant and normalized in 15 patients. Prolactin-related signs and symptoms remitted in 47%, while of 29.4% of subjects showed a partial remission. Results concerning both prolactin concentrations and clinical remission of symptoms were maintained also after 8 weeks of cabergoline withdrawal, with 4 more subjects obtaining clinical response. No side effect was observed or reported and psychopathology was unchanged. Replication of results of the previous pilot study in an independent sample confirms efficacy and safety of low-dose cabergoline treatment in risperidone-induced symptomatic hyperprolactinemia.

PO1.65. OLANZAPINE IN ADOLESCENT AND YOUNG ADULT PATIENTS WITH SCHIZOPHRENIA: CHANGES IN BODY WEIGHT AND LEPTIN

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This multicenter study assessed efficacy and safety of olanzapine in adolescents (n=93) and young adults (n=3) with schizophrenia (DSM-IV). Here, we report treatment-emergent changes in body weight and leptin levels. Patients received open-label olanzapine for 6 weeks (5-20 mg/day; starting dose 10 mg/day), responders continued for additional 18 weeks. Weight and leptin levels were measured regularly throughout the study. Primary study endpoint was the change in Brief Psychiatric Rating Scale (BPRS items 1-6) scores from baseline to week 6 (response: >30% reduction). 100 patients entered the trial (12-21 years), 96 received olanzapine, 80 reached week 6, 34/60 responders completed 24 weeks. The mean maximum dose was 16.7 mg/day. At baseline, 75.0% of patients had age-specific normal weight, 14.6% were overweight, 10.4% underweight. Weight gain (last observation carried forward) was 5.1±3.7 kg at week 6, and 11.7±7.9 kg (responders only) at week 24 (body mass index, BMI: +1.6±1.3; +3.6±2.6 kg/m2, respectively; all $p<0.001$). There was a negative association between baseline BMI and BMI increase ($p=0.01$). One patient discontinued due to weight gain. Mean leptin levels increased (baseline: 5.8±8.2; week 6: 9.8±10.7; week 24: 13.7±15.7 µg/L). At week 6 they were higher in females (22.6±12.8) than in males (5.8±5.5 µg/L), and increased with age-specific weight. There were no significant correlations between leptin levels and current dosage or body weight. BPRS scores at week 6 decreased by 17.0±14.4 points ($p<0.001$). 62.5% of patients were responders. In conclusion, these young patients experienced significant mean weight gain, which was higher than in olanzapine-treated adults and associated with baseline BMI.

PO1.66.
PRELIMINARY PHARMACOKINETIC AND TOLERABILITY PROFILES OF OLANZAPINE 20, 30, AND 40 MG/DAY

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The study aimed to characterize the steady-state pharmacokinetics and assess the tolerability of three doses of oral olanzapine (20, 30, and 40 mg/day) among patients with psychiatric disorders. Thirty-seven stable inpatients with schizophrenia, schizoaffective disorder, or bipolar mania were treated with olanzapine 20 mg/day for 10 days and were then randomized to 10 days of double-blind treatment with olanzapine 20 mg (n=12), 30 mg (n=11), or 40 mg (n=14) daily. For an additional 10 days, 30 mg patients received olanzapine 40 mg/day (30-40 mg); all other patients remained on their same dose. To obtain pharmacokinetic data, a 7-day olanzapine wash-out period followed. Steady-state pharmacokinetics were computed using standard non-compartmental methods and various tolerability measures were obtained during double-blind treatment. Olanzapine pharmacokinetics appeared linear for doses of 20, 30, and 40 mg/day, with olanzapine plasma concentrations continuing a dose-proportional increase. Doses of up to 40 mg/day of olanzapine were generally well tolerated. Two patients (40 mg) discontinued because of an adverse event (akathisia, depressed mood). The most frequently reported adverse events were increased weight (20 mg, n=2; 30-40 mg, n=3; 40 mg, n=2) and sedation (20 mg, n=3; 30-40 mg, n=2; 40 mg, n=2). Four patients (40 mg) reported treatment-emergent akathisia (3 of 4 not confirmed by Barnes Akathisia Scale scores). No clinically important changes were observed in QTc intervals, laboratory parameters, or treatment-emergent extrapyramidal symptoms. Five patients (20 mg, n=3; 30-40 mg, n=2) experienced weight increase >7% from baseline. In conclusion, the pharmacokinetic and tolerability profiles of olanzapine 20, 30, or 40 mg/day in patients with psychiatric disorders were consistent with the known profiles of standard dose olanzapine (5-20 mg/day).

PO1.67.
COMPARISON OF OLANZAPINE TO OTHER ATYPICAL ANTIPSYCHOTICS IN PREVENTING RELAPSE IN PATIENTS WITH SCHIZOPHRENIA

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The study aimed to compare time to relapse on olanzapine with other atypical antipsychotics in patients with schizophrenia and explore some clinical reasons for relapse. Three double-blind studies, comparing olanzapine to risperidone (28 weeks), olanzapine to ziprasidone (28 weeks), and olanzapine to quetiapine (24 weeks), were included in these analyses. Response was defined as 20% or 30% improvement in Positive and Negative Syndrome Scale (PANSS) total score at 8 weeks. Relapse was defined as 20% or 30% worsening on PANSS total score and a Clinical Global Impression (CGI)-Severity of 3 after 8 weeks in responders. Four sets of pairwise comparisons for response-relapse were conducted and labeled 20-20, 20-30, 30-20 and 30-30. Reasons for discontinuation were examined at 30-20. The percent of patients achieving 20% or 30% improvement in PANSS total score at week 8 was similar between olanzapine and each of the comparator drugs. Olanzapine-treated patients were significantly less likely to relapse than risperidone-treated patients at both criteria for response and relapse ($p \leq 0.001$; odds ratio, OR for relapse with risperidone ranged from 2.86 to 4.55). Olanzapine-treated patients also relapsed less than ziprasidone-treated patients at 20-20 and 30-20 ($p \leq 0.01$), but not at 20-30 and 30-30. OR for relapse with ziprasidone ranged from 1.79 to 2.33. Olanzapine-treated patients relapsed less than quetiapine treated ($p \leq 0.02$) patients at all defined levels of response and relapse except 30-20. OR for relapse with quetiapine ranged from 3.85 to 7.14. Analysis of relapsers at 30-20 showed no significant differences in reasons for discontinuations between olanzapine and the other atypical antipsychotics. In conclusion, olanzapine was better at reducing relapse in patients with schizophrenia than risperidone, ziprasidone and quetiapine using multiple definitions of response and relapse.

PO1.68.
RAPID ONSET OF ABSORPTION WITH OLANZAPINE ORALLY DISINTEGRATING TABLETS

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A clinical perception exists suggesting more rapid onset of action with olanzapine orally disintegrating tablet (ODT) versus olanzapine standard oral tablet (SOT). Olanzapine bioavailability data were evaluated to assess early plasma concentration time profiles for olanzapine ODT versus SOT. In three crossover bioequivalence studies of olanzapine ODT (5, 10, or 20 mg) versus SOT (1 x 5 mg, 2 x 5 mg, 4 x 5 mg), approximately 20 healthy subjects received single-dose ODT and the corresponding dose of SOT (13 days between treatments). Olanzapine plasma concentrations, AUC and Cmax values were evaluated to assess bioequivalence. Early onset of absorption was assessed using comparative absorption profiles. Olanzapine ODT and SOT were bioequivalent based on AUC and Cmax. Overall, plasma concentration-time profiles and absorption rate constants were nearly identical between formulations. Nonetheless, with 5 mg olanzapine, 79% of ODT vs. 0% of SOT patients had measurable olanzapine concentrations at 15 minutes. Significantly more subjects receiving ODT had higher plasma concentrations over the first hour vs. SOT (e.g. 63% vs. 11% 1 ng/mL at 45 minutes). These small early concentration differences became indistinguishable before reaching Cmax. In conclusion, olanzapine ODT yields a more rapid onset of absorption than SOT as significantly more subjects given ODT achieved slightly higher olanzapine concentrations immediately after administration. The small differences are likely attributable to more rapid onset of ODT gastrointestinal absorption. These differences do not change the conclusion of bioequivalence. The relevance of earlier onset of absorption to clinical treatment has not been tested.

PO1.69.
AMANTADINE FOR WEIGHT GAIN IN OLANZAPINE-TREATED PATIENTS

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This study aimed to determine whether amantadine could attenuate weight gain or promote weight loss in patients who gained weight during olanzapine therapy. The study included patients with schizophrenia, schizoaffective, schizophreniform, or bipolar I disorders, not manic or acutely psychotic, treated with olanzapine for 1-24 months, and who had gained 5% of their initial body weight. Olanzapine (mean modal dose, 12.4 mg/day) was coadministered with double-blind treatment of 100-300 mg/day amantadine (Olz+Amt, n=60; mean modal dose, 235.6 mg/day) or placebo (Olz+Plc, n=65). Weight was measured at each visit, and the Brief Psychiatric Rating Scale (BPRS) and the Montgomery-Asberg Depression Rating Scale (MADRS) were administered monthly for 16 weeks and again at 24 weeks. Visitwise analysis of weight showed that weight change from baseline (LOCF) in the Olz+Amt group was significantly different from the Olz+Plc group at Weeks 8 (p=0.042), 12 (p=0.029), and 16 (primary endpoint, -0.19±4.58 kg vs. 1.28±4.26 kg, p=0.045). Mean BPRS total, positive, and anxiety-depression scores improved comparably in both groups. The Olz+Amt group had greater improvement in MADRS total score compared with the Olz+Plc group. There were no clinically meaningful between-group differences in safety parameters. In conclusion, amantadine was safe, well-tolerated, and promoted weight loss or attenuated weight gain in patients who had gained weight during olanzapine therapy.

PO1.70.
QUETIAPINE REGULATES FGF-2 AND BDNF EXPRESSION IN RAT HIPPOCAMPUS

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Synaptic mechanisms involved in neuroplasticity are characterised by the interplay of several factors, including neurotrophic molecules, and recent findings suggest that these molecules represent likely therapeutic targets for psychotropic drugs, including antidepressants, mood stabilisers and antipsychotics. Of the neurotrophic molecules, brain-derived neurotrophic factor (BDNF) and fibroblast growth factor-2 (FGF-2) are factors widely distributed in the adult brain. These molecules play an important role in the maintenance of neurons in response to cell injury and also participate in neuronal remodeling and cellular resiliency. Our hypothesis is that the impact of antipsychotic treatment on neuronal plasticity depends on the pathological condition of the substrate. To achieve this, we used the N-methyl-D-aspartate (NMDA) receptor antagonist MK-801 to simulate the neurotransmission deficits encountered in schizophrenia. Furthermore, we compared quetiapine with a conventional antipsychotic, haloperidol, in order to establish differences in these mechanisms that may reflect therapeutic features of these drugs. Our findings show that administration of the atypical antipsychotic quetiapine resulted in a marked elevation of FGF-2 and BDNF mRNA levels in the rat hippocampus, but only under reduced NMDA receptor activity. These effects were drug-specific, given that they were not observed with the conventional antipsychotic haloperidol; and anatomically defined, since no similar effect was observed in striatum, prefrontal or frontal cortex. In conclusion, these results suggest that quetiapine may promote neuroplasticity via the up-regulation of neurotrophic factors when NMDA-mediated transmission is perturbed.

PO1.71.
QUETIAPINE IN SCHIZOPHRENIA-MOOD DISORDER COMORBIDITY

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This study reports on two patients affected from paranoid schizophrenia, with intercritical residual symptoms, associated with depressive disorder, intra-psychotic depression and non-major depression (DSM-IV-TR). The assessment instruments were the Brief Psychiatric Rating Scale and the Hamilton Rating Scales for Anxiety and Depression. Monotherapy with quetiapine (600 and 800 mg/day) proved to be effective both on psychotic productivity (anomalies of thought, perception, behaviour) and on affective symptoms (anxiety and depression). The tolerability was good. Quetiapine monotherapy proved to be more effective than all other previous therapies (typical and atypical antipsychotic drugs).

PO1.72.
INDICATIONS AND OUTCOME OF THE USE OF QUETIAPINE IN UNIVERSITY MALAYA MEDICAL CENTRE

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Atypical antipsychotics are now preferred for use in schizophrenia and other psychotic disorders worldwide. However, guidelines for the prescription of these new drugs are lacking. The aims of this naturalistic study were: a) to assess the prescribing philosophies of doctors in University Malaya Medical Centre, b) to come up with proper guidelines when introducing a new drug. The first 68 patients put on quetiapine were included in the study. This study showed that there was premature discontinuation of the drug in 15 patients. Nine patients experienced various side effects, including somnolence, rash, palpitations, chocking and in one case anaphylactic shock. Generally quetiapine was well tolerated. However, haphazard introduction and the lack of a follow-up plan led to the inappropriate discontinuation in many cases. The use of easily available samples also lead to the mismanagement of patients. The findings are discussed critically and a protocol is suggested based on the findings. The need for stringent guidelines for detailed assessment and follow-up plans is emphasized.

PO1.73.
EFFECT OF THE SWITCH FROM HALOPERIDOL TO QUETIAPINE ON NUMBER OF HOSPITALIZATIONS AND COGNITIVE PERFORMANCE

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The aim of this study was to evaluate the impact of the atypical antipsychotic quetiapine on the number of hospitalizations, severity of the disease and cognitive performance in patients with serious psychotic disorders (high frequency of hospitalization/year). Six patients (males;

mean age: 38±7 years) with a schizophrenic disorder, paranoid type (DSM-IV-TR), currently undergoing a treatment with haloperidol decanoate (100-200 mg every 20-30 days), were switched to quetiapine (600-1000 mg/day, triple daily administration). The two therapeutic regimens were compared in terms of number of hospitalisations. Moreover, the Clinical Global Impression (CGI) Severity scores at T0 (time of switch) and T1 (one year from T0) were compared, together with the Wechsler Adult Intelligence Scale (WAIS) scores for performance scales. We found a reduction in the number of hospitalisations and the severity of the disease and an improvement of cognitive performance after one year following the switch to quetiapine. No patient discontinued the treatment due to adverse events. The most frequent side effect reported was sedation.

PO1.74. QUETIAPINE IN ACUTE PSYCHOSIS AND PERSONALITY DISORDERS DURING HOSPITALIZATION: ASSESSMENT OF THERAPEUTIC RANGE

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Optimizing the clinical effectiveness of atypical antipsychotics while minimizing side effects in the acute setting is the major goal of treating facilities. Further, even though the need for accurate dose response data is critical, very few are available. In particular, data from studies on the plasma concentration-response relationship can be very useful. Thirty-seven inpatients, 31 males and 6 females, affected by schizophrenia and cluster B personality disorders (DSM-IV criteria), age ranging from 18 to 71 years (mean 37.7±13.2 years) were included in the study. After a wash-out period of at least 2 weeks, patients were given 250 to 800 mg/day of quetiapine (QTP) (mean 570.7±154.4 mg), on the basis of clinical judgement, for 2 weeks. Patients were evaluated at baseline (T0) and after 15 days (T1) by means of the Brief Psychiatric Rating Scale (BPRS), the Positive and Negative Syndrome Scale (PANSS), the Hamilton Rating Scale for Depression (HRS-D), the Simpson and Angus Scale for Extrapyramidal Side Effects (EPSE) and a checklist for Anticholinergic Side Effects (ACS). QTP plasma levels were determined at T1 by high-pressure liquid chromatography. Psychotic symptoms showed a significant improvement ($p<0.001$) at the end of the study, confirming the rapid efficacy of the drug. In particular, patients showed BPRS amelioration ranging from 0 to 60.3% (mean 27.8±14.7%) and PANNS amelioration ranging from –1.0 to 60.9% (mean 25.9±14.6%). QTP plasma levels ranged from 45.3 to 898.0 ng/ml (mean 387.6±239.5 ng/ml) and showed a great variability among the patients. There was no correlation between age, clinical improvement, side effects and QTP plasma levels. This study, conducted in a naturalistic setting, confirms the good and rapid efficacy of QTP and its good tolerability in acute psychosis and personality disorders.

PO1.75. EFFECT OF ATYPICAL ANTIPSYCHOTICS ON DIABETES IN SCHIZOPHRENIA: A REVIEW AND META-ANALYSIS

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There is growing evidence implicating the newer antipsychotics in diabetes. We conducted a meta-analytic review of the literature to assess this relationship and to provide an evidence-based argument regarding an atypical-diabetes 'class effect'. We carried out a comprehensive search of electronic databases (MEDLINE, Current Contents) for all relevant papers published from January 1, 1990 to November 15, 2002. Studies with at least one atypical treatment for schizophrenia qualified. Summary odds ratios (SOR) were computed from reported ORs for three atypicals (clozapine, olanzapine, risperidone) with two referent groups: 1) conventional antipsychotics; or 2) no treatment. Mantel-Haenszel fixed-effects models were used to compute weighted SORs. Of the 27 accepted studies, 21 were papers and 6 were abstracts. SORs for the association between diabetes and clozapine use were 7.44 (95% CI: 1.6–35) versus no treatment and 1.37 (95% CI: 1.1–1.7) versus conventional antipsychotics. For olanzapine use, SORs were 4.02 (95% CI: 1.8–9.6) versus no treatment and 1.37 (95% CI: 1.1–2.1) versus conventionals. Risperidone use was not associated with diabetes in either referent category: 1.33 (95% CI: 0.6–3.2) versus no treatment, and 1.12 (95% CI: 0.8–1.2) versus conventionals. In conclusion, an association between atypical antipsychotic use and incident diabetes appears to be restricted to clozapine and olanzapine, but not risperidone. This evidence suggests that it is premature to ascribe 'class effect' to all atypicals.

PO1.76. SCHIZOPHRENIC PATIENTS TREATED WITH ARIPIPRAZOLE EXHIBIT IMPROVED OVERALL EFFECTIVENESS COMPARED TO PATIENTS TREATED WITH ATYPICAL ANTIPSYCHOTICS

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Most comparative studies of antipsychotic therapies focus upon efficacy measures only. Assessments that measure combined efficacy, safety, and tolerability (i.e. effectiveness) provide a more comprehensive evaluation of drug performance. We used a new instrument, the Investigator's Assessment Questionnaire (IAQ), to compare patients treated with aripiprazole to those treated with atypical antipsychotics. The IAQ was used as a secondary measure in an 8-week, open-label, multicentre study of atypical antipsychotic treatment in 1268 patients with schizophrenia or schizoaffective disorder. Patients were randomized to aripiprazole (n=1049), or treatment with any of the following atypicals (n=219): olanzapine, risperidone, quetiapine, risperidone, ziprasidone, or other. The IAQ is an internally validated, clinician-administered questionnaire with 12 items evaluating efficacy, safety, and tolerability of antipsychotic therapy. The mean total score of the 12 items was compared between the two groups. Lower scores were associated with improved outcomes. As part of the internal validation, mean scores were correlated with an independent measure, time to drug discontinuation (TTD). Mean total

score for aripiprazole-treated patients was 17.4±8.16 compared to 22.2±8.67 for those receiving atypicals (p<0.0001). Mean total score correlated with TTD (r=-.493), and clinical relevance was demonstrated by the observation that a 1 unit increase in score correlated with a 10% increase in the hazard for TTD. In conclusion, overall effectiveness of antipsychotic therapy was greater for patients treated with aripiprazole than patients treated with atypical antipsychotics. Choice of therapies among schizophrenics should consider not only efficacy, but also safety and tolerability concerns.

PO1.77. COMPARATIVE ONE-YEAR INCIDENCE OF METABOLIC SYNDROME AMONG PATIENTS TREATED WITH OLANZAPINE VERSUS ARIPIPRAZOLE

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Metabolic syndrome (Met-S) is a strong determinant of new onset diabetes and myocardial infarction. We compared the incidence or worsening of Met-S among patients treated with aripiprazole or olanzapine from pooled clinical trials. Met-S was defined by presence or exacerbation of three out of the following five risk factors: 1) obesity, defined as relevant weight gain (≥5% increase from baseline, body mass index >25kg/m^2); 2) hypertriglyceridaemia (≥15% increase, ≥150 mg/dl); 3) low high density lipoproteins (≥15% decrease, <40 mg/dl); 4) hypertension (≥8 mmHg increase in diastolic blood pressure, ≥85 mmHg, or ≥12 mmHg increase in systolic blood pressure, ≥135 mmHg); and 5) elevated glucose (≥20% increase, ≥110 mg/dl). Kaplan-Meier survival curves were computed and compared by log rank test. Cox regression computed hazard ratios for Met-S incidence between olanzapine and aripiprazole. After 26 weeks of follow-up, event rates for 504 aripiprazole patients were 8.5±1.7% compared with 14.4±1.9% for 505 olanzapine patients. One-year event rates were 10.0±1.9% for aripiprazole patients versus 20.0±2.3% for olanzapine patients. The relative risk (RR) for Met-S was doubled for olanzapine patients compared with aripiprazole patients (RR=2.1; 95% CI: 1.3–3.1; p=0.0016). In conclusion, onset and worsening of clinically relevant Met-S is substantially greater for olanzapine patients than aripiprazole patients. The association between Met-S and diabetes and cardiovascular disease dictates careful consideration of antipsychotic choices for at-risk patients.

PO1.78. REASONS FOR SWITCHING ATYPICAL ANTIPSYCHOTIC TREATMENT AMONG SCHIZOPHRENIC OUTPATIENTS IN FRANCE

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Despite the availability of new treatments for patients with schizophrenia, discontinuation and switching of medication due to intolerability remains an issue. This study aims to identify determinants of discontinuation/switching among patients treated with atypical antipsychotics. A cross-sectional survey of a representative sample of 1861 schizophrenic outpatients in France was performed. The survey collected information about pharmacological treatment and clinical response. Patients altering their treatment regimen were asked specific questions to determine the reason for change. These analyses focus on switches due to intolerability among patients treated with olanzapine and risperidone. Out of 446 patients treated with olanzapine, 12% (n=55) switched therapies. Among these patients, 57% switched because of intolerability. Weight gain was the most frequent cause of switching (41%), followed by sexual dysfunction (11%), sedation (10%), and extrapyramidal symptoms (8%). As compared to olanzapine, more risperidone-treated patients switched therapy (16%; n=56), with 46% related to tolerability. Sedation accounted for 31% of these switches, followed by extrapyramidal symptoms (22%), weight gain (18%), and sexual dysfunction (11%). In conclusion, the majority of medication switches for olanzapine and risperidone patients were due to intolerability. Weight gain was the most frequent cause for olanzapine patients, while sedation was the most common for risperidone.

PO1.79. LONG-TERM DIABETES RISK WITH OLANZAPINE VERSUS ARIPIPRAZOLE TREATMENT: RESULTS FROM POOLED RANDOMIZED SCHIZOPHRENIA TRIALS

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We applied a validated diabetes risk prediction model to estimate the long-term risk of diabetes among patients enrolled in pooled clinical trials comparing olanzapine to aripiprazole. The risk model uses patient-specific age, sex, race (hispanic or non-hispanic), family history, systolic blood pressure (SBP), high density lipoprotein (HDL), body mass index (BMI), and glucose levels to estimate the adjusted mean 7.5-year incidence of diabetes. The long-term diabetes risk at baseline was 0.167±0.201 for olanzapine (n=262) and 0.177±0.215 for aripiprazole (n=229) (p=0.56), with similar follow-up between groups. Diabetes risk at follow-up increased from 0.167 to 0.183 for olanzapine patients and decreased from 0.177 to 0.142 for aripiprazole patients. The estimated hazard ratio for diabetes risk among aripiprazole patients versus olanzapine patients was 0.78 (p=0.021). Differences in BMI and HDL change during follow-up between aripiprazole and olanzapine were the strongest contributors. Switching from olanzapine to aripiprazole would result in 41 fewer estimated diabetes cases among 1000 hypothetical olanzapine patients. In conclusion, a clinically significant number of long-term diabetes cases would be avoided by switching patients from olanzapine to aripiprazole. The observed differences in estimated risk are primarily attributable to BMI and HDL.

PO1.80. COMPARATIVE STUDY OF THE LONG-TERM EFFECTS OF ARIPIPRAZOLE AND OLANZAPINE TREATMENT ON BODY WEIGHT

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This randomized, double-blind, multicentre study compared the effects of long-term treatment with aripiprazole and olanzapine on body weight in patients with schizophrenia. A total of 317 patients were randomised to receive treatment with aripiprazole (15–30 mg/day) or olanzapine (10–20 mg/day) for 26 weeks. The primary

outcome measure was the proportion of patients experiencing significant weight gain (≥7% increase) from baseline to endpoint. Throughout the study period, significantly more patients receiving olanzapine experienced significant weight gain (≥7% increase) than those receiving aripiprazole. Mean changes in body weight differed significantly between the groups at weeks 6 and 26. At week 26, there was a mean weight gain of 4.23 kg with olanzapine treatment compared with a mean weight loss of 1.37 kg with aripiprazole treatment ($p<0.001$). Differences favouring aripiprazole were also seen for total cholesterol, high density lipoprotein (HDL) cholesterol, and triglyceride levels. The rate of response of clinical symptoms did not differ between the two treatment groups. In summary, the incidence of weight gain and dyslipidaemias was significantly lower with aripiprazole than with olanzapine, suggesting a more advantageous long-term metabolic profile for patients treated with aripiprazole, compared with those receiving olanzapine.

PO1.81.
EFFICACY AND SAFETY OF INTRAMUSCULAR ARIPIPRAZOLE IN ACUTELY AGITATED PATIENTS WITH PSYCHOSIS

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The aim of this study was to evaluate the efficacy and safety of intramuscular (IM) aripiprazole for the treatment of acute agitation in patients with schizophrenia, schizoaffective, and schizophreniform disorders. In total, 357 patients presenting with acute agitation were randomized to aripiprazole IM (1 mg, 5 mg, 10 mg, and 15 mg doses), haloperidol IM (7.5 mg dose), or placebo, in this 24-hour, multicentre, double-blind study. The key outcome measure was Positive and Negative Syndrome Scale (PANSS) - Excited Components (PEC), evaluated every 15 minutes for the first 2 hours after dosing. A rapid reduction of PEC was observed with aripiprazole 10 mg IM compared with placebo (at 30 min: –3.2 vs. –1.76, $p=0.051$; 45 min: –4.39 vs. –2.22, $p<0.05$; 60 min: –5.48 vs. –2.41, $p<0.05$), and efficacy was maintained for the duration of the study. Aripiprazole 5 mg IM and 15 mg IM both showed significant reductions in PEC at 60 minutes, and haloperidol 7.5 mg IM showed a significant reduction in PEC at 105 minutes. In addition, aripiprazole IM resulted in significant improvement in agitation, without excessive sedation, as measured by the Agitation-Calmness Evaluation Scale. Aripiprazole IM was associated with minimal pain at the injection site (1.8%) and two patients discontinued due to adverse events. In conclusion, these data suggest that aripiprazole 10 mg IM is an effective treatment for the rapid reduction of acute agitation in patients with schizophrenia, schizoaffective, or schizophreniform disorders, without resulting in excessive sedation or pain at the injection site.

PO1.82.
EFFECTS OF ARIPIPRAZOLE AND HALOPERIDOL ON AFFECTIVE SYMPTOMS OF SCHIZOPHRENIA: RESULTS FROM A LONG-TERM STUDY

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The long-term effects of aripiprazole and haloperidol on the affective symptoms of schizophrenia were evaluated in this analysis of a randomized, multicenter, 52-week study. This study compared aripiprazole with haloperidol for maintenance of response in 1283 patients with acute exacerbation of chronic schizophrenia. Affective symptoms of schizophrenia were evaluated using the Positive and Negative Syndrome Scale (PANSS) depression/anxiety symptom cluster derived by factor analysis, the PANSS depression item (G6), and the Montgomery-Asberg Depression Rating Scale (MADRS) score. Results at Week 8 showed a greater improvement in the PANSS depression/anxiety cluster score and the PANSS depression item score for treatment with aripiprazole than with haloperidol therapy. This effect was maintained throughout the study period. At Week 52 there was a significant difference between treatments; for the depression/anxiety cluster, mean treatment difference was 0.52 ($p=0.015$), and for the depression item, mean treatment difference was 0.14 ($p=0.027$). Patients in the upper tertile after stratification by baseline scores showed a particularly pronounced difference in the depression/anxiety cluster (mean treatment difference 1.10; $p=0.02$). Similar results were produced after analysis of MADRS scores. In particular, reductions in MADRS score were significantly greater with aripiprazole than with haloperidol (6.0 vs. 3.5; $p=0.029$) among patients with pronounced depressive symptoms at baseline (MADRS >16). In summary, long-term therapy with aripiprazole is more effective than haloperidol for the reduction of affective symptoms in patients with schizophrenia, as measured by changes in MADRS and relevant PANSS items scores.

PO1.83.
A NATURALISTIC STUDY OF ARIPIPRAZOLE TREATMENT IN A GENERAL PSYCHIATRIC SETTING

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We aimed to examine the overall effectiveness of aripiprazole treatment in a naturalistic setting. A multicentre, open-label study of aripiprazole was conducted in outpatients with schizophrenia or schizoaffective disorder for whom a switch or initiation of antipsychotic medication was required. Patients were randomized in a 4:1 ratio to aripiprazole (n=1295) or a safety-control group (primarily risperidone, olanzapine, ziprasidone, or quetiapine; n=304) for 8 weeks. Aripiprazole treatment was initiated at a 15 mg/day dose, with the option to adjust within a range of 10–30 mg/day. The key measures of effective-

ness included the Clinical Global Impression - Improvement scale (CGI-I) and Preference of Medication Scale (POMS). At study endpoint, the mean aripiprazole dose was 19.9 mg/day, with 47% of patients receiving the 15 mg dose. The effectiveness of aripiprazole was demonstrated as early as week 1. Among patients completing the study, 69% of those in the aripiprazole group responded to treatment (CGI-I score of 1 or 2) with a mean CGI-I score of 2.17. Over 60% of aripiprazole-treated patients and 54% of caregivers rated aripiprazole as much better than prior antipsychotic therapy (score of 1). The only adverse events reported with aripiprazole treatment with an incidence of 10% or above were nausea (14%) and insomnia (20%). In conclusion, aripiprazole demonstrated overall effectiveness in patients with schizophrenia and schizoaffective disorder in a general psychiatric setting.

PO1.84. GUANOSINE-5'-O-(3-[35S]THIO)-TRIPHOSPHATE BINDING ASSAYS CAN BE INSENSITIVE IN DETECTING D2 PARTIAL AGONIST DRUG ACTIVITY

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This study investigated whether D2 receptor partial agonist activity could be detected for aripiprazole, its close structural analogue OPC-4392, a series of atypical antipsychotics, and the reference D2 partial agonists, (–)3-PPP and (+)terguride, in a [35S]GTPγS binding assay using membranes expressing cloned human D2Long receptors (CHO-hD2L). These drugs were also profiled in the same CHO-hD2L cell line using Flashplate® adenylate cyclase (AC) and [3H]arachidonic acid release (AA) assays. The resultant estimates of drug potency and relative intrinsic activity (RIA) were compared between assays. Aripiprazole was inactive in the [35S]GTPγS binding assay, although it behaved as a potent, partial agonist in its inhibition of AC activity (pEC50 8.36±0.54; Emax 10.6±2.0%, relative to 10 µM dopamine) and stimulation of AA release (pEC50 8.13±0.23; Emax 32.4±2.9%). (+)Terguride, (–)3-PPP, and OPC-4392 displayed partial agonist activities in all three assays, and, in common with aripiprazole, the RIA of each compound was higher in the AA > AC > [35S]GTPγS binding assay. In contrast, haloperidol, olanzapine, ziprasidone and clozapine were inactive in all three assays. These results demonstrate that aripiprazole, unlike the other antipsychotics tested, behaved as a partial agonist at cloned human D2L receptors, although this property was undetectable in a [35S]GTPγS binding assay that was nearly insensitive to the reference D2 partial agonists (+)terguride and (–)3-PPP. Attempts to identify novel D2L partial agonist therapeutics may benefit from adopting multiple in vitro functional assays to minimise the occurrence of false negatives that may arise due to agonist directed trafficking.

PO1.85. SHORT-TERM ARIPIPRAZOLE TREATMENT IN SCHIZOPHRENIA: EFFECTIVENESS AGAINST DEPRESSION, ANXIETY, AND HOSTILITY SYMPTOMS

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We aimed to examine the short-term effects of aripiprazole on the symptoms of depression, anxiety and hostility associated with schizophrenia. This analysis used pooled data from five 4- to 6-week double-blind studies of aripiprazole in patients with schizophrenia or schizoaffective disorder. Depression/anxiety and excitement/hostility symptom clusters were determined using factor analysis of Positive and Negative Syndrome Scale (PANSS) scores. Changes in factor scores were compared in patients treated with aripiprazole (n=885) and those receiving placebo (n=405). The same analysis was also performed on data from the two fixed-dose trials that included haloperidol as an active control. The mean reduction in PANSS depression/anxiety factor was significantly greater with aripiprazole than placebo (p=0.001). The effect was particularly pronounced in patients with baseline scores above the median value (–3.15 vs. –1.88, p<0.001). Reduction in the PANSS depression item (G6) was also significantly greater in aripiprazole-treated patients than those receiving placebo (p=0.008). The mean excitement/hostility factor score increased by 1.29 with placebo and decreased by 0.94 in aripiprazole-treated patients (p<0.001). The two fixed-dose trials that included a haloperidol arm showed similar changes in the depression/anxiety factor in the haloperidol and placebo arms (p=0.368), while significant improvement over placebo was seen in the aripiprazole arm (p=0.013). In these trials, the excitement/hostility score was significantly (p<0.001) reduced by both aripiprazole (–1.17) and haloperidol (–1.11) compared with placebo (+1.48). In conclusion, in short-term trials, aripiprazole was effective for amelioration of the depression, anxiety and hostility symptoms associated with schizophrenia.

PO1.86. ZIPRASIDONE VS. OLANZAPINE: CHANGE IN CORONARY HEART DISEASE RISK DURING A 6-WEEK TRIAL

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The study aimed to examine differences in coronary heart disease (CHD) risk arising from short-term treatment with ziprasidone and olanzapine. Hospitalized schizophrenic adults underwent 6-week randomized, double-blind treatment with ziprasidone or olanzapine, with data collected at baseline and endpoint for fasting lipids and weekly for blood pressure. A Framingham algorithm was used to calculate the percentage CHD risk over 10 years in patients ≥30 years (per algorithm). Baseline-to-endpoint least–squares (LS) mean changes in age-adjusted risk by sex were compared using ANCOVA (baseline adjusted). In men ≥30 years, there was a significant difference in LS mean changes in total cholesterol (TC) for olanzapine vs. ziprasidone (+24.8 mg/dL and +0.52 mg/dL, respectively; p=0.004). A significant difference was also seen in LS mean changes in low density lipoprotein C (LDL-C) for olanzapine and ziprasidone (+14.0

mg/dL and -1.24 mg/dL, respectively; p=0.01). Mean CHD risk in men increased by 0.8% (baseline 4.2%) with olanzapine (n=55) and decreased by 0.2% (baseline 4.5%) with ziprasidone (n=46) (p<0.05 between groups). Although there were greater LS mean increases in LDL-C, TC, and triglycerids in women ≥30 years receiving olanzapine, between-group differences were not statistically significant, nor were mean differences significant for CHD risk in women. Neither treatment had significant effects on blood pressure. In conclusion, in short-term treatment of men ≥30 years, olanzapine was associated with significant changes in lipid profile vs. ziprasidone, with a consequent significant increase in CHD risk versus ziprasidone. These findings, coupled with those of significant weight gain with olanzapine versus ziprasidone, warrant investigation in longer-term trials.

PO1.87.
COURSE OF WEIGHT AND METABOLIC BENEFITS 1 YEAR AFTER SWITCHING TO ZIPRASIDONE

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The study aimed to determine the long-term course of short-term improvements in weight and metabolic side effects among schizophrenic outpatients recently switched to ziprasidone. Three open-label, flexible-dose continuation studies enrolled stable completers of 6-week trials of outpatients who were switched from either conventionals (n=71), olanzapine (n=71), or risperidone (n=43) to ziprasidone. Follow-up to 1 year of ziprasidone monotherapy (median 30.5 weeks) permitted longitudinal assessment of improvement in weight and metabolic side-effect profile using intention-to-treat analysis. Patients switched to ziprasidone from risperidone or olanzapine exhibited continued weight loss and lowering of body mass index over 1 year. For the pre-switch olanzapine group, additional weight loss was 5.7 lb (2.6 kg) (p<0.0001) over and above the initial 6-week weight loss of 3.7 lb (1.7 kg). For the pre-switch risperidone group, the additional weight loss was 9.3 lb (4.2 kg) (p<0.001) over and above the initial 2.0 lb (0.9 kg) weight loss. Metabolic improvements in triglycerides and cholesterol noted at endpoint of the 6-week switch were sustained over 1 year. Reduction in median triglycerides was 31.0 mg/dL (p=0.0001) for the pre-switch olanzapine group, and 17.0 mg/dL (p<0.05) for the pre-switch risperidone group. In conclusion, schizophrenic outpatients switched from olanzapine or risperidone to ziprasidone continued losing weight for up to 1 year. Other initial 6-week improvements in metabolic parameters were sustained during long-term ziprasidone monotherapy.

PO1.88.
ZIPRASIDONE: LONG-TERM POST-SWITCH EFFICACY IN SCHIZOPHRENIA

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The study aimed to evaluate ziprasidone's long-term efficacy and tolerability in schizophrenic outpatients switched from other antipsychotics. Three open-label, flexible-dose continuation studies enrolled completers of 6-week trials initially switched to ziprasidone from conventionals, olanzapine, or risperidone. Primary efficacy variables were changes at endpoint from core baseline in Positive and Negative Syndrome Scale (PANSS) total and Clinical Global Impression-Severity (CGI–S), with analysis by paired t tests in intention-to-treat (ITT) and completer populations. Overall median treatment duration was 215 days (range 7-824 days); median dosage at penultimate treatment day was 120 mg/d. In those switched from conventionals, mean PANSS total score improved significantly in ITT patients (n=71, –6.3, p<0.01) and in completers (n=30, –10.1, p<0.01); CGI–S improved significantly in both (–0.4, p<0.001, and –0.7, p<0.0001, respectively). In patients switched from olanzapine (n=71), completers (n=25) exhibited significant improvements in PANSS total (–10.0, p<0.01) and CGI–S (–0.4, p<0.05). In patients switched from risperidone (n=43), completers (n=17) exhibited significant improvements in PANSS total (–10.9, p<0.05) and CGI–S (–0.9, p<0.001). Ziprasidone was well tolerated, with insomnia alone having an incidence >10% in all 3 groups. No patient had QTc interval >500 msec. In conclusion, patients switched to ziprasidone demonstrated long-term improvement in symptoms and illness severity. Ziprasidone was well tolerated.

PO1.89.
LONG-TERM COGNITIVE IMPROVEMENT IN PATIENTS SWITCHED TO ZIPRASIDONE

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Memory impairment in schizophrenia is associated with functional impairment. We examined improvement in memory functions associated with ziprasidone in patients switched from other antipsychotics. Three open-label, flexible-dose continuation studies enrolled patients who completed 6-week trials wherein they had been switched to ziprasidone from conventional antipsychotics, risperidone, or olanzapine due to suboptimal antipsychotic efficacy or tolerability. Learning and memory were assessed at last visit with the Rey Auditory Verbal Learning Test (RAVLT). Changes from the core study baseline to endpoint in the intention to treat population are reported. Overall, median treatment duration was 215 days. Patients in all 3 studies demonstrated significant improvement in multiple components of the RAVLT. Patients switched from conventional antipsychotics (n=71) demonstrated improvement in performance on first learning trial (p<0.001), total learning over 5 learning trials (p<0.05), and long delay recall (p<0.05) components. Patients switched from olanzapine (n=71) exhibited improvement in trial one performance (p<0.0005), total learning (p<0.0001), and long delay recall (p<0.005). Patients switched from risperidone (n=43) improved significantly on total learning (p<0.05) and long delay recall (p<0.01). In conclusion, patients switched to ziprasidone may experience improvement in learning and memory over a long-term period. The functional consequences of the improvements are yet to be determined.

PO1.90.
OPTIMAL INITIAL DOSING OF ZIPRASIDONE: CLINICAL TRIAL DATA

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The study aimed to evaluate optimal initial dosing of ziprasidone in patients with acute exacerbation of schizophrenia or schizoaffective disorder. We analyzed ziprasidone's clinical trial database for efficacy and tolerability data respecting two initial dosages, 40 or 80 mg/d. Pooled data from seven fixed- and flexible-dose studies (n=2174) were analyzed for initial and overall efficacy, initial and total discon-

tinuations, and adjunctive medications. Overall, subjects initiating ziprasidone at 80 mg/d demonstrated improved outcomes compared with subjects initiating therapy at 40 mg/d. Improved efficacy was indicated by greater reductions in Brief Psychiatric Rating Scale (BPRS) total scores at week 1 and endpoint, and significantly lower rates of discontinuation from lack of efficacy at week 1 (1.3% vs. 4.1%, respectively; $p<0.05$) or any time (19.2% vs. 26.6%, respectively; $p<0.05$). Subjects initiating at 80 mg/d were less likely to require adjunctive lorazepam than those initiating at 40 mg/d. There were no between-group differences in discontinuations due to adverse events or type and frequency of adverse events. Mean doses of ziprasidone in the flexible-dose trials ranged from 120-160 mg/d. In conclusion, initiating ziprasidone at 80 mg/d and reaching minimum target goals of 120 mg/d are associated with improved overall outcomes compared with lower dosages. Higher initial dosing is well tolerated.

PO1.91.
NORMALIZATION OF COGNITIVE FUNCTION WITH LONG-TERM ZIPRASIDONE OR OLANZAPINE

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The study aimed to elucidate the magnitude of improvements in cognitive functioning observed with ziprasidone or olanzapine in a 6-month, double-blind continuation study and to determine whether changes resulted in normalization of performance. Cognitive tests included verbal learning, executive functioning, visuo-motor speed, and verbal fluency. Standard scores were developed based on age and education-corrected norms (normal performance= z-score ≥-1.0). "Normalization" was defined as: a) performance impaired (z<-1.0) at baseline and unimpaired (z>-1.0) at endpoint and b) change in performance ≥0.5 SD. Average baseline performance was impaired across all tests. Percentages of patients with impaired performance ranged from 36% (letter fluency) to 89% (Wisconsin Card Sorting Test perseverative errors). Performance was significantly ($p<0.01$) improved at endpoint in ziprasidone (n=62) and olanzapine (n=71) groups for all variables, with corrected effect sizes of .28 to 1.56. Percentages of patients meeting normalization criteria ranged from 10% (Trail Making part B) to 37% (word list total learning). For 8/10 variables, less than 50% were still impaired. There was no significant between-group difference in extent of change and likelihood of normalization. In conclusion, the typical outcome of continuation treatment with ziprasidone over 6 months was normalization of cognitive performance. Olanzapine-treated subjects showed a similar pattern of improvement.

PO1.92.
LONG-TERM COGNITIVE IMPROVEMENT: ZIPRASIDONE VERSUS OLANZAPINE

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It is unclear whether long-term treatment with atypical antipsychotics yields continuing improvement in cognitive function. We compared olanzapine and ziprasidone treatment in a double-blind, 6-month extension of a 6-week, randomized clinical trial. Patients entered the 6-week study naïve to both medications and could enter the extension if they had a Clinical Global Impression - Improvement score ≥2 or ≥20% improvement in the Positive and Negative Syndrome Scale (PANSS) total score during the core study. A cognitive battery measured verbal learning, executive functioning, visuomotor speed, verbal fluency, and vigilance. In both ziprasidone (n=62) and olanzapine (n=71) groups, substantial cognitive improvements occurred from baseline to endpoint of the extension. Improvements (presented in effect size units for ziprasidone, but not significantly different between medications) in verbal learning were d=.97 and in delayed recall were d=1.07. Executive functioning also improved, with d=.66 for Wisconsin Card Sorting Test errors. Trail Making Test part A improved by d=.60 and part B by d=.50. These improvements were significant ($p<0.01$) and were generally uncorrelated with changes in PANSS. In conclusion, long-term treatment of patients with early response to ziprasidone or olanzapine is associated with incremental cognitive gains that are at least twice that observed in short-term trials. Thus, cognitive benefits of atypicals may increase over time.

PO1.93.
A SURVEY OF DEPOT ANTIPSYCHOTIC PRESCRIBING PRACTICE IN THE SOUTHERN REGION OF ADELAIDE, AUSTRALIA

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Depot antipsychotic medication (DAP) is a widely used treatment for schizophrenia and related disorders. The two primary objectives of the study were: a) to determine whether DAP was being prescribed in accordance with established guidelines in terms of dose, interval of administration and indications and b) to evaluate the quality of the assessment, documentation and management of DAP-related side effects. The survey was carried out between April and June 2003 and was undertaken at all three public hospital affiliated community mental health centres located in the southern region of Adelaide. Data were manually collected and extracted from three sources: depot prescription charts, community mental health service case notes and hospital case notes where available. Two hundred and sixty-one subjects were receiving DAP. The vast majority (89%) had a diagnosis of schizophrenia or schizoaffective disorder. Four percent of subjects had a case note documented diagnosis of tardive dyskinesia (TD). The commonest DAP prescribed was zuclopenthixol decanoate (57%) at a mean dose of 167 mg. Fifty-three percent of subjects had at least one dose reduction during the course of treatment. Fifty seven percent of subjects had at least one glucose test in the past year, with nearly half of them demonstrating abnormal results, and 47% of subjects had at least one lipid study, with more than half having abnormal total cholesterol and 22% having abnormal triglycerides. The results of this study indicate that depot antipsychotic medication is being used mostly for the treatment of schizophrenia and related disorders, which is in agreement with established evidence based guidelines. The finding of at least one documented attempt at DAP dose reduction or extended interval of administration in about half of the patients receiving DAP is encouraging and may have an impact on reducing the likelihood of TD development. The finding of a TD prevalence rate of 4% in this study may reflect under-reporting due to infrequent monitoring of TD. A formal TD surveillance program using a screening tool would ensure early detection of TD before progression to a more severe, persistent form. In addition, more frequent evaluation of blood glucose and lipid levels is needed.

PO1.94.
QTc VARIABILITY IN SCHIZOPHRENIA PATIENTS TREATED WITH ANTIPSYCHOTICS AND HEALTHY CONTROLS

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QTc prolongation is associated with the administration of some antipsychotics, but the QTc interval is also known to vary physiologically. There is little published evidence about changes in QTc variability during treatment with antipsychotics. In this prospective investigation, we analysed electrocardiograms (ECGs) in 61 patients suffering from a schizophrenic disorder who were treated with different antipsychotics and 31 sex and age matched healthy controls. We found no differences in QTc intervals nor in QTc variability between patients and controls. Our results raise the question of the clinical relevance of a single ECG for diagnostics of cardiac complications in schizophrenia patients and suggest the need to conduct ECG monitoring in patients at high risk for cardiac complications during antipsychotic treatment.

PO1.95.
CLOZAPINE INDUCED MYOCARDITIS IS RELATED TO EOSINOPHILIC REACTION IN MYOCARDIAL TISSUE

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Clozapine use is mostly limited by the well-known agranulocytosis risk, but it has been also associated with more rare (and less known) but similarly unpredictable and severe cardiovascular side effects, related to sudden death. Both dilated cardiomyopathy and myocarditis, as a result of direct toxicity and drug hypersensitivity, respectively, have been described at autopsy. We report a case of a 27-years-old chronic schizophrenic man (DSM-IV criteria), resistant and intolerant to neuroleptic drugs, treated with clozapine 250 mg/day who, after 12 days of treatment, developed a persistent fever (38.5°C) associated with pharingodynia and neutrophilic leukocytosis. Within 72 hours the clinical picture worsened, with severe malaise and dyspnea, while chest radiogram showed a slight enlargement of cardiac silhouette. A clozapine-related myocarditis or an acute viral myocarditis following a throat infection was then suspected and, consequently, clozapine was withdrawn. After transfer to the cardiologic semi-intensive care unit, it was possible to diagnose 'in vivo', through endomyocardial biopsy, a hypersensitivity, eosinophilic myocarditis secondary to clozapine administration. Steroids treatment resolved successfully the clinical picture.

PO1.96.
CHANGES IN BODY WEIGHT AND BLOOD SUGAR IN PATIENTS RECEIVING ATYPICAL ANTIPSYCHOTICS

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Atypical antipsychotic agents are becoming important in clinical psychiatry. They are as effective as classical antipsychotic agents on positive symptoms of schizophrenia and some evidence suggests that they are more effective than those older drugs on negative symptoms. Moreover, they are less likely to produce extrapyramidal side effects. Concerns have been raised, however, about weight gain and increased blood sugar which may be induced in some patients by some of these agents. We studied for one year 11 patients (5 males, 6 females), receiving either olanzapine or quetiapine in one of our psychiatric hospitals. We found a tendency of patients receiving olanzapine to gain weight, while patients receiving quetiapine tended to lose weight. A further follow-up and an extension of the sample are needed to take any conclusion.

PO1.97.
VALPROATE AUGMENTATION TO CLOZAPINE IN TREATMENT RESISTANT SCHIZOPHRENIA

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Neuroleptic resistant patients comprise 5 to 25% of all patients with schizophrenia. Clozapine can help attain response in 60% of neuroleptic resistant patients, but some still cannot reach an acceptable degree of remission, even when sufficient dosage is used for as long as six months. In such cases, supplemental agents such as valproate should be tried. Although there has been concern about the drug interactions between clozapine and valproate, a chart study showed that the combination is safe and efficacious. Valproate as augmentation treatment to antipsychotics has been found beneficial in reducing positive and negative symptoms in schizophrenic patients, but no study has been made on the long-term outcome of patients using clozapine-valproate combination. In this study, the charts of 37 schizophrenic patients who had been given supplementary valproate due to insufficient response to clozapine were investigated. The patients were evaluated using the Positive and Negative Syndrome Scale, the Global Assessment of Functioning and the Clinical Global Impression. The mean total scores on these scales showed a significant improvement. No serious side effects, like agranulocytosis, occurred. Sedation was the most common complaint. In conclusion, valproate can be considered as an augmentation therapy in clozapine resistant schizophrenia patients, but cautious monitoring of side effects is necessary.

PO1.98.
WHAT ARE THE INDICATIONS FOR I.M. ADMINISTRATION OF PSYCHOTROPICS IN EMERGENCY PSYCHIATRY?

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The study aimed to investigate the indications for i.m. administration of psychotropics in emergency psychiatry and to analyze the influence of compulsory treatment, nationality and sex. It was an observational trial during 13 months, using a standardized questionnaire. Among a total of 193 admitted patients, 36 were administered i.m.

psychotropics (zuclopenthixol acetate or haloperidol + clorazepate or lorazepam). 24 patients of the total schizophrenia and other psychosis population (n=95) and 8 patients of the total mood disorder population (n=19) were administered i.m. psychotropics. Of the total sample of patients diagnosed with schizophrenia and schizoaffective disorders (n=64) there were 5 patients who were administered i.m. medication. From the total sample of patients diagnosed with drug-induced psychosis (n=14), there were 10 patients who were administered i.m. medication. I.m. medication was administered to 6 out of 104 patients admitted voluntarily, and to 30 out of 89 patients admitted compulsorily. Among patients with dual diagnosis (psychiatric disorder and substance abuse) (n=6), there were 4 patients who were administered i.m. medication. Apparently, there are no clear indications for administering i.m. medication. It seems that patients with serious psychiatric conditions, with marked agitation and/or violence, sometimes related to drug abuse, tend to be eligible for i.m. medication in acute situations at an emergency service. Although most patients administered i.m. medication are in the category of 'schizophrenia and other psychosis', the clinical reasoning behind i.m. administration of psychotropics is not consistent.

PO1.99. COMPARING THE EFFECTS OF RISPERIDONE AND HALOPERIDOL IN CHRONIC SCHIZOPHRENIC PATIENTS

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This study aimed to evaluate cognitive improvement in chronic schizophrenic patients treated with risperidone or haloperidol. In a double-blind clinical trial, 65 inpatients with DSM-IV chronic schizophrenia were randomly assigned for a treatment course of 8 weeks to either risperidone (4-6 mg/day) or haloperidol (10-15 mg/day). Before, during and after the treatment course, patients were examined by the Positive and Negative Syndrome Scale (PANSS) and the Wisconsin Card Sorting Test (WCST). On the total PANSS score and the positive and negative subscales, risperidone was significantly superior to haloperidol. The same results were obtained using the Brief Psychiatric Rating Scale. Haloperidol produced significantly more parkinsonism than risperidone. Risperidone displayed an antidyskinetic effect. Risperidone was significantly better than haloperidol in reducing perseveration errors on WCST after 8 weeks. These data suggest that risperidone, at the optimal therapeutic doses of 4-6 mg/day, produces significant improvement in both positive and negative symptoms without an increase in drug induced parkinsonism and with a significant beneficial effect on tardive dyskinesia. Moreover, it produces some cognitive improvement.

PO1.100. COMPARING THE EFFECT OF ATYPICAL AND CONVENTIONAL ANTIPSYCHOTICS ON BLOOD GLUCOSE IN SCHIZOPHRENIC PATIENTS

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This study aimed to compare the effects of different antipsychotics on glucoregulation in schizophrenic patients. 81 inpatients with the diagnosis of schizophrenia, 43 receiving conventional antipsychotics and 38 treated with atypical antipsychotics, underwent glucose tolerance test. The effect of atypical antipsychotics on the first hour glucose level was marked (p=0.07). The effect was more pronounced in patients receiving clozapine than in those receiving conventional antipsychotics (p=0.06). There was a significant relation between the duration of illness and fasting blood glucose and first hour glucose level. Also, there was a significant relation between age and blood glucose level. These data suggest that atypical antipsychotics have a greater effect on blood glucose level than conventional drugs.

PO1.101. OLANZAPINE: DOES IT CONTROL CRAVING FOR COCAINE?

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Some studies have reported the efficacy of olanzapine in the treatment of craving in cocaine addicts. We are presenting two case reports confirming that. The first patient was male, aged 29, and began using nicotine and alcohol when he was 15. He then moved on to cannabis, and when he was 18, stimulants like ecstasy and cocaine. When he arrived at our centre he had been using 3-4 g of cocaine per day, 3-4 times a week for three months. The evaluation was carried out using a visual analogical scale (VAS) for craving (6.4 out of 10 for craving intensity and 4.3 for craving frequency), the Short Check List 90-R (SCL-90-R) (negative), the Hamilton anxiety and depression scales (negative). He started with 10 mg olanzapine daily. After two weeks, urine samples collected under supervision resulted negative for cocaine metabolites. After one month he felt better and VAS was lower than before (2.3 for intensity and 1.5 for frequency). Therapy was discontinued after three months, and follow-up tests resulted negative for three more months. The second patient was male, aged 36, HIV-seropositive. He has been attending our centre since 1989 due to heroin addiction. In 1992 he began methadone treatment, stopped using heroin and improved his social functionality. In 2000, due to deep depression, he began using cocaine i.v., soon arriving at 5 g per day. Because of the presence of paranoid delusions, olanzapine was prescribed at 20 mg per day. After 15 days, delusions disappeared and cocaine use stopped. The patient reported a significant reduction in craving.

PO1.102. A NATURALISTIC STUDY OF THE TOLERABILITY OF NEW ANTIPSYCHOTICS

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Data from 24 patients out of 280 in treatment with atypical antipsychotic drugs (olanzapine, clozapine, risperidone and quetiapine), not selected for pathology, attending a mental health centre have been collected during this study. The patients have been monitored for 9 months (once a month for the first six months and afterwards every three months). The tolerability has been estimated by means of a schedule covering extrapyramidal symptoms (EPS), weight, and results of routine laboratory tests. The subjective attitude to treatment with atypical antipsychotic drugs was estimated with a specific questionnaire, the Drug Attitude Inventory (DAI-10) at baseline and after nine months of treatment. The EPS incidence has been significantly lower in the patients receiving clozapine and quetiapine, while risperidone and olanzapine are characterized by a dependent dose increase in EPS. The levels of prolactin were higher in patients receiving risperidone. Concerning weight gain and hyperglycemia, quetiapine had a more favourable profile. Somnolence and sedation, especially at the beginning of treatment, were more frequent in the group treated with quetiapine and clozapine.

PO1.103.
DIFFERENT EFFECTIVENESS OF VARIOUS ANTIPSYCHOTICS IN TREATING PSYCHOTIC SYMPTOMS

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Even if new antipsychotics (risperidone, olanzapine, quetiapine, clozapine) were initially compared with haloperidol as a group of drugs, now we clinically observe differences in effectiveness among these drugs not only in indications for categorical diagnosis but also in specificity for psychotic dimensions. To assess dimensional and categorical differences among antipsychotics we observed the inpatients admitted for psychosis in our Psychiatric Unit. All inpatients were included but not those treated before admission with long-acting antipsychotics. At the moment of admission (T0), patients were tested with the Brief Psychiatric Rating Scale (BPRS), the Scale for Assessment of Positive Symptoms (SAPS), the Scale for Assessment of Negative Symptoms (SANS), medical examination, and routine laboratory tests. At the moment of discharge (T1), they were tested with BPRS, SAPS, SANS, medical examination, Clinical Global Impression (CGI) and Dosage Record Treatment Emergent Symptom Scale (DOTES). We used risperidone, olanzapine, quetiapine, clozapine or haloperidol. All inpatients improved at T1. We did not observe any side effect as important as requiring the change of the drug. Dimensional differences in effectiveness (T1-T0 in BPRS, SAPS and SANS) indicate the following results. Haloperidol (29 inpatients) had a greater effect on hallucinations, delusions and paranoid projection. Quetiapine (17 inpatients) had a greater effect on affective flattening, alogia and retardation. Risperidone (27 inpatients) had a greater effect on behavioral symptoms, distortion in language and communication, anxiety, hostility and grandiosity. Olanzapine (22 inpatients) had a greater effect on depressed mood, suicidal ideation, feelings of guilt, bizarre behavior, disorientation, hostile belligerance, stereotyped behavior. Clozapine (4 inpatients) had a greater effect on anhedonia, attentional impairment, expansive mood, bizarre thoughts, conceptual disorganization, social withdrawal, excitement, distractibility.

PO1.104.
EFFECTS OF SWITCH FROM LONG-ACTING HALOPERIDOL TO ORAL OLANZAPINE

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We studied 20 patients with a DSM-IV diagnosis of schizophrenia (14 males and 6 females, age range 30-65 years, mean 45.2 years) who had been receiving for at least two years long-acting haloperidol (50-150 mg, mean 82.5 mg, at intervals of 15-30 days, mean 21.9 days). In all these patients, olanzapine (5 mg/day per os) was added to haloperidol for 20 days. Then haloperidol was discontinued and olanzapine 15 mg/day was administered for three months. The Minnesota Multiphasic Personality Inventory (MMPI) was administered one week before starting olanzapine treatment and at the end of the trial. Body weight has been measured and routine laboratory tests have been performed at the same time points. We found a significant reduction in the scores on the scales SC (schizophrenia), PA (paranoia), PT (psychoasthenia), D (depression), SI (social introversion) and HS (hypochondriasis) at the second time point compared with the first one. Weight gain was observed in 7 patients (mean 2 kg). No significant changes have been observed in the glycemic and lipidic profiles.

PO1.105.
OFF-LABEL INDICATIONS FOR ATYPICAL ANTIPSYCHOTICS: A SYSTEMATIC REVIEW

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With the introduction of newer atypical antipsychotic agents, a question emerged, concerning their use as complementary pharmacotherapy or even as monotherapy in mental disorders other than psychosis. MEDLINE was searched with the combination of each one of the key words risperidone, olanzapine and quetiapine with key words that referred to every DSM-IV diagnosis other than schizophrenia and other psychotic disorders, bipolar disorder and dementia and memory disorders. All papers were scored on the basis of the Jadad index. The search returned 483 papers. The selection process restricted the sample to 59 papers concerning risperidone, 37 concerning olanzapine and 4 concerning quetiapine. Ten papers (7 concerning risperidone and 3 concerning olanzapine) had a Jadad index above 2. Data suggest that further research would be of value concerning the use of risperidone in the treatment of refractory obsessive-compulsive disorder, pervasive developmental disorder, stuttering and Tourette's syndrome, and the use of olanzapine for the treatment of refractory depression and borderline personality disorder.

PO1.106.
USE OF QUETIAPINE IN SCHIZOTYPAL PERSONALITY DISORDER ASSOCIATED WITH TRANSIENT PSYCHOTIC FEATURES

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This study is aimed at describing the case of a patient with a schizotypal personality disorder associated with transient psychotic features, successfully treated with quetiapine. He is 39 years of age and lives with his mother, a past alcoholic. His youth was marked by drug addiction and delinquent behaviours (he also spent some months in prison). Over the last few years, he has undergone several hospitalisations in psychiatric units because of psychotic decompensations, depressive episodes, and two attempts of suicide. The index "transient psychotic episode" determined his hospitalisation at our centre. He appeared restless, with ideas of reference, and hallucinated. He attacked his mother, driving her away from home. In the psychiatric ward, he was sullen and solitary during the first few days; he started a quetiapine therapy with titration over five days (from 200 to 800 mg/day), combined with carbamazepine (600 mg/day) and lorazepam (7.5 mg/day). After a few days, the patient improved: he became self-critical about the circumstances that had led to hospitalisation and enjoyed communicating with the staff; reference and persecution ideas disappeared. He was discharged after two weeks. The potential use of quetiapine to treat personality disorders seems to be quite interesting.

PO1.107.
QUETIAPINE IN COMBINATION WITH SELECTIVE SEROTONIN REUPTAKE INHIBITORS IN REFRACTORY OBSESSIVE-COMPULSIVE DISORDER

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This study evaluates the efficacy of combining quetiapine, an effective and well-tolerated atypical antipsychotic, with a selective serotonin reuptake inhibitor (SSRI) in patients with obsessive-compulsive disorders (OCD) who did not respond to SSRI monotherapy. Ten patients (mean age 45.7±9.06 years) with refractory OCD (DSM-IV criteria), unresponsive to treatment with SSRI monotherapy (paroxetine, sertraline, clomipramine), received quetiapine combination therapy for 3 months. Efficacy was measured using the Yale-Brown Obsessive-Compulsive Scale (YBOCS) and the Clinical Global Impression (CGI) scale every 6 weeks. Patients were treated with an initial dose of quetiapine 50 mg/day, which was increased to a maximum of 300 mg/day by week 4. All patients responded to quetiapine administration (mean dose 205±43.78 mg/day). The mean YBOCS score decreased from 24.3±1.49 at baseline to 18.5±1.84 after 6 weeks and 14.5±1.5 after 3 months, with a mean reduction at endpoint of 39.8%. Quetiapine, an atypical antipsychotic with placebo-like extrapyramidal side effects, in combination with an SSRI is effective and well tolerated in patients with refractory OCD. This preliminary study suggests that this regimen could be a useful alternative for the treatment of patients with refractory OCD.

PO1.108.
QUETIAPINE IN A CASE OF TREATMENT REFRACTORY PARANOID SCHIZOPHRENIA

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This study aimed at verifying the effectiveness of quetiapine in the long-term treatment of a patient affected by paranoid schizophrenia who had already undergone treatments based on other typical and atypical antipsychotic drugs, with unsatisfactory results. The patient was 18 years old and had a positive family history for mental disorders. He suffered from serious disorders in the contents of thought, ideas of persecution, and imperative auditory hallucinations with suicide attempts. He had developed extrapyramidal effects induced by neuroleptic drugs, and risperidone-induced hyperprolactinaemia and weight gain. We started quetiapine at a dosage of 400 mg/day, with rapid increases, until reaching 1800 mg (subsequently reduced to 1200 mg). We reached the above dosages over a few days (considering that hospitalisation lasted for 14 days). Haloperidol and diazepam were combined with quetiapine during the initial phase but were discontinued as soon as the best therapeutic dosage of quetiapine was reached. In addition to the reduction of productive symptoms and the absence of side effects (except for an initial sedative action), we also recorded a good recovery of the cognitive functions and of the relational, affective, and planning abilities (as rated by Global Assessment of Functioning).

PO1.109.
SAFETY OF RAPID TITRATION OF QUETIAPINE IN ACUTE PSYCHOTIC PATIENTS

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This study aims at assessing the safety of rapid titration of quetiapine reaching the minimum therapeutic dosage (600 mg) at the second treatment day in patients with acute psychosis. 25 patients (diagnosis of schizophrenia) were treated; safety and tolerability were assessed by means of clinical laboratory tests (the standard haematological and chemical analyses), echocardiogram and daily vital signs measurements. Only one patient reported an adverse event (a 30 mm blood pressure decrease). This experience shows that quetiapine is an extremely flexible and safe drug. Therefore, it can be a first-choice drug even for acute phases.

PO1.110.
HOSPITALIZATIONS DURING THE FIRST YEAR OF SCHIZOPHRENIA TREATMENT: THE IMPACT OF RISPERIDONE AND OLANZAPINE

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Risperidone and olanzapine have been demonstrated to be efficacious and safe in the treatment of schizophrenia. They also have been shown, while usually better tolerated, to be at least equally effective to conventional antipsychotics. Hospitalization in first episode of schizophrenia represents a major burden to patients and generates high costs. In this retrospective study I compared hospitalization rates within a one year period in a group of 67 first-episode patients treated with risperidone, olanzapine or conventional antipsychotics. Fifteen patients (55.6%) from the typical antipsychotics group (n=27) were admitted to the hospital within the first year following the index observation compared with 5 out of 21 patients treated with risperidone (23.8%; p=0.031) and 5 out of 19 with olanzapine (26.3%, p=0.049). The observed differences were explained mostly by noncompliance and side effects, while other factors, including initial symptoms severity (as measured by the Positive and Negative Syndrome Scale, PANSS), initial response and social status were less important. In conclusion, risperidone and olanzapine may decrease the hospitalization rate and related costs in first-episode schizophrenia. Reduced risk of hospitalization within the first year of treatment might represent a major advantage considering patients' burden and long-term compliance.

PO1.111.
HORMONAL STATUS OF SCHIZOPHRENIC PATIENTS DURING RISPERIDONE TREATMENT

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The aim of the study was to investigate the hormonal status in patients under risperidone treatment. We examined 16 patients (8 men and 9 women) with paranoid schizophrenia who received risperidone (4 mg/day) for 3 weeks. Serum prolactin, testosterone, triiodothyronine, thyroxin, and thyroid-stimulating hormone (TSH) levels were estimated using an immune-enzyme method before and after 21 days of treatment. In male patients there was an increase in prolactin levels from 343 to 1639 nmol/L ($p<0.05$). In 19% of these patients we found a decrease in testosterone levels. Prolactin levels in female patients

increased from 420 to 3150 nmol/L ($p<0.01$) but testosterone levels were unchanged. There was an increase in TSH levels in 31% of all patients. Risperidone treatment had no effects on triiodothyronine and thyroxin. We conclude that risperidone treatment induces a significant increase in prolactin levels both in men and women. The increase of TSH levels in one third of patients might be explained by the action of risperidone on serotonergic and dopaminergic systems that exert a marked influence on TSH secretion.

PO1.112.
IMPACT OF TREATMENT WITH RISPERIDONE ON SUICIDE TENDENCIES IN PATIENTS WITH SCHIZOPHRENIA

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We studied 30 patients with schizophrenia who had shown suicide tendencies. They were treated with risperidone (4-6 mg/day). After 4 weeks of treatment we found a significant reduction on the suicide subscale of the Hamilton Scale for Depression (89%) and the Positive and Negative Syndrome Scale (PANSS) (32%). After 12 weeks, the reduction on the suicide subscale of the PANSS was of 72%. The changes correlated with improvement of parameters of quality of life and social functioning.

PO1.113.
TREATMENT OF VERY EARLY AND EARLY ONSET SCHIZOPHRENIA USING RISPERIDONE: A RETROSPECTIVE STUDY

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We studied a sample of patients with very early or early onset schizophrenia, with a current age ranging between 12 and 17 years, admitted to the Al. Obregia Hospital between 1997 and 2004. The diagnosis was made according to ICD-10 and DSM-IV criteria, using the Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS). We evaluated the clinical severity scores on the K-SADS and the level of social functioning on the Global Assessment of Funtioning (GAF) scale before and after 1, 2, 3, 4 and 8 weeks of treatment with risperidone. We found a statistically significant reduction ($p<0.001$) of severity scores on K-SADS scale at 8 weeks, accompanied by a significant increase of the score on the GAF scale.

PO1.114.
DOUBLE-BLIND AUGMENTATION CLINICAL TRIALS IN CLOZAPINE RESISTANT SCHIZOPHRENIC PATIENTS

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Approximately 40-70% of neuroleptic-resistant patients fail to benefit from clozapine monotherapy or are partial responders. This study aims to critically review all the reported double-blind, randomized, placebo-controlled clinical trials regarding the efficacy and safety of adjunctive agents in clozapine-resistant schizophrenic or schizoaffective patients. A MEDLINE search for double-blind trials assessing the efficacy and safety of adjunctive agents in clozapine-resistant patients published from January 1980 to December 2003 was conducted using the key-words of "clozapine-resistant", "double-blind", "controlled", "augmentation", "adjunctive". In addition, the reference sections of the included papers as well as the review papers were screened. All identified papers were critically reviewed and examined against many clinical parameters, psychological parameters as well as reported side effects. Eleven studies including 265 partial or non-respondent to clozapine patients assessed the efficacy of sulpiride, lithium, lamotrigine, fluoxetine, glycine, D-serine, D-cycloserine and ethyleicosapentanoate as clozapine adjuncts. There were eight parallel-group and three crossover studies. Plasma clozapine level was assessed in only three studies. The outcome favored the combined clozapine treatment with three agents (sulpiride, lamotrigine, ethyleicosapentanoate). Lithium was shown to benefit only schizoaffective patients. The main side effects reported were hypersalivation, sedation, diarrhea, nausea, hyperprolactinaemia. In conclusion, evidence from a small number of double-blind studies encourages the use of sulpiride, lamotrigine and ethyleicosapentanoate as augmentation agents in clozapine resistant schizophrenic patients. Lithium seems to be useful in some schizoaffective patients.

PO1.115.
POLYPHARMACY IN THE TREATMENT OF SCHIZOPHRENIA IN A JAPANESE PSYCHIATRIC HOSPITAL

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Polypharmacy in the treatment of schizophrenia is today in Japan a more serious problem than in USA or Europe. Actually, in Japan, polypharmacy in the treatment of patients with schizophrenia is a tradition which has been ongoing for many years. During this period, many problems about polypharmacy, such as side effects and poor compliance, have been observed and discussed by many psychiatrists. Recently some atypical antipsychotic drugs such as risperidone, quetiapine, olanzapine and perospirone were introduced in Japan, and the drug therapy for schizophrenia has been changing a lot. But it is also true that monotherapy using atypical antipsychotic drugs has not become customary. Here we report on drug therapy for patients of schizoprenia admitted to a Japanese psychiatric hospital. We discuss the reasons why Japanese psychiatrists have not succeeded up to now in changing old polypharmacy with typical antipsychotic drugs to new monopharmacy with atypical ones.

PO1.116.
THE EFFICACY OF OLANZAPINE TREATMENT: A "BEFORE AND AFTER" STUDY

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The main aim of this study was to evaluate the efficacy of olanzapine in patients unresponsive to traditional antipsychotics. The study involved 75 adult inpatients of Nubarashen State Psychiatric Hospital with exacerbation of schizophrenia. The patients' mental state was evaluated by the Short Check List-90R (SCL-90R), the Brief Psychiatric Rating Scale (BPRS) and the Positive and Negative Syndrome Scale (PANSS). Previous to olanzapine administration, all patients received haloperidol (10-25 mg/day) and/or trifluoperazine (15-35 mg/day), but after 3-6 weeks the treatment was judged to be ineffective on the grounds of clinical data and scoring results. Olanzapine (10-20 mg/day) was used as monotherapy. Mental state monitoring

was conducted weekly. After 3 weeks of olanzapine treatment, clinical improvement was registered in 67% of patients. The clinical improvement was manifest in the reduction of emotional tension, of the intensity of delusions and hallucinations, fear and isolation as well as the increase of socially orientated activity. Clear signs of increasing awareness of mental disorder accompanied by positively changing attitude towards treatment were considered important. There was a substantial reduction on BPRS ($p<0.0005$), SCL-90R ($p<0.001$ for General Index) as well as on negative ($p<0.005$) and positive ($p<0.02$) scales of PANSS by the second week of olanzapine treatment. Only in 8% of patients the results of olanzapine treatment were considered as negative. The results of this study argue for the efficacy of olanzapine in treatment resistant cases.

PO1.117.
THE ATYPICAL ANTIPSYCHOTIC ONDANSETRON: A CASE SERIES

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Ondansetron is a new atypical antipsychotic with 5-HT3-receptor antagonist activity. Ten patients diagnosed with either schizophrenia or schizoaffective disorder were treated with ondansetron for 18 months and observed for changes in Clinical Global Impression and Positive and Negative Syndrome Scale (PANSS). Nine patients experienced a reduction of symptoms after 12 months of treatment. Eight patients completed the 18 month treatment, all exhibiting overall improvement. Despite side effects of tiredness, weight gain, headache, nausea, and decreased ejaculatory volume, ondansetron was generally well tolerated. Ondansetron appears to be a useful treatment in psychotic disorders. It may present an advantage over traditional antipsychotics through fewer extrapyramidal symptoms and improvement of negative symptoms.

PO1.118.
ACETYLSALICYLIC ACID AS AN ADJUVANT THERAPY FOR SCHIZOPHRENIA. RATIONALE AND DESIGN OF A RANDOMIZED TRIAL

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As current pharmacotherapy for schizophrenia does not change the course of disease, nor prevents functional deterioration in a substantial number of patients, research efforts into alternative or adjuvant treatment options are needed. Findings from both epidemiological and basic research indicate that non-steroidal anti-inflammatory drugs may impede the deterioration in schizophrenia. We postulate that acetylsalicylic acid may either exert a beneficial effect through inhibition of the excitotoxic neuronal cell death seen in schizophrenia, or by counteracting the schizophrenia-associated shift towards Th-2 cytokine production. A randomized placebo controlled double-blind trial of 80 inpatients and outpatients with schizophrenia, schizophreniform or schizoaffective disorder is performed to study the efficacy of acetylsalicylic acid as an additional treatment. After a placebo run-in, patients are 1:1 randomized to either 1000 mg acetylsalicylic acid or placebo daily during 3 months. Regular antipsychotic treatment will be continued at a constant dose. All patients receive pantoprazole for gastroprotection and will be closely monitored for gastric problems. The primary outcome is the 3-month change in symptoms on the total Positive and Negative Syndrome Scale (PANSS) score. Secondary outcomes are the 3-month change in the PANSS subscales, cognitive symptoms, and immunological parameters (gamma-interferon, IL-4, IL-6 and IL-12). This trial may yield a new adjuvant therapy for schizophrenia and add to the knowledge on its pathogenesis.

PO1.119.
DONEPEZIL ADJUNCTIVE TREATMENT TO CLOZAPINE FOR COGNITIVE IMPAIRMENT IN SCHIZOPHRENIA

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Cognitive dysfunctions are present in a broad percentage of schizophrenic patients and they represent an important source of functional disability. Evidence exists for a role of cholinergic neurotransmission in different domains of cognitive functioning like learning, attention and memory. Based on the assumption that the reduction of cholinergic activity may contribute to cognitive deficits in schizophrenia, the present study was designed to evaluate the effect of adjunctive donepezil, a selective acetylcholinesterase inhibitor, to an ongoing clozapine treatment as a possible treatment of cognitive dysfunction in schizophrenic patients. 14 schizophrenic patients aged from 18 to 46 years, in stable treatment with clozapine (dose range: 100-400 mg/day) received donepezil 5 mg/day for a 12 weeks period. Clinical symptomatology was assessed using the Scale for the Assessment of Positive Symptoms and the Scale for Assessment of Negative Symptoms. All subjects underwent a neuropsychological assessment of cognitive functions (Verbal Fluency, Stroop Colour Word, AB-AC). Adjunctive treatment with donepezil produced a significant improvement in Fonemic Fluency ($p=0.002$) and Stroop Color Name ($p=0.012$). No significant changes in symptomatology nor side effects were observed. The results obtained in the present study suggest that cholinergic tone modulation may enhance selective cognitive functions in schizophrenic patients. Further studies on broader samples are necessary to better define the potential benefit of this approach.

PO1.120.
MASSIVE PULMONARY THROMBOEMBOLISM IN JAPANESE PSYCHIATRIC PATIENTS TREATED WITH ANTIPSYCHOTICS

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Antipsychotic drugs have been suggested to be associated with increased risk of pulmonary thromboembolism (PTE). We assessed this association in autopsy cases where cause of death was determined in the department of legal medicine of a Japanese university hospital. Records of 1125 autopsies performed during the study period were reviewed; in 28 cases PTE was described as the cause of death; these were divided into individuals who had taken antipsychotic drugs and those who had not. Of 28 persons dying of PTE, 8 had taken antipsychotic drugs (29%). Ages ranged from 32-65 years (55±11), in these 8 cases, and all were female. In conclusion, women taking antipsychotic drugs may be at particular risk for PTE in Japan, where this condition is far less common than in the United States.

PO1.121.
ACUTE MASSIVE PULMONARY THROMBOEMBOLISM ASSOCIATED WITH RISPERIDONE AND CONVENTIONAL PHENOTHIAZINES

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The study aimed to assess the contribution of antipsychotic medication in patients suffering acute massive pulmonary thromboembolism. Records of patients with idiopathic pulmonary thromboembolism associated with antipsychotic medication who were seen in a Japanese Emergency Center from January 1996 to December 2000 were reviewed. Age, gender, physical status, clinical presentation, serum antiphospholipid antibody concentration, outcome, psychiatric profile, and antipsychotic medication use were examined. Seven patients had acute pulmonary thromboembolism associated with antipsychotic drug use, representing 44% of all patients with idiopathic pulmonary thromboembolism. More women than men were affected. In five cases, chlorpromazine and other phenothiazines had been prescribed, while in two cases risperidone had been taken for 40 days and 6 days. In four cases, including the patients taking risperidone, antiphospholipid antibodies were not present. The data suggest that patients receiving risperidone, as well as conventional phenothiazines, are at risk for acute pulmonary thromboembolism, even if otherwise healthy.

PO1.122.
THE HISTOPATHOLOGICAL EFFECTS OF HALOPERIDOL ON CAROTID BODY

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The carotid body is a small cluster of chemoreceptive cells. It measures changes in the composition of arterial blood flowing past it. It is thought to be able to measure changes in the partial pressures of oxygen and carbon dioxide and is also sensitive to changes in pH and temperature. Dopamine is one of the most prominent neurotransmitters found in the type I cell of the carotid body. Ventilatory and carotid body responses to hypoxia have been related to the endogenous release of dopamine. The aim of the study was to investigate the histopathologic effects of haloperidol on carotid body. Twenty-five adult male rats were used. Rats were divided into 5 groups. Haloperidol was given to rats in 0.5, 1, 2.5 and 5 mg/kg doses, intraperitoneally, for 10 weeks. For control animals, 1 ml of distilled water was administered. The ethic guidelines for animals were obeyed. We used conventional histopathology and stereological methods to estimate the number of neurons. We observed cellular degeneration, especially at high doses of haloperidol. The mean number of degenerated neurons was significantly lower in low dose group than in high dose group ($p<0.005$). Carotid body dopaminergic inhibition with cellular degeneration may be responsible for autonomic dysfunction, heart rate variability and risk for sudden death in patients given haloperidol.

PO1.123.
NEW-ONSET SEIZURES ASSOCIATED WITH OLANZAPINE

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We report on new-onset seizures in the context of electroencephalographic alterations during treatment with olanzapine. A 21-year-old man presented three seizures in one month while receiving a stable dosage of olanzapine 10 mg/day for a period of five months. There was no previous history of seizures. Although uncommon, seizures may occur during treatment with the atypical antipsychotic olanzapine. Careful surveillance of patients with risk factors for seizures is necessary.

PO1.124.
MANAGEMENT OF WEIGHT GAIN ASSOCIATED WITH OLANZAPINE TREATMENT: A CONTROLLED STUDY

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Many antipsychotic drugs have been associated with substantial weight gain and drug-induced obesity. The goal of this study was to assess the weight gain in a group of patients treated with olanzapine in association with diet therapy and moderate physical activity in comparison with a group of patients receiving olanzapine treatment only. The first group (A) consisted of 18 patients (9 females, 9 males) with a diagnosis of manic episode. They received olanzapine (10-20 mg/day), practiced light jogging for 30 minutes three times in a week and complied with a diet of 500 Kcal/day less than their usual feeding. The second group (B) consisted of 10 patients (4 females, 6 males) with a diagnosis of schizophrenia. They received only olanzapine (10-20 mg/day). After two months of observation, patients of group A showed a mean weight gain of 1.47 Kg, whereas patients of group B presented a mean weight gain of 3.5 Kg ($p<0.005$). This difference seems to suggest the usefulness of moderate physical activity and diet-therapy to reduce the weight gain in patients receiving treatment with olanzapine.

PO1.125.
EVALUATION OF COGNITIVE FUNCTIONS IN PATIENTS ON TREATMENT WITH HALOPERIDOL, RISPERIDONE AND CLOZAPINE

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We evaluated cognitive performance in 24 patients with a DSM-IV diagnosis of schizophrenia. 8 of them were under treatment with haloperidol, 8 with risperidone and 8 with clozapine. The three groups were matched according to age, duration of illness and education and were clinically stable since at least one year. We tested immediate memory (memory of number and words), delayed memory (recall of words), executive functions (Tower of London and Wisconsin Card Sorting Test) and attention (Continuous Performance Test). We found no significant difference between the groups.

PO1.126.
CEREBROSPINAL FLUID FILTRATION IN THERAPY RESISTANT SCHIZOPHRENIA OR AFFECTIVE SPECTRUM PSYCHOSES: AN ONGOING OPEN CLINICAL TRIAL

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Cerebrospinal fluid filtration (CSFF) has been shown to be as effective as plasma exchange to treat Guillain-Barré syndrome. In patients with therapy resistant affective or schizophrenic spectrum psychoses showing antibodies against Borna disease virus (BDV), CSFF appeared also to be effective in experimental studies. In an open clinical trial, approved by the Ethical Committee of the University of Ulm, BDV seropositive patients (n=10) with therapy resistant affective or schizophrenic psychoses were treated by CSFF. Clinical status was measured over months before and after filtration by the Brief Psychiatric Rating Scale (BPRS), the Hamilton Rating Scale for Depression (HAMD), the Montgomery-Asberg Depression Rating Scale (MADRS) and the Short Check List 90-R (SCL-90-R). BDV antibodies were measured by indirect immunofluorescence. CSF was analyzed repeatedly (cells, proteins, oligoclonal IgG bands, peptides). Medication remained unchanged from 4 weeks before, during and for 8 weeks after filtration. Filtration was performed by a lumbar catheter and automatic pump system, 300 ml CSF filtered daily over 5 consecutive days. Two-thirds of patients improved, some dramatically, with filtration. A role of inflammation in schizophrenia and affective spectrum psychoses was suggested by previous findings and BDV seropositive patients may represent such subgroup. Our findings may have impact for developing new immune modulatory treatments in therapy resistant psychosis.

PO1.127.
DYNAMIC EVENT-RELATED POTENTIALS AND RAPID SOURCE ANALYSIS REVEAL AN INTERMITTENT SHORT-LASTING DYSFRONTALITY IN SCHIZOPHRENIA

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Neuroimaging studies have identified regional brain dysfunctions in schizophrenia, but their dynamic consequences remain unclear. This study reports the electrophysiological evaluation of medicated schizophrenic patients during performance of the Wisconsin Card Sorting Test. Using event-related potentials (ERPs), averaged after passing through several band pass filters, and source analysis with variable-resolution brain electrical tomography, cerebral sources were visualized at every latency point of the evoked potential. ERPs which differed from the control group were elicited principally in frontal, central, and parietal regions, within the delta and theta frequency ranges. Significant differences emerged at three different latencies (S1, S2, S3) in frontal/midline areas and at the anterior temporal electrode site T3 for slow potentials. The left occipitoparietal region showed significant differences within the alpha and beta2 ranges, respectively. Medial fronto-orbital area and anterior cingulate cortex contributed to the development of the frontal ERPs and the lateral inferior frontal area to the temporal (T3) ERPs, while the precuneus/medial region generated the posterior activity recorded on the scalp. The intervals S1 and S3 were synchronous between the medial frontal and lateral inferior frontal region, while in the S2 interval the medial frontal areas were parallel with the precuneus/medial occipitotemporal region. A simultaneous functional imbalance between frontal subregions and posterior areas was found. Here, we show for the first time an intermittent functional deficiency of specific brain areas during task-directed mentation in schizophrenia, which by its brevity is not accessible by neuroimaging methods measuring hemodynamic activity.

PO1.128.
BRAIN OSCILLATIONS ANALYSIS IN SCHIZOPHRENIA SUPPORTS THE PRIMACY OF THE VISUAL CORTEX DYSFUNCTION IN THE GENERAL PATHOLOGY OF THE ILLNESS

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Current knowledge provides strong support for the assumption that oscillations reflect a basic form of communication between cortical cell assemblies and during mental task activity in human. The association of brain oscillation analysis with neuroimage technique (VARETA) highly improves the understanding of the complex spatiotemporal pattern "induced" and/or "evoked" during task performances. This design provides evidence that the synchronized networks overlap profusely with one another, and indicate that a particular region can participate in more than one network. It involves both "induced" and "evoked" time-locked transient oscillations. This method facilitates separation of these simultaneous events by their inherent oscillations and quantification of the distinctive frequencies characterizing the local involvement with specific task. Brain oscillation synchrony indexes a form of "communication" between cellular networks during ongoing mental task activity, while a flaw in neural connectivity ("cell communication") rather than neuronal deficit may account for the type of dysfunctions observed in schizophrenia. Therefore the study of brain oscillations in schizophrenia based upon the promising results showed by the method combined with the connectivity hypothesis becomes an obligation. Similarities, rather than differences in "cell communication" appear to be a regularity in schizophrenia during the Wisconsin Card Sorting Test. Differences in induced oscillation may be explained by unusual visual information processing, a function that is obviously not specific to the task. Additional analyses of the evoked oscillation confirm the previous results, uncovering an abnormal functional asymmetry in occipital areas and an intermittent short-lasting dysfrontality attributed mostly to dysfunction in extrastriate visual areas.

PO1.129.
EVENT-RELATED POTENTIALS TOPOGRAPHY AND CORTICAL SOURCE IMAGING IN SUBJECTS WITH DEFICIT AND NONDEFICIT SCHIZOPHRENIA

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Different electrophysiological abnormalities have been reported in patients with deficit and nondeficit schizophrenia. In the present study, event-related potentials (ERPs) recordings were obtained during a three-tone oddball task in clinically stable patients with deficit

(DS) and nondeficit schizophrenia (NDS) and matched healthy control subjects (HCS). DS and NDS patients were comparable for duration of illness and severity of disorganization and positive symptoms. The N100 component did not show amplitude differences among groups. A topographic abnormality (rightward shift of the negative area) was observed in the DS group, as compared to both NDS and HCS. P300 amplitude was significantly reduced over the left posterior temporal regions only in NDS patients vs. HCS; topographic P300 abnormalities, including a posterior shift of the negative area and a rightward shift of the positive area, were observed only in NDS patients. Low-resolution brain electromagnetic tomography (LORETA) showed that, when compared to HCS, in DS patients, N100 current source density was reduced in the left cingulate while, in NDS subjects, the reduction of the P300 current source density involved temporo-parietal regions of the left hemisphere. According to our findings, subjects with DS and those with NDS show a different pattern of ERP abnormalities, which suggest different etiopathogenetic mechanisms.

PO1.130.
SERUM HOMOCYSTEINE, FOLATE LEVEL AND MTHFR 677,1298 GENE POLYMORPHISM IN KOREAN PATIENTS WITH SCHIZOPHRENIA

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It has been postulated that high homocysteine serum levels are involved in the pathogenesis of schizophrenia, and it has been reported that some schizophrenic patients with high homocysteine levels improved after folate ingestion. Methylenetetrahydrofolate reductase (MTHFR) is an enzyme that reduces homocysteine levels. Some studies have reported a high incidence of MTHFR gene polymorphism in schizophrenia. We examined serum homocysteine, folate levels and MTHFR gene polymorphism in Korean schizophrenic patients. We compared serum homocysteine and folate levels between a schizophrenia group (n=234; 99 male, 135 female) and a normal control group (n=236; 101 male, 135 female). The C677T and A1298C mutations in the MTHFR gene were analyzed by polymerase chain reaction of genomic DNA by using the primer pairs. Homocysteine levels were significantly higher among schizophrenic patients than in the normal control group ($p<0.01$), and folate levels were significantly lower in the former group ($p<0.01$). Homocysteine levels were more negatively correlated with folate levels in the schizophrenia group ($r=-0.313$) than in the normal control group ($r=-0.276$). CT and TT mutations were more frequent in the schizophrenia group than in the normal control group ($p<0.05$), but a difference in A1298C mutation frequency distribution was not found. In the schizophrenia group, 677 TT mutated individuals showed significantly ($p<0.01$) higher homocysteine levels than the other patients. Clinical correlates (onset of disease, symptoms, family history, disease course and prognosis, and subtype) of 677,1298 genotype were not found. The odds ratio of schizophrenia was not significantly related to 677,1298 genotype. However, the gene 677 TT mutation was associated with a two-times higher risk for the disease (odds ratio=2.15) than the gene 677 CC normal type. Some schizophrenia patients with high serum homocysteine level may be C677T mutationers and have low folate level. In that case, folate ingestion could produce clinical improvement.

PO1.131.
DEHYDROEPIANDROSTERONE PLASMA LEVELS ARE STRONGLY INCREASED IN SCHIZOPHRENIA

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Dehydroepiandrosterone (DHEA) is an important circulating neurosteroid with several vital neurophysiological activities, including the regulation of neuronal excitability and function. So far, the relevance of this neuroactive steroid to psychiatric disorders is not well known. In this study, plasma levels of DHEA were determined with a highly sensitive and specific gas-chromatographic mass-specrometric method in 23 outpatients suffering from DSM-IV schizophrenia compared with 23 healthy control subjects matched for age and sex. Mean plasma levels of DHEA were found to be strongly elevated in the group of schizophrenic patients (90.9±61.4 nmol/L) compared to control subjects (24.0±17.9 nmol/L) and the difference was highly significant ($p<0.0001$). Negative correlations were found between atypical antipsychotic and benzodiazepine dosages and DHEA levels and no correlation was found between typical antipsychotic dosages and DHEA levels, indicating that it is very unlikely that the results were influenced by pharmacological therapy. These results confirm that DHEA may have some role in the pathophysiology of this disorder due to its complex mechanism of action in the brain involving genomic and non-genomic components. Therefore, its study may provide further understanding of the pathophysiology of psychoses and open new avenues for their treatment.

PO1.132.
FINASTERIDE-INDUCED PSYCHOTIC EPISODE: A CASE STUDY

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This paper reports the case of a female patient who had a psychotic episode due to the use of finasteride. The patient is 41 years old, married, and used finasteride for 6 months, prescribed by a dermatologist in order to induce hair growth. Before the treatment, the patient had never shown signs of any psychiatric pathology, neither had she antecedents of psychiatric disorders in her family history. She had an episode of acute psychosis of the kind described under the code 293.2 in the DSM-IV and, given the severity of the episode, she had to be hospitalized in an intensive care unit. Laboratory exams did not show any alterations of organic functions. Treated with aripiprazole, the patient recovered from her psychotic state.

PO1.133.
VULNERABILITY FACTORS AND PRODROMAL SYMPTOMS IN SCHIZOPHRENIA

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Retrospective follow-back studies in first onset patients have reported several syndromes and symptoms, such as non-specific affective and anxiety symptoms, in the years preceding onset of schizophrenia, as well as deficits in social knowledge. Frith as first proposed that

schizophrenic symptoms are the surface manifestations of a single, more fundamental, deficit of metarepresentation, that is, an inability to represent the nature of both our own and others' mental states. This cognitive ability termed theory of mind (ToM), when dysfunctional, hampers an adequate social interaction. In the present, controlled study the relationships between anxiety disorder and social cognition deficits were investigated. Two experiments were conducted. In experiment one, 183 normal adolescents were assessed with ToM tasks and a State Trait Anxiety scale. Results showed that 25% of health adolescents have ToM deficits; moreover a significant correlation between trait anxiety and the ability to understand ToM stories was reported. In experiment two, twenty-two young schizophrenic patients characterized by a remarkable deficit in ToM tasks were assessed for premorbid adjustment using the Premorbid Adjustment Scale in order to find out cognitive vulnerability traits, if any. Results showed that in schizophrenic subjects presenting social isolation as a prodromal symptom, co-morbid anxiety (53%) and attention deficit hyperactivity disorder (19%) frequently occurred. Our findings suggest a relationship between ToM abilities and anxiety disorder. More interestingly, anxiety and ToM dysfunction seem to be associated in the prodromal phase of illness, thus suggesting a possible common neural basis. Further prospective studies are needed to clarify the role of cognitive functioning in first-episode schizophrenic subjects and the relationships with social and clinical variables, for possible implications related to treatment planning and outcome predictors.

PO1.134.
A PSYCHOPATHOLOGICAL STUDY OF MILD SCHIZOPHRENIA CHARACTERIZED BY WITHDRAWAL

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In recent years, the number of adolescents with the clinical manifestation called "withdrawal" has been constantly increasing in Japan. We frequently recognize that "withdrawal" may be an early stage of mild schizophrenia as well as of adjustment disorder, mood disorder, anxiety disorder or personality disorder. In these cases, patients often show various physical symptoms before or right after "withdrawal" begins. In this study, we applied Huber's theory of "Grundstörung" by evaluating three patients with mild schizophrenia showing "withdrawal" and claiming physical incompleteness. The "Grundstörung" mainly focuses on physical and psychosomatic symptoms such as asthenia, autonomic disorder, paresthesia, lack of concentration and memory, etc., and is considered a direct expression of the organic cerebral change underlying schizophrenia. Our three cases show that patients try to describe their cognitive alteration. They usually refer to a physical incompleteness and tend to change their psychosomatic claims from time to time.

PO1.135.
ANOMALIES OF SUBJECTIVE EXPERIENCE IN SIBLINGS OF PATIENTS WITH SCHIZOPHRENIA

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Abnormal neuropsychological and cognitive functions in non-psychotic relatives of schizophrenics are currently a subject of intense interest, mainly due to the reborn attention to the theoretical construct of schizotaxia. Contextually, in recent years the issue of subjective experiences has once again become central in psychopathological research. Among self-experimental disturbances, basic symptoms (BS) are considered the first, protophatic, subjective reverberation of the neurobiological deficit of schizophrenia. Thus BS are expected to be detectable in non-psychotic relatives of schizophrenia patients. The aim of the present study was to compare the prevalence of such anomalous subjective experiences in siblings of schizophrenic patients, schizophrenia spectrum patients (schizotypals and schizophrenics) and non-clinical controls. Different profiles of BS were obtained in the samples. An increasing gradient of BS ranging from non-clinical to clinical samples, with unaffected siblings in the intermediate position, occurred for some of the BS clusters (i.e., thought, language, perception and motor disturbances; impaired bodily sensations). Other BS clusters (i.e., disorders of emotion and affect; increases emotional reactivity) were characteristic of the clinical subgroups, whereas an enhanced tolerance to normal stress significantly distinguished the sibling sample from the other ones. The heterogeneity of these patterns suggests that BS constellations may be underpinned by different psychopathological processes and that cognitive and bodily BS may be target clinical phenotypes for schizotropic liability screening.

PO1.136.
THE OUTCOME OF SCHIZOPHRENIA IN THE COMMUNITY: A FOUR-YEAR NATURALISTIC PROSPECTIVE STUDY

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Fifty-five patients fulfilling both DSM-IV and ICD-10 criteria for either schizophrenia or schizoaffective disorder were assessed by the Positive and Negative Syndrome Scale and the Life Skills Profile and subdivided into three groups according to their symptomatology and function score. They were then treated as usual by their reference psychiatrist. Social and clinical outcome was assessed four years after the study entry and analyzed according to the tripartite classification. Patients with high symptom and function score at baseline were more dysfunctional and tended to relapse more frequently ($p=0.009$ for hospital admission and $p=0.0001$ for compulsory admission). A diagnosis of alcohol abuse was more frequent in this group ($p=0.026$). These findings were confirmed by an additional survival analysis with comparison of distributions (Wilcoxon Gehan test), that revealed differences for hospital admission ($p=0.0013$), compulsory admission ($p=0.0002$) and alcohol related diagnosis ($p=0.038$) among the three groups. A further membership analysis was conducted on the basis of antipsychotic regimen: results support the view that atypical antipsychotics are associated with lower rate of relapses and alcohol related diagnosis and superior social functioning and quality of life. These data suggest that the tripartite classification based on symptom and function score is able to predict accurately the outcome in schizophrenia.

PO1.137.
PREVALENCE AND SEVERITY OF AKATHISIA AMONG ACUTE SCHIZOPHRENIC PATIENTS

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The introduction of atypical antipsychotics has raised expectations of improved outcomes for schizophrenic patients with fewer motor side effects. Acute schizophrenic patients receiving atypical antipsychotics (AA) were compared with a group of patients receiving AA in combi-

nation with conventional antipsychotics (CA) and a group of patients receiving CA as monotherapy, to assess the frequency and severity of akathisia. Sixty-three acute schizophrenic patients (62% men) with a mean age of 31.4±9.4 years admitted at the Eginition Hospital, Athens, during a one year period, were studied. Patients' case notes analysis was performed surveying psychotropic drugs prescribing on the first week after their admission. All patients were assessed for drug-induced akathisia using the Barnes Rating Scale for Akathisia (BARS). 19% of the patients were on AA as monotherapy (Group A), 16% used AA in combination with CA (Group B), while 65% were on CA (Group C). Based on the global clinical assessment scale of the BARS (score of at least 2), 15.9% of patients were rated as having akathisia. Prevalence of akathisia was 16.6% among Group A patients, 20.0% among Group B and 14.7% among Group C patients. The mean BARS score in Group A patients was 0.62±0.85, in Group B was 0.71±1.16, and in Group C was 0.84±1.86. Comparison between the three groups of patients regarding the prevalence and severity of akathisia did not reveal statistically significant differences. The results suggest that akathisia may be a common side effect of all antipsychotic medications.

PO1.138.
SEXUAL SELF-PERCEPTION IN SCHIZOPHRENIC PATIENTS IN RELATION TO SEX AND AGE

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The aim of this investigation was to establish the difference in sexual self-perception between acute and chronic schizophrenic patients and healthy individuals, with regard to their sex, age, marital status and level of education. Subjects of the investigation were a hundred acute and a hundred chronic schizophrenic individuals with an age varying from 18 to 45 that had been treated at the Psychiatric Clinic, Clinical Hospital Centre Rijeka, and a hundred healthy individuals randomly selected and matched for age, among citizens of Rijeka during April and May of 1999. Sexual self-perception was investigated applying a questionaire created by Bezinovic. Chronic and acute schizophrenic patients had significantly higher scores than healthy individuals with regard to negative emotions and sexual incompetence. There were no differences between acute and chronic schizophrenics. Male individuals from all groups showed significantly better results than women on scales that measure sexual self-scheme, sexual adventures and sexual pleasure. In young healthy individuals sexual self-perception is significantly related to sexual awareness, sexual readiness and sexual pleasure. Age is not particularly significant in schizophrenic patients, whether acute or chronic.

PO1.139.
THE WISCONSIN CARD SORTING TEST IN PATIENTS WITH SCHIZOPHRENIA AND THEIR SIBLINGS

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The first aim of this work was to verify that patients with stabilized schizophrenia and their siblings share the same deficits in executive functions compared to healthy controls. The second aim was to explore the relations between performance on the Wisconsin Card Sorting Test (WCST) and the length and severity of the illness. The study was conducted in 30 patients with schizophrenia, 30 of their siblings, and 30 healthy control subjects. The intensity of symptoms was evaluated by the Positive and Negative Syndrome Scale (PANSS), and the social functioning by the Global Assessment of Functioning (GAF). The WCST was administered to the three groups. Patients with schizophrenia and their siblings presented a significantly worse performance on the WCST compared to control subjects. Siblings were in an intermediate position between schizophrenic patients and controls. On the other hand, there was no correlation in patients between the WCST performance and age, gender, education, length of the illness, treatment, and PANSS and GAF scores. These results suggest that performance on the WCST may be considered like a marker of vulnerability to schizophrenia.

PO1.140.
HETEROGENEITY OF COGNITIVE DYSFUNCTION AMONG CLINICALLY STABILIZED SCHIZOPHRENIC PATIENTS

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This study aimed to describe the neuropsychological profile associated with chronic schizophrenia and to test the hypothesis that epidemiological and clinical variables could affect cognitive performance. A neuropsychological battery, including tests for the assessment of the cognitive domains usually compromised in schizophrenia, was administered to 94 patients with chronic schizophrenia clinically stabilized and responder to classical antipsychotics, risperidone or clozapine, compared with a group of 71 healthy subjects, matched for age and education. Patients with chronic schizophrenia performed significantly worse than controls in all tests administered, but individual profiles resulted highly heterogeneous in a wide proportion of the sample. Negative psychopathology was correlated to an index of general cognitive ability, defined as the number of tests badly performed, while antipsychotic treatment did not influence performance, with the exception of verbal memory, significantly impaired among clozapine-treated patients. Previous reports of extensive and stable neuropsychological deficits associated with schizophrenia were supported by the average values of our study, but individual profiles showed a high proportion of heterogeneity that might reflect heterogeneous physiopathology.

PO1.141.
THE INFLUENCE OF COGNITIVE DEFICITS AND PSYCHOPATHOLOGY ON FUNCTIONAL IMPAIRMENT OF SCHIZOPHRENIA

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There has been an increasing interest in the consequences of neurocognitive deficits of patients with schizophrenia on daily functioning, but, although the published literature in this area doubled in the last few years, results are very inconsistent. The goal of this study was to determine the effect of the interaction of residual psychopathology, neurocognitive deficits and clinical variables on the daily functioning of a sample of 103 chronic schizophrenic patients. The neuropsychological domain was assessed by means of a battery including the Continuous Performance Test, the Wisconsin Card Sorting Test and the Brief Assessment of Cognition in Schizophrenia. The

psychopathological domain was assessed with the Positive and Negative Syndrome Scale (PANSS) and the daily functioning was assessed by the Quality of Life Scale. Stepwise multiple regression analysis was used to explore significant effects of neurocognitive, psychopathological and clinical variables on functioning areas (personal autonomy, relationships, work). Models calculated for each dependent functioning variable were all significant and accounted for 32% to 36% variance. The most consistent finding was that negative symptoms contribute significantly to all models; verbal memory contributes significantly to relationship and work areas; working memory and semantic fluency contribute significantly to work area. Positive symptoms were not significantly associated with outcome measures. Verbal memory and working memory appear to be necessary for adequate functional outcome. Deficit in these areas may prevent patients from reaching optimal adaptation, so that they should be addressed specifically in cognitive rehabilitation intervention programs.

PO1.142.
THE DEFICIT SYNDROME IN SCHIZOPHRENIA

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The deficit syndrome in schizophrenia is defined by the presence of prominent, enduring and primary negative symptoms. We carried out a cross-sectional retrospective study comparing patients with a diagnosis of schizophrenia with vs. without deficit syndrome. We gathered 80 patients fulfilling DSM-IV criteria for schizophrenia, in a stabilized period of the course of the disease. We assessed them by the Positive and Negative Syndrome Scale (PANSS), the Schedule for the Deficit Syndrome (SDS), the Simpson Angus Extrapyramidal Side Effects (EPS) Rating Scale and the Global Assessment of Functioning Scale (GAF). Using the SDS, 34 patients (42.5%) were categorized as having deficit schizophrenia, and 46 (57.5%) as having nondeficit schizophrenia. Most patients with the deficit syndrome showed a poor pre-morbid adjustment (82%), an insidious onset of symptoms (76%) and a poor outcome characterized by a global dysfunction (68%). Most patients with the deficit syndrome stopped working or studying (82%). Hence, they showed high rates of economic dependence (80%). Regarding therapeutic aspects, a frequent use of long-term high dose neuroleptic treatment was noted (997 mg per day as a chlorpromazine equivalent mean daily level). Novel antipsychotics were rarely prescribed (14%).

PO1.143.
MONITORING THE PSYCHOTIC PROCESS FROM THE ONSET

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Psychiatric research and everyday clinical practice have provided us, after decades of difficulties, with the nosological structure and the appropriate initial approach towards the first episode of psychosis. However, although there are a large variety of diagnostic criteria for the psychotic process, we still do not have a clear distinction between episode and illness. The aim of this study is to monitor the dynamics of the psychotic process from the onset, and to identify the basic time stages of the process. For the clinician it is important to know what are the unstable diagnostic groups and the moment of their metamorphosis, in order to be able to influence the illness course and accordingly modify the therapy of patients with a diagnosis of first episode of psychosis.

PO1.144
CITALOPRAM FOR DEPRESSIVE SYMPTOMS IN CHRONIC SCHIZOPHRENIA

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There is increasing evidence suggesting that depressive symptoms may be associated with serotonergic dysfunction in schizophrenic patients. This study aimed to determine the efficacy and safety of citalopram as a treatment for depressive symptoms in patients with chronic schizophrenia. The Calgary Depression Scale for Schizophrenia (CDSS) was used as the outcome measure. Forty-seven patients suffering from schizophrenia (DSM-IV) with a CDSS score higher than 8 were included in a double-blind, placebo-controlled, 8-week trial of citalopram. Citalopram was started at 20 mg/day; this could be increased to 40 mg after 4 weeks for an inadequate response. There were no significant differences between these two groups with respect to age, education, gender and type of antipsychotic. There was no significant difference between the citalopram and the placebo group in the mean baseline CDSS score (9.8±2.2 vs. 9.3±1.6, p=0.32), but after 8 weeks the mean score of the citalopram group was significantly lower (6.1±1.8 vs. 7.8±1.8, p=0.002). No clinically significant adverse effects were reported by the patients or observed by the examiner. These results suggest that citalopram is useful and safe as a treatment for depressive symptoms in schizophrenia.

PO1.145.
OBSESSIVE-COMPULSIVE DISORDER IN SCHIZOPHRENIA

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Schizophrenia is a neuro-developmental disorder that affects 1% of the population. Its onset is in late adolescence and it affects a wide variety of different brain systems. The heritability is 80%. Obsessive-compulsive disorder (OCD) is also a neuro-developmental disorder that affects 2% of the population. Its onset is in early adolescence and it also affects a wide range of brain systems. The heritability is 40%. There is a reported incidence of 10 to 25% of OCD symptoms in chronic schizophrenia. As a part of a genetic epidemiology study, a sample of 540 subjects with schizophrenia has been identified. They have been interviewed by the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) to look for OCD symptoms. There appears to be a trend towards poorer outcome in patients with OCD and schizophrenia. However, contrary to our hypothesis, there was a decreased level of extrapyramidal symptoms. There are difficulties in distinguishing the symptoms of OCD and schizophrenia: the OCD symptoms may be distinguished by their ego-dystonic features. In this group the obsessions tend to be mostly aggressive thoughts. In conclusion, OCD symptoms are common in schizophrenia and may mark a poor outcome subgroup. This may represent shared dysfunction in basal-thalamic-cortical functioning. Future studies may identify shared neuropsychological deficits and pathophysiology. It is important that these symptoms are identified and treated as often OCD symptoms are ignored and there is evidence that selective serotonin reuptake inhibitors are of value in the treatment of these symptoms.

PO1.146.
BINGE EATING IN SCHIZOPHRENIC PATIENTS: A CASE CONTROL STUDY

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Antipsychotic induced weight gain occurs in up to 50% of patients and can lead to a central or abdominal obesity. Binge eating disorder is a provisional new eating disorder diagnosis. This disorder, especially prevalent in the obese population, has an important impact on treatment outcome. The purpose of this study was to assess whether severely overweight schizophrenic patients differ from controls and from pairs in binge eating symptomatology. Current body mass index (BMI) and the binge eating status were assessed cross-sectionally in 40 schizophrenic outpatients and 40 non-psychiatric controls. In each group half of the subjects had a BMI ≥ 28 or were obese. Binge eating symptomatology is significantly more prevalent in schizophrenic patients and especially in severely overweight and obese patients. This result may have some consequences on the understanding of weight gain associated with antipsychotics and on the treatment and prevention of obesity in this population.

PO1.147.
THE ITALIAN VERSION OF THE EPPENDORF SCHIZOPHRENIA INVENTORY (ESI)

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The Eppendorf Schizophrenia Inventory (ESI) is a self-administered 40 item questionnaire exploring psychosis-related subjective experiences, grouped in five subscales pertaining to attention and speech impairment (AS), auditory uncertainty (AU), ideas of reference (IR), deviant perceptual phenomena (DP), plus items (FR) controlling for frankness and motivation in completing the inventory. The original instrument was translated into Italian, back-translated and discrepancies resolved by discussion with the author of the original. The Italian ESI was administered to 50 inpatients with schizophrenia according to ICD-10 criteria and to 50 controls matched for sex, age, and educational level. Patients were assessed using the Positive and Negative Syndrome Scale (PANSS) and completed another Italian-validated inventory of subjective experiences, the Frankfurter Complaint Questionnaire (FCQ). The total and each subscale scores of the Italian ESI, except FR, were significantly higher in patients. Patients showed significant correlations of ESI total and subscale scores with duration of illness and negative symptom PANSS scores. Significant positive correlations were found between ESI total and subscale scores and FCQ global and subscale scores. Cronbach's alpha for the Italian ESI and its subscales ranged from .65 to .89. The Italian version of the ESI appears to have satisfactory concurrent validity and acceptable internal consistency; preliminary data showing discriminant validity between patients with schizophrenia and controls support further study of its test-retest reliability and discriminant validity between patients with schizophrenia and other diagnostic groups.

PO1.148.
A MULTIDIMENSIONAL APPROACH TO ASSESS SCHIZOPHRENIA SYMPTOMS AND FUNCTIONAL DISABILITY

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The present study was designed in order to verify the association between schizophrenic symptoms and function according a multidimensional approach assessment. Forty chronic schizophrenic patients in a stabilized phase of illness were studied by a comprehensive clinical, psychopathological and psychosocial assessment. Diagnoses were made according to DSM-IV and ICD-10 Research Criteria. All patients were on pharmacological and psychosocial treatment. A pervasive correlation among symptoms and psychosocial variables emerged suggesting a unitary concept of behavior related to diagnosis. A factor analysis and a cluster analysis on factor variables associated with symptoms and function scores yielded the best fit (100%) with a tripartite solution. In conclusion, schizophrenic symptoms and social functioning seem to be organized in a tripartite and homogeneous structure, suggesting the existence of three different syndromes. The dimensional structure of schizophrenia needs a comprehensive and multi-domain assessment for deriving prediction of outcome.

PO1.149.
FAMILY RELATIONS OF PSYCHOTIC AND NON-PSYCHOTIC ADOLESCENTS

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This study focuses on individuation-separation processes in families of psychotic patients. It was carried out in patients hospitalised for the first time at the inpatient ward of the Department of Child and Adolescent Psychiatry, Jagiellonian University, in Cracow and in their families. Patients of both sexes, aged 14-19 years, with various psychopathological pictures, were examined. The examination included patient's parents and siblings aged 14-20. Patients with ICD-10 psychotic disorders (F20-F23) with their families (parents and siblings) were compared to patients with other diagnoses ('non-psychotic disorders'). The patients and siblings were examined by Offer's Self Image Questionnaire for Adolescents and Cierpka's Family Assessment Measure. Parents were examined by the Family Assessment Measure. The essential result of the study was a qualitative description of specific emotional factors and parents-children dynamics characteristic of psychotic patients, which may be useful for the diagnostic-therapeutic process.

PO1.150. MORBID SELF-EXPERIENCES AND ALEXITHYMIA IN SCHIZOPHRENIA

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Schizophrenic subjects with alexithymia display a global inflation of psychopathology. However, the psychopathological understanding of such phenomena is still incomplete. Furthermore, the potential salience of not-yet-psychotic, qualitative anomalies of subjective experiences to the development of alexithymia has been eclipsed by an unproblematized transposition of the alexithymia construct (originally developed in psychosomatic medicine) into the field of psychosis. The aim of this study was to recontextualize alexithymia in a

detailed mapping of schizophrenic subjective psychopathology on the epistemological basis of the Jaspersian and Schneiderian descriptive phenomenological method. 70 patients were examined with the Bonn Scale for the Assessment of Basic Symptoms (BSABS) and the 20-item Toronto Alexithymia Scale. Schizophrenic subjects with alexithymia displayed an increase of basic symptoms level, and alexithymia was associated with elevated scores on the scales measuring disorders of self-awareness and interpersonal uneasiness. These findings suggest that certain anomalies of subjective experience contribute to the unfolding of alexithymia in schizophrenia and that alexithymia in schizophrenic psychopathology is better understood as indicative of a disturbed self-experience rather than as a trait-like pathoplastic feature.

PO1.151.
FUNCTIONAL STATUS AND QUALITY OF LIFE IN LATIN AMERICANS WITH SCHIZOPHRENIA

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The study aimed to summarise changes in functional status and health related quality of life (HRQoL) in Latin American (LA) patients with schizophrenia after 12 month participation in a 3 year global, observational study. HRQoL (assessed by EuroQoL) and functional status (social, employment and residential) were determined for LA outpatients with schizophrenia. Data were adjusted for baseline differences and multivariate comparisons of olanzapine, risperidone and typical antipsychotic treatment were performed. Patients who remained on their originally prescribed monotherapy of olanzapine (n=803), risperidone (n=227) or typical antipsychotic treatment (n=183) for 12 months were compared. Following one year of therapy, patients in all treatment groups improved, but olanzapine was superior to typical antipsychotic treatment in terms of changes in total EuroQoL score ($p<0.0001$), health status ($p<0.0001$), work status ($p=0.0005$) and social status ($p=0.0002$). Changes in total EuroQoL ($p=0.02$) and health status ($p=0.02$) were also greater for olanzapine when compared to risperidone. Our results confirm the positive influence of antipsychotic treatment on functional status and quality of life in patients with schizophrenia. Olanzapine was superior to typical antipsychotic therapy and showed greater improvement in HRQoL when compared to risperidone.

PO1.152.
USE OF INPATIENT SERVICES AND CLINICAL FEATURES OF SCHIZOPHRENIC PATIENTS INCLUDED IN CLINICAL CASE MANAGEMENT PROGRAMS IN MADRID, SPAIN

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The present study is about the differential clinical characteristics and their relationship to use of inpatient services of schizophrenic patients included in three clinical case management (CCM) programs in two catchment areas of Madrid. In these areas a psychiatric case register exists since 1985 including information about admissions, emergencies and outpatient care. We compared the clinical characteristics of the patients included in the programs with those who have not been included. We studied 920 patients with a diagnosis of schizophrenia according to ICD-10 attending from January, 2002 to October, 2003 three CMHC (corresponding to a population of 552,000 inhabitants). 241 of them were included in programs of CCM with different components (professional caseload, keyworker assignment, written individualized plan, team work, domiciliary visits and control of drop out). The assessment instruments were the Positive and Negative Syndrome Scale (PANSS), the Disability Assessment Schedule (DAS) and the Global Assessment of Functioning scale. We assessed the percentage of time spent in a psychotic condition in the last year, the adherence to treatment, and admissions, emergencies and outpatient care in the psychiatric case register.

PO1.153.
HOSPITAL ADMISSIONS, COMORBIDITY AND MORTALITY IN SCHIZOPHRENIA: A PILOT COMMUNITY BASED COHORT STUDY

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The natural course of schizophrenia is extremely heterogeneous and generally considered unpredictable. This prospective research investigated the five year natural course of schizophrenia in a community based population referring to an Italian mental health center, looking for the identification of psychopathological predictors of outcome. Forty patients with schizophrenia were assessed at baseline in a stabilized phase of illness, with clinical scales of psychopathology and social functioning and were followed up for 36 months. All of them were treated with antipsychotic drugs. According to their symptoms and function score, patients were empirically classified in three groups with a cluster analysis: a group characterized by low symptoms and good functioning, a group with high symptoms and poor functioning and an intermediate one. The empirical classification correctly predicted long-term outcome. A survival analysis with comparison of distributions (Wilcoxon Gehan test) revealed also significant differences in term of hospital admission and comorbidity with alcohol related diagnosis across groups. Patients with poor prognosis and on typical antipsychotic medications showed a higher mortality rate. This study suggests that the long-term outcome in schizophrenia patients followed by a community-based mental health service is generally poor and multifaceted. However, outcome may be predicted on the basis of the psychopathological and social functioning profile assessed in a stabilized phase of illness according to operational criteria. Atypical antipsychotics improve outcome and reduce mortality even after correction for age and unsafe lifestyles.

PO1.154.
SCHIZOPHRENIA IN SPAIN: MOST FREQUENT SYMPTOMS AND SUBTYPES AMONG AN OUTPATIENT POPULATION

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The objective of the Abordaje Clínico de la Esquizofrenia (ACE) study is to describe the clinical management of schizophrenia in Spain. We describe here the clinical profile of the schizophrenic patients. The study is a descriptive, cross-sectional, multicentric one, carried out in outpatient mental health centers and private offices. 500 investigators recruited 1969 patients with a primary diagnosis of schizophrenia; 32 patients (1.6%) were excluded from the analysis by protocol violation. The most frequent schizophrenia subtype in these patients is paranoid (68.4%), followed by residual (13.9%) and undifferentiated (7.1%). At the study visit, most of the patients (64.1%) were stabilized, 28.6% in a process with active symptoms and 7.2% in an acute phase. 76.6% of the patients had been diagnosed more than 5 years before. The percentage of patients with negative symptoms was higher (87.7%) than the percentage of those with positive symptoms (63.5%) and differences were found between men and women for the former symptoms (88.8% vs. 85.2%, $p<0.05$). The most frequent negative symptoms were social impairment (65.8%), affective numbness (50.1%), apathy (44.1%) and reduced flow of conversation (40.4%); the most frequent positive symptoms were delusions (44.5%), hallucinations (27.2%) and conceptual disorganization (26.4%).

PO1.155.
EPIDEMIOLOGICAL FINDINGS IN 2000 SCHIZOPHRENIC OUTPATIENTS IN SPAIN: THE CLINICAL MANAGEMENT OF SCHIZOPHRENIA (ACE) STUDY

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The objective of the Abordaje Clínico de la Esquizofrenia (Clinical Management of Schizophrenia, ACE) study is to describe the clinical management of schizophrenia in Spain. Here we describe the epidemiological findings for the study population. The study was a descriptive, cross-sectional, multicentric one, carried out in outpatient mental health centers and private offices. 500 investigators recruited 1969 patients with a primary diagnosis of schizophrenia; 32 patients (1.6%) were excluded from the analysis by protocol violation. Patients age average was 37.6±10.8 years. Men (69.1%) were 3.3 years younger than women ($p<0.001$). 23.1% had a direct familiar background of schizophrenia (9.8% brothers/sisters), were bachelors (79.7%) and lived in a familiar environment (95%). 59.6% of the patients did not go to any other center for medical follow-up; those who did, mainly attended occupational workshops (17.5%). The percentage of patients with an university degree was 8.5% (49.1% just with a primary school level) and 73.2% of them did not work/study due to the disease. Time since diagnosis for 76.6% of the population was >5 years. The Spanish schizophrenic population is a young one, with an important female presence (30.9%), and mostly with a primary school background. Most patients do not work/study and live in a familiar environment.

PO1.156.
SECLUSION AND THE USE OF ANTIPSYCHOTICS IN HOSPITALISED PSYCHIATRIC PATIENTS

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This study aimed to gain insight into patient-related factors associated with seclusion of patients in the admission wards of three psychiatric hospitals in The Netherlands and to assess the relationship between the prescription of antipsychotics and seclusion in psychotic patients. We collected data over the years 1997-1999 from a consecutive sample of 996 patients in adult psychiatric admission wards. Secluded patients were compared to non-secluded patients and associations between antipsychotic use and seclusion were evaluated. Young age, low Global Assessment of Functioning (GAF) score, involuntary hospitalisation and bipolar disorder (manic episode) were significantly associated with seclusion, applied in 28.6% of the patients. The median time from admission to seclusion among patients with psychotic disorders who used antipsychotics during the first week was 7 days. In patients not using antipsychotics this was 2.5 days. In addition, the use of antipsychotics was, although not significantly, associated with a lower risk of seclusion (relative risk: 0.7; 95% confidence interval: 0.5-1.2). In a substantial part of the psychotic patients, antipsychotic treatment was initiated during or shortly after seclusion, with a relative risk of 2.0 (95% confidence interval: 1.2-3.4). In conclusion, the use of antipsychotics is associated with a later application, probably a delay, of seclusion. In a substantial proportion of the patients treatment with antipsychotics was initiated during or shortly after seclusion.

PO1.157.
TARDIVE DYSKINESIA: LINKAGE DISEQUILIBRIUM ANALYSIS OF SHORT TANDEM REPEAT LOCI SURROUNDING CYP2D6 GENE AT 22q13.1

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The evidence of the genetic factors involved in the predisposition to develop tardive dyskynesia (TD) comes from animal studies, clinical observations showing familial clustering and genetic association studies. Actually, rats treated chronically with neuroleptics develop vacuous chewing movements (VCMs), similar in some respect to TD in the man. VCMs vary in severity and frequency between different rat strains, suggesting that a genetic mechanism might underlie vulnerability. This observation is consistent with the limited clinical data suggesting familial patterns and ethnic correlation in the occurrence of drug-induced TD. The rationale to suspect CYP2D6 polymorphism as a major factor in the predisposition to develop TD is that previous studies have shown that many neuroleptics are metabolized by CYP2D6. Moreover, it has been showed that approximately 5-10% of Caucasians lack CYP2D6 activity, and these individuals classified as poor metabolizers could achieve high or toxic plasma levels on standard drug therapy, increas-

ing the risk for acute adverse effects. In this study we want to test the hypothesis that polymorphisms of short tandem repeat loci (D22S276, D22S282, D22s274) spanning the 22q13.1 region, which contains the CYP2D6, are in strong linkage disequilibrium with a major gene, whether CYP2D6 or other one, predisposing to develop TD.

PO1.158.
SERUM SUPEROXIDE DISMUTASE AND THIOBARBITURIC ACID REACTIVE SUBSTANCES IN MEDICATED SCHIZOPHRENIC PATIENTS

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Impaired antioxidant defense and increased lipid peroxidation have been previously reported in drug naïve, first episode and chronically medicated schizophrenic patients using typical antipsychotics. We measured serum superoxide dismutase (SOD) and thiobarbituric acid reactive substances (TBARS) in chronic DSM-IV schizophrenic patients under haloperidol (n=10) or clozapine (n=7), and in a group of healthy controls (n=15). Serum SOD and TBARS were significantly higher (p=0.001) in schizophrenic patients than in controls. Among patients, serum TBARS was significantly higher (p=0.008) in those taking clozapine (4.4329±0.7070) than in those under haloperidol, whereas SOD levels were not different (p=0.7). Further investigation of the relationship of scavenging antioxidants enzimes and lipid peroxidation with the course of schizophrenia is warranted.

PO1.159.
WATER-ELECTROLYTIC DYSBALANCE, PHARMACOTHERAPY AND WORSENING OF PSYCHOSIS

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The clinical observation that patients with psychotic disorders (schizophrenia, schizoaffective and affective psychoses) very often take excessive quantities of water (compulsive drinking) generated the interest to investigate the possible pathogenic role of "water intoxication" in the appearance, worsening and maintenance of psychotic symptoms. 41 patients have been included in the study. In all of them, water-electrolytic balance has been investigated at the time of hospitalization, through pharmacotherapy and at discharge. The worsening of psychosis was associated with a constant tendency to hypernatremia (with secondary hyponatremia) and hypercalcemia. Pharmacotherapy had a negative influence on water-electrolytic balance. The regular examination of water-electrolytic balance in psychotic patients is an important part of their clinical assessment.

PO1.160.
ATTENTIONAL AND MNESTIC RESISTANCE TO INTERFERENCE AND THE POSITIVE, NEGATIVE AND DISORGANIZATION DIMENSIONS OF SCHIZOPHRENIA: A CORRELATION STUDY

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Attentional and mnestic resistance to interference represent core neuropsychological functions in executive funtioning organization. The impairment of executive functions is a well-known feature of many schizophrenic subjects. The present study has been performed with the aim to evaluate possible relationships among interference inhibition and the positive, negative and disorganization dimensions of schizophrenia. 76 schizophrenic patients aged from 18 to 58 years were examined by the Scale for the Assessment of Positive Symptoms (SAPS) and the Scale for the Assessment of Negative Symptoms (SANS) to evaluate positive, negative and disorganization dimensions. All patients underwent a neuropsychological examination with the Stroop Colour Word, which assesses selective attention by an interference component that requires the subject to inhibit an automated response, and the AB-AC, a verbal learning task for the evaluation of proactive interference. Statistically significant correlations were observed among the Stroop Colour Word, "odd behavior" (SAPS) and "apathy" (SANS); lesser significant correlation resulted between AB-AC and "delusions" at SAPS. Although the available data in the literature tend to support the lack of relationships between global executive dysfunctioning and the positive, negative and disorganization dimensions of schizophrenia, the present study suggests that such relationships appear when simpler neuropsychological dimensions are investigated. These results suggest that the assessment of simpler neuropsychological functions which concur to the organization of the global executive functioning may be more useful and accurate than the evaluation of global executive function alone.

PO1.161.
INTERFERENCE INHIBITION AND RELATIONAL COMPLEXITY IN SCHIZOPHRENIA

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Executive functions are subtended by simpler neuropsychological organizations as attentional resistance to interference, working memory, analysis of relational complexity and self-concepts. The aim of the present study was to evaluate the relationships among the single neuropsychological functions which participate to the organization of executive functioning in a sample of schizophrenic patients with various degrees of cognitive impairment. 76 schizophrenic patients (56 males and 20 females, mean age 34.32 years) underwent a neuropsychological assessment which involved the Stroop Colour Word (which assesses selective attention by an interference component that requires the subject to inhibit an automated response), the AB-AC (a verbal learning task for the evaluation of proactive interference) and the Raven's Standard Progressive Matrices (for the analysis of relational complexity). Correlations analysis (Pearson's r) has been performed assuming $p<0.01$ as threshold for statistical significance. No significant correlations were observed among the examined variables. This result supports the idea that the simpler cognitive functions assessed in the present study are quite independent from each other. The global impairment of executive functions thus may reflect simpler deficits subtended by different etiopathogenetic mechanisms. The exact characterization of the "mosaic" of those simpler, isolated impairments which concur to the organization of executive functioning may be a target for individual rehabilitative and psychoeducational strategies for schizophrenic subjects.

PO1.162.
SOCIAL ADJUSTMENT IN SCHIZOPHRENIC PATIENTS WITH A FAMILY HISTORY OF THE DISEASE

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Recently, the influence of a family history of the disease on the course of schizophrenia and on the social adjustment of patients with schizophrenia has been a focus of attention. We studied 60 families with two or more cases of schizophrenia among first or second degree relatives. We found that that a family history of the disease, and the fact of living with the ill relative, exerted an adverse impact on the age of the onset of the disease, on patient's premorbid personality, on clinical manifestations of the disease, and on patient's social adjustment. In families with mentally ill relatives we found peculiar dynamics conditioning the patient's social adjustment. The highest level of adjustment (integrative, extrovert) was associated with positive coalition. Negative coalition was associated with an adverse type of adaptation (destructive) with a high specific burden of disability related to mental disease.

PO1.163.
SCHIZOPHRENIA COMBINED WITH SOMATIC PATHOLOGY

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Recently, accompanying somatic diseases have attracted attention as one of the adverse factors conditioning the clinical and social outcome in schizophrenia. The presence of accompanying somatic pathology is a characteristic of a subgroup of treatment resistant schizophrenic patients. Diseases of gastrointestinal tract and of the cardiovascular system (especially hypertension), as well as renal illnesses (especially chronic pyelonephritis), are the most frequent. We present data on clinical peculiarities of schizophrenia associated with somatic pathology, whose exacerbation leads to somatogenic reactions (anxious-depressive, hypochondriacal, anosognostic, restoration of previous psychopathological symptoms and mixed). We found that somatic diseases are adverse factors influencing the social functioning of these patients, as well as family functioning, manifesting in outer (family) reactions of three basic types: passive-awaiting, loyal and extremist.

PO1.164.
ABOUT THE DIAGNOSIS OF RESIDUAL SCHIZOPHRENIA

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Residual schizophrenia as an independent diagnosis is present in international classifications of mental disorders but is not broadly used in Russia. According to the data of our group, already in the second period of five years in the course of the disease, schizophrenic patients without signs of defect cannot be found, and after the second period of 10 years in the course of the disease a stabilisation of psychotic activity is observed. Multiple types of remissions and residual states are probably comprised under the heading of "residual schizophrenia". According to data obtained at the Mental Health Research Institute (Russia, Tomsk), this diagnostic heading in ICD-10 reflects the stage of the disorder marked by a relative stabilisation of the schizophrenic process.

PO1.165.
SOCIAL FUNCTIONING RELATES TO AGE OF ONSET IN OUTPATIENTS WITH SCHIZOPHRENIA

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In a random sample of 231 outpatients with schizophrenia attending five mental health centers in the Barcelona area, we evaluated sociodemographic and clinical variables and social functioning (Life Skills Profile, LSP). The age of onset was evaluated at first symptoms, at first contact and at first diagnosis. We subdivided the patients into three groups according to the age of onset: early (0-17 years), middle (17 to 30 years) and late (more than 30 years). There was a preponderance of males in the middle group ($p<0.001$). When we evaluated the age of onset at first symptoms, people with early onset had a worse global social functioning, as well as functioning in the areas of social contact and communication, than people with a late onset ($p<0.05$).

PO1.166.
SCHIZOPHRENIC PSYCHOSES: A RISK FACTOR FOR SUDDEN DEATH?

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In the general adult population, sudden death occurs with an incidence of 0.3/1,000/year in the absence of known risk factors. In the presence of cardiovascular risk factors the incidence increases up to 11.7/1,000/year, with a higher incidence in males. In patients affected by schizophrenic psychoses, the risk is higher than in the general population, which has been related to behavioural disturbances (drug abuse, nicotinism) and the use of drugs which prolong the QTc interval. We retrospectively assessed 489 patients with a chronic schizophrenic psychosis, evaluating the presence of pre-existing cardiovascular risk factors and pharmacological treatment. Five patients, four males and one female, with a mean age of 43 years, died suddenly in three years (incidence of 3.41/100 patients/year). All these patients smoked more than 20 cigarettes/day and were receiving antipsychotic drug treatment. Two of them presented hypercholesterolemia as a further risk factor. Further studies are necessary to identify the role of the various factors associated with sudden death and to develop the appropriate preventive strategies. Moreover, our study shows the necessity of a cardiological evaluation of psychiatric patients, especially if receiving pharmacological therapy.

PO1.167.
HALLUCINATORY DISORDER: CLINICAL AND BIOLOGICAL EVIDENCE

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We studied a sample of 9 subjects with a clinical picture corresponding to the description of chronic hallucinatory psychosis (CHP) in the French literature and a control group of 9 schizophrenic patients, with respect to psychopathological (Brief Psychiatric Rating Scale, Scale for the Assessment of Positive Symptoms, Scale for the Assessment of Negative Symptoms, Positive and Negative Syndrome Scale)

and neuroimaging (single photon emission computed tomography) variables. Patients with CHP had significantly lower scores than patients with schizophrenia for positive symptoms, negative symptoms and conceptual disorganization, but a higher score for hallucinations. As compared with healthy controls, patients with CHP had a significant regional cerebral blood flow (rCBF) increase in right thalamus, left insula (Broadman area, BA 13), left precuneus (BA 19), left superior temporal gyrus (BA 22), and occipital region bilaterally. Compared to healthy controls, the schizophrenia group showed a significant rCBF reduction in right medial frontal gyrus (BA 10) and right superior frontal gyrus (BA 9). The neuroimaging findings are consistent with the "inner speech" theory of activation of an extensive network of cortical and subcortical areas in auditory hallucinations.

PO1.168.
OUTCOMES OF REHABILITATIVE INTERVENTIONS IN A POST-ACUTE REHABILITATION WARD: NEUROPSYCHOLOGICAL AND PSYCHOPATHOLOGICAL PREDICTORS

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Rehabilitation programs for schizophrenic patients are usually intended for chronic schizophrenia and consequently most studies address the treatment of this phase. Limited or no data are instead available about rehabilitation programs in post-acute inpatients. These programs may have different targets, like potentiating and anticipating effects of drug treatment on behavioural competence and organization, but may respond to the same modulating rules of chronic schizophrenia interventions. The aim of this study was to recognize neuropsychological and psychopathological predictors of functional outcomes of a in-ward, post-acute rehabilitation program. 50 consecutively admitted schizophrenic patients were assessed with the Positive and Negative Syndrome Scale (PANSS) for psychopathology, the Evaluation of Abilities, Definition of Objectives (VADO) for daily functioning and a battery of neuropsychological tasks assessing most of the core deficits known in schizophrenia (Brief Assessment of Cognition in Schizophrenia). VADO assessment was repeated after 4 weeks of cognitive-behavioural treatment, before discharge. Preliminary results on 23 patients showed that the highly significant improvement of daily functioning (basal-final VADO scores change p=0.0005) was not correlated with residual acute psychopathology. On the other hand, we found a significant correlation between VADO-measured functional improvement and basal neuropsychological functions (working memory, p=0.02; attention, p=0.007). Our results suggest that, even in patients with residual acute symptomatology, in-ward cognitive-behavioural rehabilitation is effective and its outcomes are influenced more by neuropsychological performance than by psychopathology, like in chronic schizophrenia rehabilitation.

PO1.169.
EMOTION TRAINING IMPROVES RECOGNITION OF FACIAL EMOTIONS IN CHRONIC SCHIZOPHRENIA. A PILOT STUDY

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Impaired emotional communication may be an important contributing factor to poor social function in schizophrenia. This pilot study examined the effect of emotion training exercises on the perception of facial emotional expression. 20 male chronic schizophrenia patients underwent 3 training sessions using a computerized emotion training program developed for teaching autistic children that was adapted to the clinical setting. Patients were assessed before and after training with validated tests of identification of facial emotions (Penn Emotion Acuity Test, PEAT and Emotion Rating 40, ER40), differentiation of facial emotions (Emotion Differentiation Test, EMODIFF) and working memory. In comparison to baseline, patients performed significantly better on PEAT and ER40 tests after training. No change was observed in EMODIFF or in cognitive test performance. In conclusion, brief emotion training can improve recognition of facial emotional expressions in chronic schizophrenia patients. This may be due to increased patient awareness of emotional aspects of stimuli and/or improvement in specific emotional perceptual skills. Further studies of emotion training as a potential treatment modality are warranted.

PO1.170.
A SINGLE BLIND RANDOMISED CONTROLLED TRIAL OF MUSIC THERAPY IN PATIENTS WITH SCHIZOPHRENIA AND RELATED PSYCHOSES

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The potential value of music therapy for people who experience mental distress has been widely discussed but seldom evaluated. Current treatments for schizophrenia leave many with residual symptoms and impaired social functioning. We therefore conducted a randomised controlled trial of music therapy for people with schizophrenia and related psychoses in order to examine its effect on clinical and social outcomes. Patients aged over 18 who were being treated for non-affective psychoses at one of four local hospitals were randomised to individual music therapy (MT) plus standard care or standard care (SC) alone. We used remote randomisation with block randomisation in a ratio of MT:SC of 2:3. Music therapy sessions lasted up to 50 minutes, once a week for up to 12 weeks. Sessions were delivered by trained music therapists who received regular supervision during the course of the study. Symptoms of schizophrenia (measured using the Positive and Negative Syndrome Scale, PANSS), engagement with services, satisfaction with care, and social functioning were measured prior to randomisation and at three and six months after. Over the course of six months 80 patients were randomised. Findings from patient follow-up interviews will be presented and implications for future research on art therapies discussed.

PO1.171.
THE CAREGIVING EXPERIENCE OF RELATIVES OF CHINESE PATIENTS WITH SEVERE MENTAL ILLNESSES IN HONG KONG

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This study examined the psychometric properties of the Experience of Caregiving Inventory (ECI), a 66 items instrument with both positive and negative appraisal of caregiving. Predictors of the caregiving appraisal were explored and the stress-coping model was re-examined. 129 caregivers and 81 patients were recruited. Test retest reliability, internal consistency and the item-scale correlation of the Chinese version of the ECI were satisfactory. Factor analysis found a 10-factor solution that was comparable with the original version. Regression analysis of socio-demographic and clinical predictors of ECI showed that negative appraisal was mainly predicted by the 1 year Global Assessment of Functioning (GAF) and the years of education of the caregivers. The positive appraisal was predicted by the employment status of the patients and the years of education of the caregivers. Re-examination of the stress-coping model showed that there was significant psychological distress amongst caregivers. Ways of coping (especially rational problem solving) accounted for 21.8%, while negative appraisal explained 22.8% of the variance of the General Health Questionnaire. The positive correlation between negative and positive appraisal warrants further investigation of the stress coping model with the concept of 'commitment' of relatives in caregiving.

PO1.172.
WHICH PSYCHIATRIC PATIENTS NEED ANTI-STIGMA ASSISTANCE?

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It is well established that the general public has devaluating attitudes towards psychiatric patients. In order to avoid rejection, many of these patients develop coping strategies, such as withdrawal and concealing their treatment history. These efforts are in themselves stressing, which might have negative consequences for the course of the disorder. It is not clear, however, how many and which patients do actually perceive the public's stereotype as threatening and therefore expect rejection. 90 psychiatric patients and a sample of 1042 persons of the Austrian general population were asked whether they agreed with five devaluating statements about mental patients contained in a questionnaire developed by Link et al. Matched pairs comparisons and multiple logistic regression were employed, in order to find out whether patients agreed to the same extent with these statements as the general public did. For the statements that psychiatric patients are "less intelligent", "less trustworthy" and "taken less seriously", patients thought significantly less often than the general population that most people devalue mental patients. For two statements ("personal failure", "think less of"), no difference was found. It seems that some psychiatric patients are less convinced than the general population that most people devalue psychiatric patients in specific respects; these patients might fear rejection less than other patients do. Those who actually fear rejection might need anti-stigma assistance more urgently than the first group.

PO1.173.
HOW PATIENTS SUFFERING FROM SCHIZOPHRENIA COPE WITH ANTICIPATED STIGMA

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The present study undertook the task of exploring the strategies which persons suffering from schizophrenia and living in the community are using for coping with anticipated stigma and discrimination. Link et al. have identified three such coping strategies: a) withdrawal, i.e. avoiding social contacts; b) secrecy, i.e. concealing from others the fact that one has been or is currently treated for the disorder; and c) education of others, i.e. explaining others what the disease "really" is and that the stereotypes are wrong. In the present study 100 patients suffering from schizophrenia for an average duration of 12 years were investigated by means of the discrimination-devaluation questionnaire by Link et al. and the stigma-coping questionnaire by the same authors. A factor analysis yielded two factors which explained 45% of the variance, with one factor clearly representing both the withdrawal and the secrecy strategy, and a second factor representing the education strategy. According to these findings two main strategies, a more passive and a more active one, can be distinguished. Since these coping strategies are intimately interwoven into the lives of patients living in the community, and since they might be related both to their psychopathology and to their help-seeking behaviour, these coping strategies will have to be considered more intensely when treating and integrating psychiatric patients in the community.

PO1.174.
THE TREATMENT OF PSYCHOSIS IN THE CONTEXT OF CHILDHOOD TRAUMA

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A recent review of 40 studies shows that the majority of psychiatric patients, internationally, have been either physically or sexually abused as children. This paper will discuss the fast growing research literature demonstrating a relationship between childhood trauma (including sexual and physical abuse) and psychosis in adulthood, including recent New Zealand research. The issue of whether the relationship is causal will also be discussed. Findings that the brains of traumatised children show the same neurological and biochemical abnormalities as the brains of adult schizophrenics will be summarised. It will be argued that, regardless of one's causal beliefs concerning psychosis, the high number of people receiving mental health services for psychosis who were abused as children mandates that clinicians are equipped to offer, or prepared to refer on for, trauma-based psychotherapy. One way forward is an integration of psychological treatments proven to be effective for psychosis and trauma-oriented therapies currently used with non-psychotic populations.

PO1.175.
DAY-HOSPITAL REHABILITATIVE PROGRAMS FOR PSYCHOTIC PATIENTS: A TWO-YEAR FOLLOW-UP STUDY

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The purpose of this study was the assessment of clinical and psychosocial outcome of the patients undergoing the rehabilitative treatments developed at the Day Hospital of the Psychiatric Clinic of the University of Milan. Reduction of negative symptoms of psychosis and an increase in psychosocial competence are the main aims of treatment. We analysed the outcome of 20 patients with psychotic disorders. The rehabilitative treatment included psychopharmacologic therapy, clinical observation, monitoring and supportive interviews, and an individualized rehabilitative program comprising basic rehabilitative activities called "Occupational Therapy" and more specific group rehabilitative activities, using both expressive and cognitive techniques. In order to evaluate the results gained by the patients we considered cognitive functioning, assessed through the Mini-Mental State Examination; psychopathological symptoms, assessed through the Brief Psychiatric Rating Scale, the Scale for Assessment of Negative Symptoms and the Scale for Assessment of Positive Symptoms; global psychosocial functioning, assessed through the scale "Valutazione Globale del Funzionamento" (VGF); relapses of disease, indicated by the number of hospitalizations; the reach of objectives decided and monitored through the manual "Valutazione di Abilità, Definizione di Obiettivi" (VADO). We report results of a 24-month follow-up, showing a considerable decrease of negative symptoms, the reduction of the number of hospitalizations and an improvement in global psychosocial functioning.

PO1.176.
REHABILITATIVE PROGRAMMES FOR PATIENTS WITH DUAL DIAGNOSIS: A DAY HOSPITAL EXPERIENCE

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The integrated approach to alcohol dependence combines different medical and psychosocial treatments, in individual, group or familiar settings, to achieve and support alcohol abstinence and improve global psychosocial functioning. These clinical goals are more difficult to achieve in psychiatric patients than in the alcoholics without psychiatric diseases; psychiatric patients show low global functional level, few familiar and social supports, cognitive and psychological disabilities, so they need more supportive personal programmes for a long time. In this paper we report our experience of rehabilitative treatments for patients with alcohol dependence and psychiatric comorbidity. We report the 2-year outcome of 20 alcoholics with psychiatric comorbidity treated in day hospital and 21 alcoholics without comorbidity, undergoing outpatient treatment. Preliminary data analysis confirm international literature results: 42% of the day hospital sample and 58% of the outpatient sample achieved and maintained alcohol abstinence during the two years of follow-up. The compliance and outcome seems to be better in alcoholics with axis I (affective disorder) than axis II (personality disorders) comorbidity.

PO1.177.
A FIVE-YEAR ACTIVITY OF SUPPORTED EMPLOYMENT FOR PEOPLE WITH PSYCHIATRIC DISABILITY: OUTCOMES, SATISFACTION AND SOCIAL INTEGRATION

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This work is part of the World Psychiatric Association programme against stigma and discrimination because of schizophrenia. Following our first study conducted in Italy exploring the attitudes of employers and employees toward people suffering from psychiatric disability, we analysed five years of activity in the Nucleo Inserimento Lavorativo (NIL) of Brescia, Italy. The NIL is a public agency which provides a supported employment service for people with disabilities. Within this, there is a unit specifically dedicated to people with mental illness. Since 1998, the mental illness unit followed more than seventy people with serious mental illness. The percentage of people who have been employed and maintain their work is more than 30%. The criteria for the admission to the service and an operational description of the different steps of the supported employment are described. We collected data about people's satisfaction with the course of the supported employment and general satisfaction with work and social integration. We also involved family members to assess their satisfaction with the situation of the relative. We finally tried to understand the level of satisfaction of employers, in general for the service provided by the NIL, and specifically for each supported employment course.

PO1.178.
RANDOMIZED CONTROLLED TRIAL OF COGNITIVE REMEDIATION THERAPY IN OUTPATIENTS WITH SCHIZOPHRENIA

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Cognitive remediation therapy (CRT) is a novel psychosocial treatment approach designed to improve adaptative functioning by using cognitive compensatory strategies to bypass the cognitive deficits associated with schizophrenia. The effect of CRT was tested on neurocognition, positive and negative symptoms and psychosocial functioning. Cognitive behavioural treatment (CBT) is a useful therapy for emotional problems that is not expected to have effects on neurocognition and was used as a control condition. Twenty-four patients with DSM-IV schizophrenia and prominent negative symptoms were randomly assigned for 3 months to one of the two treatment conditions: 1) standard medication follow-up plus CRT, 2) standard medication follow-up plus CBT. Comprehensive assessments (Positive and Negative Syndrome Scale, Life Skills Profile, Wechsler Adult Intelligence Scale-III, Wisconsin Card Sorting Test, Stroop Test) were conducted before and after the treatments. Significant differences were found between the two treatment groups in neurocognition and psychosocial functioning after the treatment. Patients receiving CRT overall had higher levels of improvement in neurocognition and psychosocial functioning (Lambda de Wilks 0.514; p=0.009) but not in symptomatology (Lambda de Wilks 0.673; p=0.394). Nevertheless, patients receiving CBT showed significant reduction in some aspects of the general psychopathology after treatment. In conclusion, CRT may improve neurocognition and psychosocial functioning for patients with schizophrenia. Although CBT did not improve cognition nor social functioning it might reduce general psychopathology levels.

PO1.179.
STIGMATISATION OF MENTALLY ILL BY PSYCHIATRIC PROFESSIONALS: THE WARD-STAFF PROJECT

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Diagnostic labels can be useful tools in medicine that facilitate communication between professionals, but they can also be harmful when they are used by non-professionals who are not familiar with the original definition. Misuse of diagnostic labels can lead to stigmatisation and discrimination of people with mental illness, in the general public as well as in psychiatric professionals. The research group "Destigmatization of mental illness" of the Department of Psychiatry and Psychotherapy of the Heinrich-Heine-University in Düsseldorf, Germany is conducting anti-stigma interventions with psychiatric ward staff in the framework of the World Psychiatric Association's Global Program "Fighting stigma and discrimination because of schizophrenia". The "Ward-Staff Project" is to be implemented in collaboration with a research group in Zurich, Switzerland. Target group of this intervention is ward staff in academic and urban hospitals in open and closed wards. Health care professionals' attitudes will be assessed in Germany and in Switzerland. In addition, patients' stigma experiences will be assessed. On the basis of the survey results, special training units to reduce discriminative thinking and behaviour in psychiatric professionals towards mentally ill patients will be developed.

PO1.180.
PUBLIC ATTITUDES TOWARDS PEOPLE WITH MENTAL ILLNESS: A COMPARISON BETWEEN GERMANY AND MACEDONIA

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In Germany and Macedonia the public health care systems differ fundamentally: while deinstitutionalisation and extension of outpatient care began in Germany in 1975, a similar process only started in Macedonia in 2000. We present the findings of an attitude survey in the general public carried out in the two countries using the same methods. We investigated knowledge about the causes of schizophrenia, beliefs about treatment options, symptoms and behavior of patients with schizophrenia, social distance towards people with schizophrenia, attitudes towards the establishment of outpatient facilities, and the perceived social discrimination of the mentally ill. Furthermore, we explored the perception of the portrayal of people with schizophrenia in the media. Differences between the two countries shall be discussed alongside their implications on measures to reduce stigma, and discrimination, especially in the framework of the World Psychiatric Association's Global Programme "Fighting stigma and discrimination because of schizophrenia".

PO1.181.
TRANSITION AND OUTCOME OF TREATMENT PATTERNS IN SCHIZOPHRENIC PATIENTS IN A KOREAN GENERAL HOSPITAL DURING THE LAST TEN YEARS

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There have been many changes recently in the use of antipsychotics in Korea. We studied the transition of treatment patterns, costs and efficacy in schizophrenic inpatients during the last ten years. We assessed the types and doses of antipsychotics, their cost, the duration of hospitalization, and the rates of rehospitalization, drop-out, switching of drug, and return to job. The use of atypical antipsychotics and the cost of treatment increased, but the duration of hospitalization and the rates of rehospitalization and drop-out decreased. A cost-effectiveness evaluation is clearly needed.

PO1.182.
KNOWING - ENJOYING - LIVING BETTER: QUALITY OF LIFE ORIENTED PSYCHOEDUCATION FOR PEOPLE WITH SCHIZOPHRENIA

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Following the trend of integrating quality of life oriented topics into psychoeducational group therapies, a new group program has been developed for people with schizophrenia spectrum disorder, a seminar called "Knowing – enjoying – living better". The aim of the study was the evaluation of the seminar as seen from the subjective perspective of the participants and their referring psychiatrists. Experiences of participants with the seminar were explored in two focus groups and analysed by means of qualitative content analysis. Psychiatrists completed a visual analog scale to evaluate the effects of the seminar on their patients. A total of 75 questionnaires was returned. The analysis of focus group data shows that participants emphasized positive effects of the seminar and gave detailed and very interesting information about how changes were caused and which conditions were relevant for success. Positive effects included an increase in knowledge, empowerment, improved social networks and quality of life. Psychiatrists also noticed improvements in quality of life domains and observed positive changes in attitudes towards medication, illness and health behaviour and in their collaboration with the patient. In conclusion, both participants and psychiatrists appreciated the program and emphasized its positive effects on the quality of life. This form of treatment may become an attractive and cost-effective alternative to conventional psychoeducational programs.

PO1.183.
ANALYSIS OF EMOTION-ASSOCIATED GESTURES IN CHRONIC SCHIZOPHRENIC PATIENTS

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We carried out a study of emotion-associated gestures comparing 8 chronic schizophrenics to 8 healthy control subjects. Our subjects had to enact 4 specific life situations that we created in a standardized set-

ting. The scenarios were designed so that emotional participation was enhanced in the subsequent life situations. Gestures of our participating subjects were observed and videotaped. Videotapes were evaluated using the Budapest Gesture Rating Scale (BGRS), a gesture coding scale developed at our institution. In remarkable contrast to a healthy group of individuals, chronic schizophrenics utilize a reduced amount of emotion-associated gestures. This difference in non-verbal communication is even more obvious as emotional involvement becomes stronger.

PO1.184. EVALUATING PSYCHIATRIC PATIENTS USING HIGH FIDELITY ANIMATED FACES

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We describe the development and early clinical testing of a novel psychiatric assessment tool that employs 3D animated faces of virtual humans animated in real-time to evoke and measure emotional responses of psychiatric patients. The purpose of this new tool is to create a screening protocol where repeatable and parametric facial stimuli are presented interactively to patients in order to characterize and later identify their respective mental disorders using their measured responses. The computer system, presented herein, uses photo-realistic animated 3D models of human faces that display basic emotions which can be most reliably recognized from facial expressions. The patients' ability to recognize these basic expressions (neutral, happiness, surprise, fear, anger, disgust or sadness) is used as an index of their mental health and mapped onto scientifically evaluated symptoms of the respective mental disorders. This paper presents our early clinical results demonstrating that the new assessment tool can be effectively used to screen patients for a group of well defined psychiatric disorders.

PO1.185. THE IMPORTANCE OF TREATMENT FOR VIOLENCE REDUCTION IN SCHIZOPHRENIA

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The purpose of this presentation is to summarize two studies: a) a descriptive study on the characteristics of the whole population of patients of a forensic hospital of Rio Grande do Sul; b) a case-control study of schizophrenic inpatients at the same hospital, focusing on factors associated to homicide, with emphasis on previous treatment. The characteristics of 618 individuals admitted to the hospital in the year 1999 are presented in the descriptive study. In the case-control study, 100 schizophrenic inpatients who committed homicide were compared with 185 schizophrenic patients admitted for other crimes. In both studies, demographic, judicial, and treatment-related variables were explored. In the case-control study, some of these variables were studied by uni- and bivariate analysis, and by multiple logistic regression analysis, constructed in a hierarchical model. The most important finding was that the patients who did not receive previous treatment before the offence had higher homicide rates than those who had received treatment. This finding can be important for public health care, indicating the need to develop a psychiatric care network.

PO1.186. SCHIZOPHRENIA AND MOTHERHOOD: A CLINICAL CASE

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This paper aims to draw attention to the problem of motherhood of women suffering from schizophrenia. Schizophrenia changes the way of thinking and personality of patients as well as perception and assessment of reality and emotional reaction. There are not much academic data about the alteration of maternal abilities of women suffering from schizophrenia. It has been observed that their children are affected by mental disorders 2.5 times more often and have lesser academic abilities than the rest of the population. Part of these children are raised by relatives or state institutions as their mothers are not capable of taking care of them due to frequent hospitalisation and negative development of their illness. Nevertheless, women suffering from schizophrenia have the right to motherhood. As mentioned in the Law on Mental Health Care of the Republic of Lithuania, "Mentally ill persons shall have all political, economic, social and cultural rights. There shall be no discrimination on the grounds of mental illness". We describe the case of a 25 year old single female art university student, having paranoid schizophrenia for 3 years. She was brought to our department after the third severe psychotic episode with Kandinski-Clérambault syndrome, aggressive and inadequate behaviour. A 5-week pregnancy was detected at the beginning of the treatment and the patient was willing to sustain it. Her social conditions were unfavourable (no husband, family support, job), patient was being uncritical. What are possible treatment and prevention measures in such cases?

PO1.187. AN INTERVENTION TO CHANGE ATTITUDES TOWARD MENTAL ILLNESS IN WORK SETTINGS

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This work is part of the World Psychiatric Association programme against stigma and discrimination because of schizophrenia. We carried out one of the few Italian studies exploring the attitudes of employers and employees toward people suffering from psychiatric disability. We highlighted which employers' and employees' characteristics are more frequently associated with negative attitudes. We selected a sample of 39 companies of the manufacturer sector in the province of Brescia, a Northern Italian town, in which there is a long established iron and textile industry. Two questionnaires were developed with the purpose to analyse emotional aspects, behaviour intentions and attitudes of employers and colleagues towards people who suffer from mental illness. The data collected concern 284 questionnaires filled in by employees and 39 by employers. At the moment we are making a thorough study of all data and planning specific interventions in the factories to inform, involve and change attitudes of employees and employers.

PO1.188.
CRIMINALITY AND SCHIZOPHRENIA: IS THERE A RELATIONSHIP?

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A review of the recent literature, both Greek and international, was carried out (1987-2002), using the words criminality, crime, and schizophrenia with Medline as well as a manual search of the Greek psychiatric journals. The search found only 49 publications in Medline and only 2 publications in Greek journals. 18-37% of schizophrenics demonstrate violent criminal behaviour during their involuntary admission to hospital for treatment. This figure decreases during treatment but following release from hospital there is a statistically higher likelihood of criminal behaviour in relation to the general population, as can be ascertained from the arrest figures. Moreover, acute psychotic symptoms, the content of hallucinations and delusions, premorbid personality with an emphasis on antisocial disorders, alcohol or substance use, and exposure to some form of violence during childhood or adolescence are factors that contribute to criminality among schizophrenics. Schizophrenic assailants are found and arrested more frequently than non-psychotic assailants committing similar crimes. Among detainees, schizophrenics are six times more likely to be violent in relation to their co-detainees. A proper social support framework, good family relations, avoidance of alcohol and substance use, lack of physical, psychological and sexual violence during childhood and adolescence, as well as the quality of treatment and compliance with courses of pharmacological treatment all contribute to limiting the appearance of criminal behaviour among schizophrenics.

PO1.189.
MATRICIDE AND PATRICIDE: NEW DATA

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A review of recent bibliography, both Greek and international, was carried out (1987-2002), using the words matricide, patricide and mental illness. The search found only 23 publications in Medline and only 1 publication in the Greek journals. 1 out of 10 of all homicides are parent killings. Patricides (0.7–1.1) outnumber matricides (0.6-0.8), and 75% of the assailants are aged over 18. Among adolescents, the ratio sons/daughters is 15 to 1, while among adults the ratio is 5 to 1. In both cases the victims are father to mother in a ratio of 2 to 1. Predisposing factors are: mental illness, antisocial personality disorder, alcohol and other dependence-inducing substance use, cessation of drug treatment, the availability of weapons, a background of family violence, abuse during the assailant's adolescence, warnings given before the crime, as well as threat of suicide. Of these people released from prison, only 8% are sentenced for another crime (but not murder). Overall, parent killers are predominantly adolescents who have been abused, or adult middle-aged women who lived with decrepit, autarchic mothers, fully isolated from society, or mental patients with comorbid substance abuse.

PO1.190.
PSYCHOLOGICAL AND MOTIVATION DIFFICULTIES IN YOUNG PEOPLE WITH MILD SCHIZOPHRENIA

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In the last 9 years we carried out an extensive study of outpatients with mental disorders in one community in Riga (60,000 inhabitants) and analyzed data from mental health information system (60,924 patients in year 2003). In 1995/1996 we interviewed and analyzed 640 patients and their data, in 1999/2000 we interviewed and analyzed 429 patients. In general, the reform of psychiatry in our country is carried out similarly to so-called model of Canada. According to this model, ambulatory care is implemented not only in medical care institutions, but also in day centers, where occupational therapy is provided. A mathematical analysis showed that interviewed patients can be divided into three groups. One of them consisted of young people who suffered from relatively mild schizophrenic forms. These people do not have a significant disability. Several of them want to work and/or practice occupational therapy. The main problems in these patients are lack of energy and activity and an autistic lifestyle. Social obstacles, stigmatization and lack of information in the general population represent further difficulties.

PO1.191.
A UNIVERSITY COLLEGE STUDENT POPULATION SURVEY ON STIGMATISATION OF PEOPLE WITH MENTAL DISORDERS IN VARESE, ITALY

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We tested the attitudes of a sample of University college students towards people with mental disorders. The Community Attitudes to Mental Illness (CAMI) questionnaire was adapted by the study group. The study was conducted at the Varese University College of Medicine, previously hosting a mental health hospital. The questionnaire was administered to 180 students. Compared with the general population of the same area, students seem to have a better knowledge, a higher acceptance level, but a lower personal experience about mental illnesses.

PO1.192.
PREJUDICE AND TOLERANCE TOWARDS PEOPLE WITH MENTAL DISORDERS IN VARESE, ITALY

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After the promulgation of the Italian mental act in 1978, community mental health facilities have been improved. This has led to a closer link between psychiatric care and socio-cultural organisation. This study aimed to evaluate the prejudice ad tolerance towards people with mental disorders in a sample from the general population. The Community Attitudes to Mental Health (CAMI) questionnaire was adapted by the study group. The research was conducted in two different areas and the questionnaire was administered to 300 adult people. The existence of a link between the degree of personal or theoretical knowledge about mental illnesses and the tolerance level was confirmed. 80% of all the interviewed people declared to be ready to work with people who had psychiatric problems in the past. The degree of information about the mental health reform process was not uniform.

PO1.193.
PUBLIC IDENTIFICATION OF MENTAL DISORDERS IN SÃO PAULO, BRAZIL

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The study aimed to evaluate whether the population of São Paulo city is able to identify four mental disorders: schizophrenia, depression, alcohol dependence and dementia. A household survey was carried out with a representative sample of 2000 residents of São Paulo city, aged 18-65 years. The interview was based on a vignette depicting a person with one of the above diagnoses according to the DSM-IV. Only one vignette was presented to each respondent. They were asked to identify what kind of problem the person described had and if it was a mental illness. More than 90% of the sample declared that the person described in the vignette had some sort of problem. Answers about the kind of problem indicated that schizophrenia was identified mainly as depression (23%). Only 2% correctly identified schizophrenia. Depression was correctly labeled by 44% of the population. Dementia was labeled as a memory problem (46%). Only 4% mentioned dementia or Alzheimer's disease. Alcohol dependence was identified as alcoholism by 31% and chemical/alcohol dependence by 20%. Schizophrenia was identified as a mental illness by 57% of the sample, dementia by 39%, depression and alcohol dependence by 19%. In conclusion, the majority of the São Paulo population is able to recognize some sort of mental or emotional problem, although a small proportion thinks it is a mental illness. Specific diagnoses are rarely identified, especially those of schizophrenia and dementia.

PO1.194.
A QUALITATIVE STUDY ABOUT CONCEPTS AND ATTITUDES TOWARD MENTAL ILLNESS: 20 CHILDREN OF CHRONIC MENTALLY ILL PARENTS TELL THEIR STORIES

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The point of view of children about mental illness is rarely investigated. We studied 20 Mexican children aged 8-12 years with at least one parent suffering from a chronic mental disorder. Their perceptions and feelings about mental illness were explored. A semi-structured interview and a projective technique were applied and life stories were collected. Inner fears, presence of guilt, and misconceptions were observed. Some children showed interpersonal difficulties as well as problems with attachment. Functional coping skills from caregivers proved to be a protective factor. We present a psycho-educational model for children and their families based upon these results.

PO2
MOOD, ANXIETY AND EATING DISORDERS; CHILD PSYCHIATRY; SUBSTANCE ABUSE

PO2.1.
THE SOCIO-ECONOMIC BURDEN OF BIPOLAR DISORDER IN THE NETHERLANDS

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The Netherlands Mental Health Survey and Incidence Study (NEMESIS) is a prospective survey in the Dutch general population among 7,067 respondents aged 18 to 64. In a follow-up study respondents were identified by using the Structured Clinical Interview (SCID-I) resulting in a DSM-IV diagnosis of bipolar disorder (BD). The objective was to assess the quality of life and costs to society of patients suffering from BD in the Netherlands. Forty persons identified with a lifetime diagnosis of BD were interviewed. Data on medical health care utilisation (direct costs) and production losses due to absence from work and efficiency losses (indirect costs) as well as quality of life was collected. For the quality of life we applied validated generic instruments: the EuroQol-5 Dimensions (EQ5D) and the Short-Form 36. The average direct costs per patient per year were estimated at 897 Euro (range: 0-3200). The average indirect costs per year was 3720 Euro (range: 0-6373) of which 86% was due to absence from work. The average score on the EQ5D was 0.82. The quality of life was not significantly lower for the BD population compared to the general population (0.87). Based on the prevalence of 5.2% the total costs of bipolar disorder were estimated at 1.93 billion Euro (total direct costs=480 million Euro; total indirect costs=1.45 billion Euro). In conclusion, the societal costs for bipolar disorder in the Netherlands were high, especially the indirect costs due to absence from work. Quality of life was not significantly decreased compared to the general population.

PO2.2.
PREVALENCE OF BIPOLAR SPECTRUM DISORDERS IN UK ADULTS USING THE MOOD DISORDER QUESTIONNAIRE

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The lifetime prevalence of bipolar I and II disorders in adults in the United States was estimated to be 3.4%, using the Mood Disorder Questionnaire (MDQ), a screening instrument for bipolar disorder. The MDQ was mailed to a nationwide sample of 127,000 people in the United States, with 85,358 returning usable questionnaires (67% response rate). The present study aimed to estimate the lifetime prevalence of bipolar disorder in adults in the UK. The MDQ was mailed to a representative sample of 15,000 UK households for completion by up to two adult household members. Samples were balanced with Eurostat data for age, gender, region, market size and household size. A positive MDQ was defined as seven or more symptoms, co-occur-

rence of two or more symptoms, and moderate or severe impairment. We will report on the survey response rate, overall prevalence adjusted for non-response bias, bipolar disorder detection/diagnosis rates, depression only misdiagnosis rate and demographic characteristics of positive cases.

PO2.3. PREVALENCE OF BIPOLAR SPECTRUM DISORDERS IN UK ADOLESCENTS USING THE MOOD DISORDER QUESTIONNAIRE

P. DeDoncker[1], R.M.A. Hirschfeld[2], T. Frangiosa[3], M. Mehra[3], M. Reed
[1]Janssen-Cilag, Beerse, Belgium; [2]University of Texas Medical Branch, Galveston, TX; [3]Johnson and Johnson Pharmaceutical Services, Raritan, NJ; [4]Vendanta Research, Chapel Hill, NC, USA

The lifetime prevalence of bipolar I and II disorders in adults in the United States was estimated to be 3.4%, using the Mood Disorder Questionnaire (MDQ), a screening instrument for bipolar disorder. A nationwide sample of 127,000 people in the United States was surveyed and 85,358 (67% response rate) participated in the study. An adolescent version of the questionnaire has been developed and validated in the US. This study aimed to estimate the lifetime prevalence of bipolar disorder in adolescents in the UK. The MDQ was mailed to a representative sample of 15,000 UK households. Parental heads of household from the sample were asked to complete the questionnaire on behalf of all adolescents (age 12-17) within their homes. Samples were balanced with Eurostat data for age, gender, region, market size and household size. A positive MDQ was defined as seven or more symptoms, co-occurrence of two or more symptoms, and moderate or severe impairment. We will report the survey response rate, weighted prevalence for adolescents at each age, overall prevalence adjusted for non-response bias, bipolar disorder detection/diagnosis rates, depression only misdiagnosis rate and demographic characteristics of positive cases.

PO2.4. PREVALENCE OF BIPOLAR DISORDER IN A NATIONAL MANAGED CARE HEALTH PLAN

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Despite significant financial burden of bipolar disorder, prevalence of bipolar disorder, as well as comorbidities, in the privately insured population has not been reported. This study aimed to estimate treated prevalence of bipolar disorder in a large US commercial health plan and to assess common comorbidities. Bipolar disorder was identified using ICD-9-CM diagnosis codes on insurance claims for medical services. Average annual prevalence was calculated for 1999-2002. Diabetes was identified using the relevant diagnosis code. Common diagnoses were measured based on frequency of occurrence on medical claims. Annual prevalence of treated bipolar disorder was 262 per 100,000 enrollees (0.26%). Prevalence of treated diabetes among these bipolar disorder patients was 68 per 1000 (6.80%). General symptoms was the most frequent comorbidity, followed by neurotic disorder and essential hypertension. Diabetes was the 11th most common diagnosis. The prevalence of bipolar disorder found in this study was lower than national estimates, and diabetes prevalence within the bipolar disorder population was also lower than published data. These findings may reflect a healthier, insured, working-aged population, misdiagnosis or underdiagnosis of bipolar disorder, and frequency of medical services.

PO2.5. PREVALENCE, INCIDENCE, AND COMORBIDITY AMONG PATIENTS WITH BIPOLAR DISORDERS IN A MANAGED CARE MEDICAID POPULATION

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This study aimed to identify prevalence and incidence rates of bipolar disorders, and to categorize medical comorbidities among patients with bipolar disorders in a managed care Medicaid population. Using a multi-state claims database, patients who had at least 3-months continuous enrollment and at least one bipolar diagnosis, indicated by the relevant ICD-9 codes, from January 1, 1998 to December 31, 2002 were selected. The monthly prevalence rates of bipolar disorder increased with age, with the peak prevalence (2.1%) occurring in the 35–49 year age range. Of 13,396 identified bipolar patients, 64.2% were female, with an average age of 29.4±13.8 years. Lifetime bipolar diagnostic categories indicated 88.17% with bipolar I disorder, and 11.83% with bipolar II disorder. Analysis of patients' last bipolar diagnoses showed 4.95% with psychosis, 12.8% with mania, 58.1% with mixed state, 22% with depression, and 7.1% with hypomania. Severity categories were: severe, 11%; moderate, 8.6%; mild, 2.1%; remission, 2.2%; and unspecified, 76.1%. Key comorbidities of psychiatric disorders included: previous major depression, 41.7%; anxiety disorder, 36.1%; alcohol use disorder, 8.2%; substance use disorder, 9.6%; and personality disorder, 4.5%. General comorbidities included: hypertension, 13%; diabetes mellitus, 7.2%; obesity, 7.9%; chronic obstructive pulmonary disease, 4%; arthritis, 1.5%; neoplasm, 0.4%; ischaemic heart disease, 2.2%; and cerebral vascular diseases, 1.7%. This analysis reveals the prevalence and characteristics of bipolar disorder among patients in a managed care Medicaid population, underlining the significant health burden associated with this disorder.

PO2.6. HEALTHCARE UTILIZATION FOR BIPOLAR DISORDER IN A MANAGED CARE ORGANIZATION

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The purpose of this study was to determine the direct healthcare expenditures incurred by patients diagnosed with bipolar disorder in a managed care organization. Continuously enrolled adult patients with a medical claim for a diagnosis of bipolar disease between July 1, 2000 and June 30, 2001 were identified. All pharmacy and medical claims for these patients were then examined in the one-year period following the index diagnosis. A total of 4397 patients met the inclusion criteria. The average age of the identified cohort was 53 years, and 66.1% were female. Among these patients, a total of 91.3% were prescribed a psychotropic medication, and average annual pharmacy costs, based on ingredient costs, totalled $1940 per person. In addition, 29.7% of the patients had at least one hospital admission, 39.1% had at least one emergency department visit, and each patient averaged 10.6 outpatient visits. Average annual medical costs, based on submitted charges, totalled $30,811 per patient and direct healthcare

expenditures for this cohort totalled more than $144 million. These results demonstrate that patients diagnosed with bipolar disorder are high utilizers of medical services compared to the average health plan member, which indicates the need for creative and innovative programs to manage this population.

PO2.7. COGNITIVE IMPAIRMENT IN ACUTE AND REMITTED BIPOLAR PATIENTS

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There is increasing evidence that bipolar patients show cognitive impairments which are not only restricted to the acute episodes of the illness but also to remission periods. Nevertheless, there is controversy among authors with regard to what kind of cognitive dysfunctions persist in euthymic states. Moreover, there are some clinical factors such as relapses or subclinical symptoms which influence cognitive functioning in bipolar patients. On the other hand, recent studies have emphasized the influence of cognitive impairment on the psychosocial functioning of bipolar patients. Several areas of cognitive functioning were examined in 30 depressed bipolar patients, 34 manic or hypomanic bipolar patients and 44 euthymic bipolar patients. The control group consisted of 30 healthy subjects without history of neurologic or psychiatric disorders. A neuropsychological battery assessed attention, executive function, verbal and visual memory. The three patient groups showed cognitive impairment in verbal memory and frontal executive tasks compared with the control group. Patients with history of psychotic symptoms, bipolar I type, longer duration of illness and a higher number of manic episodes were the ones that were more likely to show neuropsychological disturbances. Poor neuropsychological performance was associated to poor functional outcome. These results suggest that psychotherapeutic approaches should address these cognitive impairments in order to improve quality of life in bipolar patients.

PO2.8. PREDICTORS OF TIME TO RELAPSE IN BIPOLAR I DISORDER

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In bipolar disorder, optimal treatment planning depends upon early prediction of illness course. The following post-hoc analyses examined predictors of time to relapse using pooled data from two bipolar maintenance studies. Subjects were 779 patients who achieved symptomatic remission from a manic or mixed index episode and entered double-blind maintenance therapy for up to 48 weeks with olanzapine (n=434), lithium (n=213), or placebo (n=132) following 6-12 weeks of acute open-label treatment with either olanzapine (Study 1) or olanzapine-lithium cotherapy (Study 2). Various patient and illness characteristics were assessed as possible predictors using Cox regression analyses, adjusted for therapy. Rapid cycling course, mixed index episode, number of mood episodes in the past year, early onset, bipolar family history, female gender, and lack of prior hospitalization for bipolar disorder were all significant predictors of shorter time to relapse. Stepwise analysis suggested that history of rapid cycling and a mixed index episode were the strongest predictors of time to relapse. Analysis by type of maintenance therapy also yielded differential predictors. In these samples, history of rapid cycling course, presenting with a mixed index episode, and >1 manic episode in the past year were most strongly predictive of a shorter time to relapse.

PO2.9. DIAGNOSIS OF BIPOLAR II DISORDER: OVERCOMING PROBLEMS

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This study aimed to explore the degree of agreement in the diagnosis of bipolar II disorder (BP-II) between the DSM-IV Structured Clinical Interview (SCID-CV) and a semi-structured interview based on Angst's hypomania checklist, and to assess priority among symptoms for BP-II diagnosis. 102 remitted depression outpatients were interviewed with SCID-CV and then with Angst's semi-structured interview following DSM-IV criteria. The SCID identified 29 cases of BP-II, 26 of bipolar I disorder (BP-I), and 47 of major depressive disorder (MDD). The semi-structured interview identified 69 cases of BP-II, 33 of MDD, and none of BP-I. The agreement for BP-II diagnosis between the two interviews was 53.9%, k=0.18. Re-analysis after deleting the SCID question on impact on functioning increased the agreement to 78.4%, k=0.55. Elevated mood and overactivity had the lowest kappa agreement (k=0.46, 0.49). For predicting BP-II, overactivity had the highest sensitivity (94.2%, elevated mood had 84.0%). Multiple regression for predicting BP-II, including all hypomanic symptoms, found that mood change and overactivity were the only strong and independent predictors. Overactivity plus at least 3 symptoms was present in 71, of whom 91.5% met also DSM-IV criteria for hypomania. Overactivity and elevated mood were strongly associated. These findings support a diagnosis of BP-II based on Angst's semi-structured interview (performed by a clinician) versus fully structured SCID interview. While DSM-IV always requires mood change for the hypomania diagnosis, these findings suggest that overactivity could have at least the same priority level.

PO2.10. HYPOMANIA AND MANIA HAVE DIFFERENT SYMPTOM PROFILES

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According to DSM-IV, manic and hypomanic episodes differ only in the degree of severity. Yet several lines of evidence, including family history, long-term diagnostic stability and linkage studies, point to bipolar I (BP-I) and bipolar II (BP-II) disorders being distinct forms. This suggests that mania and hypomania, which are the hallmarks of the two disorders, might have different symptom profiles. To test this hypothesis, we compared manic symptoms occurring in two BP-I and BP-II groups. 280 bipolar inpatients were assessed using the operational criteria for psychotic illness checklist with a lifetime perspective. Manic or hypomanic symptoms were investigated and compared between BP-I (n=158) and BP-II (n=122) patients. When compared with BP-II, BP-I disorder had a higher prevalence of reckless activity, distractibility, psychomotor agitation, irritable mood and increased self esteem. These five symptoms correctly classified 82.8% of BP-I and 80.1% of BP-II patients.

These findings suggest that mania and hypomania can be differentiated in their clinical profiles and serve to address the question of bipolar disorder nosography, that is whether BP-I and BP-II are the same or two distinct diseases. In fact, the different manic profiles might be a manifestation of a greater severity, or they might reflect a different physiopathology.

PO2.11. PHARMACOLOGICAL TREATMENTS OF 250 BIPOLAR I PATIENTS DURING A 1-YEAR NATURALISTIC FOLLOW-UP STUDY

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The prevention of recurrence and the acute management of depressive and manic episodes are the major goals in the treatment of bipolar disorder, characterized by a persistent, severe and lifelong course. Maintenance studies of lithium, divalproex and carbamazepine suggest that these medications have efficacy in this phase of illness management but that only a minority of patients do well with treatment with any one of this agents alone. Case reports and open trials consistently indicate that patients who have responded inadequately to a single drug may obtain better acute and lasting improvement when further medications are added. Recent studies found that long-term lithium-based treatment is less effective in mixed mania, secondary mania and mania associated with substance abuse, as well as rapid cycling. Our aim was to evaluate the clinical features, the relapse predictors and the maintenance therapy in a population of 250 bipolar patients during a 1-year naturalistic follow-up study. Socio-demographic and clinical variables and maintenance treatment data were collected. Results showed that 3.6%, 48.8% and 6.8% of patients were treated with one, two or three mood stabilizers, respectively. 58% of patients received also antidepressants, 14% typical and 37% atypical antipsychotics. There was no relapse in 31% of subjects and 90% of them showed a 50% reduction of illness duration. The risk of relapse seemed to increase in patients with depression at the first episode; rapid, switching cycling and worse treatment compliance. Data suggest that combination maintenance therapy may be effective in reducing the risk of episode recurrence and symptoms overall in bipolar patients.

PO2.12. PHARMACOLOGICAL TREATMENT OF ACUTE MANIA ACROSS EUROPE: BASELINE FINDINGS FROM THE EUROPEAN MANIA IN BIPOLAR LONGITUDINAL EVALUATION OF MEDICATION (EMBLEM) STUDY

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The European Mania in Bipolar Longitudinal Evaluation of Medication (EMBLEM) is a 2-year prospective, observational study on the outcomes of pharmacological treatment for mania conducted in 13 European countries. Adult patients with a diagnosis of bipolar disorder are enrolled within the standard course of care as in- or outpatients if they have initiated/changed oral medication (excluding benzodiazepines) for treatment of acute mania. All treatment decisions are at the discretion of the treating psychiatrist. Patients are enrolled in 2 principal cohorts: 1) initiated/changed to olanzapine, and 2) initiated/changed to non-olanzapine treatment. 600 psychiatrists are enrolling 4000 patients between December 2002 and March 2004 using the same study methods assessing demographics, psychiatric history, clinical status (Clinical Global Impression, Young Mania Rating Scale, Hamilton Scale for Depression, Life Chart Method), functional status (relationships, dependants, housing conditions, work, social contacts, Slice of Life items) and pharmacological treatment patterns including tolerability, compliance, and concomitant medication. Data collection is currently ongoing. At the time of writing, 2,500 patients have been enrolled. We will present: 1) descriptive baseline data of the patient population including sociodemographic and clinical characteristics and 2) comparisons between participating countries in terms of clinical severity, functional status and treatment patterns of included patients. As the biggest naturalistic study so far conducted in bipolar disorder, EMBLEM will provide invaluable information on important differences in patterns of care for mania in patients receiving pharmacological treatment in routine clinical practice.

PO2.13. TIME IN EUTHYMIA FOR BIPOLAR PATIENTS RECEIVING OLANZAPINE OR LITHIUM MAINTENANCE TREATMENT

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In evaluating maintenance therapies for bipolar disorder, it is important to consider not only time to relapse but also time in euthymia. The following post-hoc analyses compared time in euthymia for patients receiving either olanzapine or lithium. 543 patients with bipolar I disorder, manic or mixed type (Young Mania Rating Scale, YMRS ≥ 20), with a history of at least 2 manic or mixed episodes within 6 years, entered the study and received open-label combination therapy with olanzapine and lithium for 6-12 weeks. Of these, 431 patients met symptomatic remission criteria (YMRS total score ≤12 and Hamilton Scale for Depression, HAMD-21 total score ≤8) and were randomized to either olanzapine (n=217) or lithium (n=214) for 12 months of double-blind treatment. Time in euthymia was defined as the number of days in remission and free of any subsyndromal symptoms (YMRS=13-14; HAMD=9-14) during double-blind treatment. Patients receiving olanzapine maintenance treatment remained in euthymia for a median of 241 days compared with 177.5 days (p=0.26) for lithium patients. Olanzapine patients remained free of subsyndromal manic symptoms for a median of 250 days compared with 186 days (p=0.34) for lithium patients. Olanzapine patients remained free of subsyndromal depressive symptoms for a median of 241 days compared with 177.5 days (p=0.27) for lithium patients. Subsyndromal symptoms occurred relatively infrequently, in only 19.8% of olanzapine patients and 21.5% of lithium patients. In conclusion, olanzapine was similar to lithium in terms of patients' median number of days in euthymia, and subsyndromal symptoms accounted for a small amount of patients' time while in the study.

PO2.14.
LONG-TERM USE OF OLANZAPINE OR OLANZAPINE/FLUOXETINE FOR BIPOLAR DEPRESSION

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Olanzapine/fluoxetine combination (OFC) has shown efficacy in treating bipolar depression. Present analyses examined 6-month maintenance data for subjects who achieved remission of depressive symptoms following acute treatment. 379 subjects with bipolar depression completed 8 weeks of randomized, double-blind treatment using olanzapine (OLZ, n=179), placebo (n=145), or OFC (n=55). Of these, 192 were in remission (MADRS ≤ 12) upon entering open-label treatment, at which time they were switched from their acute-phase treatment to 5-20 mg/day open-label OLZ. After 1 week on OLZ, subjects could be switched to OFC as needed. Primary efficacy measure was the Montgomery-Åsberg Depression Rating Scale (MADRS). Manic symptoms were monitored using the Young Mania Rating Scale (YMRS). Time to relapse (MADRS >15) was estimated using Kaplan-Meier survival analysis. Of the 192 remitters, 120 (62.5%) remained free from relapse over the 6-month open-label period. For the 72 subjects (37.5%) who relapsed, median time to relapse was 194 days. Mean MADRS total score at open-label endpoint was 7.93 (SD 9.24, n=192) using a last-observation-carried-forward (LOCF) methodology. This open-label study suggests that OLZ and OFC may represent treatment options in the long-term management of bipolar depression. Further studies are necessary to replicate these findings using appropriate controls and double-blind methodology.

PO2.15.
EFFECT OF OLANZAPINE/FLUOXETINE COMBINATION ON CORE MOOD SYMPTOMS IN BIPOLAR DEPRESSION

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Depression scales frequently incorporate items addressing somatic symptoms such as disturbed sleep and appetite. Patients can experience improvements in these physical symptoms of depression while still having depressed mood. This post-hoc analysis examines the effect of olanzapine/fluoxetine combination on core mood symptoms in bipolar I depression. 833 subjects with bipolar depression were enrolled in this 8-week double-blind study and were randomized to olanzapine (n=370), placebo (n=377), or olanzapine/fluoxetine combination (n=86). Core mood was measured by an index created from the sum of items 1 (apparent sadness), 2 (reported sadness), 6 (concentration difficulties), 8 (inability to feel), 9 (pessimistic thoughts), and 10 (suicidal thoughts) of the Montgomery-Åsberg Depression Rating Scale (MADRS). Analyses utilized a last-observation-carried-forward (LOCF) methodology. Olanzapine/fluoxetine combination (-10.4±7.4) and olanzapine (-7.5±7.9) showed greater baseline-to-endpoint decreases in core mood items than placebo (-6.2±7.6, p<0.001 and p=0.02, respectively). Olanzapine/fluoxetine combination subjects also showed significantly greater improvement in the core mood index than olanzapine (p=0.002). These results suggest that MADRS improvement with olanzapine/fluoxetine combination represents core mood improvement and not just amelioration of the somatic symptoms of depression.

PO2.16.
IMPROVEMENT IN GLOBAL FUNCTIONING IN BIPOLAR PATIENTS: RESULTS FROM AN OPEN-LABEL RISPERIDONE STUDY

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The study aimed to examine the effect of risperidone monotherapy on global functioning in patients with bipolar I disorder. A 9-week, open-label (OL) extension trial of risperidone was conducted in patients previously randomized to 3 weeks of either placebo or risperidone monotherapy for the treatment of acute mania. The Global Assessment Scale (GAS) was used to assess overall functioning. Changes from OL baseline were analyzed using paired t test. This study included 105 patients who were previously randomized to placebo (PLA/RIS), and 134 to risperidone (RIS/RIS). Mean age was 35.2, and mean modal dose of risperidone was 4.6 mg. Mean (SD) OL baseline GAS score was 56.1 (17.6) for PLA/RIS patients, and 66.9 (13.0) for RIS/RIS patients. At OL endpoint, mean (SD) scores improved to 66.8 (21.7) and 77.7 (14.7), an improvement of 10.6 and 10.8 points, respectively (p<0.001 in both). Median scores at OL endpoint were 70.0 and 80.0, respectively. Relative to double-blind baseline, the RIS/RIS group improved by 41.9 points, and the PLA/RIS group by 31.1 points. In conclusion, treatment with risperidone resulted in significant and clinically meaningful improvements in overall functioning. Those who received risperidone for the entire 12 weeks improved to a level of minimal or no impairment, while those initially on placebo improved to a mild impairment level, supporting the role of risperidone in helping patients achieve restoration of their functioning.

PO2.17.
IMPROVEMENT IN GLOBAL FUNCTIONING WITH RISPERIDONE TREATMENT IN BIPOLAR PATIENTS

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The study was aimed to understand risperidone's effect on functioning in bipolar patients. It was focused on post-hoc analysis of Global Assessment Scale (GAS) scores from two randomized, placebo-controlled, 3-week trials of risperidone in patients with bipolar I disorder, currently manic (US and ex-US studies) or mixed (ex-US study). GAS scores from 1 to 100 were examined on a categorical basis (10 point/category increments) using last observation carried forward, LOCF (endpoint) and completer analyses. Between group analyses used Cochran-Mantel-Haenszel test, controlling for site and psychotic symptoms at baseline. Baseline GAS scores were comparable between risperidone and placebo, with 89% to 96% of patients scoring below 50, indicating serious symptoms and/or impairment in social or occupational functioning. At endpoint, significantly more risperidone-treated patients (52.4%-US; 78.3%-ex US) scored >50 versus placebo (27.7%-US; 41.5%-ex US) (p<0.001; p<0.001). Among study completers, 76.8% (US) and 84.6% (ex-US) of risperidone-treated patients scored >50 (p<0.05 and p<0.001 vs. placebo), and 20.3% (US) and 33.8% (ex-US) scored >70. From baseline, 42.9% (US) and 75.5% (ex-US) of risperidone-treated patients improved by >2 GAS categories (p<0.001; p<0.001 vs. placebo). Among completers, >2 cat-

egory improvement rates were 66.7% vs. 30.8% (US) (p=0.020) and 81.5% vs. 56.3% (ex-US) (p<0.001) for risperidone and placebo, respectively. In conclusion, risperidone treatment results in clinically meaningful improvements in functioning in bipolar patients.

PO2.18.
A TWELVE WEEK RANDOMIZED DOUBLE BLIND STUDY OF RISPERIDONE VS. HALOPERIDOL MAINTENANCE TREATMENT IN BIPOLAR DISORDER

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We report on a randomized double blind trial of risperidone vs. haloperidol in bipolar patients treated for twelve weeks after a manic episode. Remission was defined as either a Young Mania Rating Scale (YMRS) ≤12 or a combination of a YMRS ≤8 and a Montgomery-Asberg Depression Rating Scale (MADRS) ≤12 at 12 weeks (observed cases). The proportion of patients with good functioning by Global Assessment Scale ≥70 and of those who experienced motor events were also analyzed. More risperidone patients completed treatment. For both criteria, the rates of remission and good functioning were slightly greater in the risperidone than haloperidol arm (observed cases) without reaching statistical significance. With haloperidol, significantly more movement disorders (including hyperkinesia and dystonia) were observed. In conclusion, using stringent remission criteria, with risperidone more patients completed the study. Slightly higher remission and good functioning rates and fewer motor events were observed than with haloperidol. These results favor risperidone for maintenance treatment in bipolar disorder.

PO2.19.
RISPERIDONE MONOTHERAPY IN ACUTE BIPOLAR MANIA: A 9-WEEK EXTENSION TRIAL

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The study aimed to examine the safety and efficacy of risperidone monotherapy for bipolar I disorder. A 9-week, US-based, open-label extension study was conducted in patients previously randomized to 3 weeks of either double-blind placebo or risperidone monotherapy. Primary outcomes were mean changes from open-label baseline to endpoint in Young Mania Rating Scale (YMRS) total scores, Extrapyramidal Symptom Rating Scale (ESRS) total scores, and body weight. Of the 83 patients in the study, 38 had been previously randomized to double-blind placebo (PLA/RIS) and 45 to risperidone (RIS/RIS). The study was completed by 60% of patients. The mean modal dose of risperidone was 3.5±1.4 mg/day. Mean YMRS scores significantly improved from 14.4±7.5 to 6.5±6.6 (p<0.001) in PLA/RIS patients and from 10.3±6.9 to 8.2±8.1 (p=0.038) in RIS/RIS patients. Mean ESRS scores were 1.0±2.6 at baseline and 1.4±3.0 at endpoint in PLA/RIS patients and 1.2±2.3 and 1.1±2.1 in RIS/RIS patients. Mean body weight changes at endpoint were +0.1 kg in PLA/RIS patients and +0.4 kg in RIS/RIS patients. In conclusion, risperidone was well tolerated and significantly improved acute bipolar mania symptoms in patients previously treated with double-blind placebo or risperidone.

PO2.20.
RISPERIDONE IN THE TREATMENT OF ACUTE MANIA

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The study aimed to evaluate the efficacy and tolerability of risperidone in the treatment of acute manic patients. It was a prospective multicenter phase II-trial. Inpatients (18 to 65 years of age) with acute mania (baseline score ≥ 20 on the Young Mania Rating Scale, YMRS) were treated with oral risperidone with or without a benzodiazepine. 30 patients were enrolled (57% male, mean age 42±13 years). The mean daily risperidone dose at endpoint was 4.7 mg/day. 97% of the patients received a benzodiazepine (diazepam or lorazepam). Mean YMRS total score improved significantly from baseline to endpoint (28.8±6.0 to 12.7±11.9, p<0.0001). Improvement was significant from day 3 on (p=0.0002) and was maintained throughout the study. Manic symptoms improved in 28 of 30 patients, and 66.7% were rated as responders (improvement in YMRS ≥ 50%). Severity of mania on the Clinical Global Impression improved in 22 of 30 patients (p<0.0001). 15 patients had at least one adverse event (AE). 3 patients dropped out due to an AE, one patient due to lack of efficacy. Extrapyramidal-motor symptoms as measured by the Extrapyramidal Symptom Scale were low both at baseline and endpoint (0.08 and 0.22, respectively). In conclusion, risperidone was effective and well tolerated in the treatment of acute mania.

PO2.21.
PLACEBO-CONTROLLED STUDY OF ARIPIPRAZOLE IN THE TREATMENT OF BIPOLAR DISORDER PATIENTS EXPERIENCING AN ACUTE MANIC OR MIXED EPISODE

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The study aimed to compare the efficacy and safety of aripiprazole with placebo for the treatment of acute mania in patients with bipolar I disorder. In this phase III, multicentre, double-blind study, 272 patients with bipolar I disorder who were experiencing an acute manic or mixed episode were randomised to 3 weeks of treatment with either aripiprazole 30 mg daily (option to reduce to 15 mg for tolerability) or placebo. Key treatment outcome measures included the Young Mania Rating Scale (Y-MRS) total score, the Clinical Global Impression – Bipolar Disorder (CGI-BP), and the Positive and Negative Syndrome Scale (PANSS) Hostility subscale. Aripiprazole produced significantly greater improvements in Y-MRS compared with placebo at study endpoint (–12.5 vs. –7.2, p≤0.01), with improvements apparent as early as day 4. In addition, significantly more patients responded to aripiprazole (Y-MRS decrease ≥50%) than to placebo (53% vs. 32%, p≤0.01). Aripiprazole also significantly improved patients' scores on the CGI-BP Severity of Illness (mania) scale and the PANSS Hostility subscale, compared with placebo. Discontinuation rates due to adverse events were similar in the aripiprazole and placebo groups, while aripiprazole-treated patients showed fewer discontinuations due to lack of efficacy than those receiving placebo. There were no significant changes in body weight with arip-

iprazole compared to placebo. This is the second study to demonstrate the efficacy and safety of aripiprazole in the treatment of acute mania in patients with bipolar I disorder.

PO2.22.
RELAPSE PREVENTION WITH ARIPIPRAZOLE IN A 26-WEEK PLACEBO-CONTROLLED TRIAL IN BIPOLAR DISORDER

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The study aimed to compare aripiprazole with placebo in maintaining the stability of patients with bipolar I disorder in a 26-week, double-blind, relapse prevention study. Patients who had recently experienced a manic or mixed episode received aripiprazole 15–30 mg/day (starting dose 30 mg/day) for 6–18 weeks in an initial open-label stabilisation phase. 161 patients met stabilisation criteria (Young Mania Rating Scale ≤10 and Montgomery-Asberg Depression Rating Scale ≤13 for 4 consecutive visits or 6 weeks), and entered a 26-week, randomised, double-blind, maintenance phase during which they received aripiprazole treatment or placebo. The primary endpoint was time to relapse of manic, mixed, or depressive symptoms (requiring a dosing change in psychotropic medications other than study drug, or hospitalisation for manic or depressive symptoms). Time to relapse of symptoms was significantly prolonged with aripiprazole compared to placebo (p=0.020). In addition, patients receiving aripiprazole experienced significantly fewer relapses (manic, mixed, or depressive symptoms) than those receiving placebo (25% vs. 43%, p=0.013). The only adverse events (≥10% incidence) more commonly reported with aripiprazole than with placebo were anxiety and nervousness. Aripiprazole prolongs time to relapse of symptoms in stabilised patients with bipolar I disorder who previously experienced a manic or mixed episode.

PO2.23.
ZIPRASIDONE IN BIPOLAR MANIA: EFFICACY ACROSS PATIENT SUBGROUPS

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The study aimed to evaluate the efficacy of ziprasidone in bipolar mania, focusing on clinically relevant subgroups. It was a secondary analysis of two randomized, double-blind 21-day trials comparing flexible-dose ziprasidone (40-80 mg bid) to placebo in adults with mania associated with bipolar I disorder. Changes in Mania Rating Scale (MRS) and Clinical Global Impression - Severity (CGI-S) were calculated for combined study populations and in subgroups of patients with manic episodes, mixed episodes, and with or without psychotic symptoms. Mean daily dose was approximately 120 mg. At last visit (last observation carried forward, LOCF), mean change in MRS in patients receiving ziprasidone (n=268) was -11.72 (baseline 26.82) versus -6.69 (baseline 26.53) in patients receiving placebo (n=131) (p<0.001). Change in CGI-S for ziprasidone was -1.19 (baseline 4.71) versus -0.66 (baseline 4.76) for placebo (p<0.001). Significant improvement versus placebo was observed from day 2 for MRS and day 4 for CGI-S. The 95% confidence intervals for placebo-corrected least square (LS) mean change from baseline in all patients and in the 4 subgroups (manic, mixed, and with and without psychotic symptoms) overlapped, indicating comparable efficacy. In conclusion, ziprasidone rapidly improves symptoms and global illness severity in bipolar mania and is efficacious in mixed and manic episodes and in presence or absence of psychotic symptoms.

PO2.24.
ADJUNCTIVE ZIPRASIDONE FOR BIPOLAR MANIA: SHORT- AND LONG-TERM DATA

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Antimanic agents may require 2-3 weeks for acute symptom control, making adjunctive antipsychotic therapy attractive. Because ziprasidone has shown rapid efficacy in acute mania, we investigated its use in bipolar patients receiving lithium. Lithium-treated bipolar inpatients with Mania Rating Scale (MRS) score ≥14 were randomized to ziprasidone (80-160 mg/d) or placebo for 21 days (lithium serum levels: 0.8-1.2 mEq/L). A 104-week, open-label study (ziprasidone 40-160 mg/d) assessed mean endpoint changes from continuation baseline (last observation carried forward). Day-4 rates of change were significant with ziprasidone (n=102) but not with placebo (n=103) for MRS, Clinical Global Impression-Severity and Improvement (CGI-S, CGI-I), Behavior and Ideation, and Hamilton Scale for Depression (HAM-D). Day-14 rates of change in MRS and CGI-S (primary endpoints) were comparable, but mean changes with ziprasidone were significantly greater for Positive and Negative Syndrome Scale (PANSS) variables at days 14 and 21. Improvement from continuation baseline (n=89) stabilized at weeks 4-12 for MRS, at weeks 12-28 for CGI-S, and after week 52 for PANSS Positive. MRS and PANSS Positive improvements were sustained to endpoint; PANSS Total improvement until week 28 (with fluctuations thereafter). The most common side effects were somnolence and extrapyramidal symptoms (usually mild or moderate). There was no change in median weight, and only one case of glucose 1.5 x ULN. No subject had QTc interval >480 msec despite concomitant lithium. In conclusion, ziprasidone plus lithium effected a significantly greater day 4 rate of change in mania-related psychopathology, suggesting more rapid efficacy than with lithium alone. Long-term improvements were sustained, with good tolerability.

PO2.25.
ZIPRASIDONE'S LONG-TERM EFFICACY AND SAFETY IN BIPOLAR DISORDER

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The study aimed to evaluate efficacy and tolerability of long-term ziprasidone treatment in patients with bipolar disorder. We analyzed primary results from a 2-year open-label extension of a 21-day placebo-controlled trial of ziprasidone in mania associated with bipolar I disorder. Efficacy assessments were performed at day 3 and weeks 1, 2, 4, 12, 28, 52, 76, and 104. Observed cases and last visit (LOCF) analyses were conducted. The extension enrolled 127 patients. Mean dosage was 122.4 mg/d. A Kaplan-Meier survivor estimate found 50% of patients remained in the study at day 100 and 30% after 1 year. Scores on the Mania Rating Scale and Clinical Global Impres-

sion-Severity (CGI-S), the primary efficacy variables, continued to improve from extension baseline up to week 12, with improvement sustained at weeks 28, 52, 76, and 104, and last visit. Concomitant medications included anxiolytics (77.9%), hypnotics and sedatives (41.7%), antiepileptic drugs (29.9%), antidepressants (27.6%), and lithium (14.1%). Ziprasidone was well tolerated; 15 (11.8%) patients discontinued due to treatment-related adverse events. Fourteen (12.5%) patients had weight gain ≥7% and 20 (17.9%) weight loss ≥7%. In conclusion, ziprasidone is associated with long-term symptom and global improvement in patients with bipolar I disorder and is well tolerated, with a weight-neutral profile.

PO2.26. RETROSPECTIVE ASSESSMENT OF RISK FACTORS FOR TREATMENT EMERGENT GLUCOSE ABNORMALITIES DURING RANDOMIZED, DOUBLE-BLIND CLINICAL TRIALS OF MEDICATIONS FOR TREATMENT OF BIPOLAR DISORDER

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We retrospectively examined a large database pooled from multiple randomized, double-blind clinical trials of medications for treatment of bipolar disorder. Non-fasting glucose values were used to identify patients with treatment emergent diabetes (TED, two non-fasting glucose values of at least 200 mg/dl during the study, an endpoint non-fasting glucose value of at least 200 mg/dl, new clinical diagnosis of diabetes, or addition of anti-diabetic medications). Individuals without repeated glucose values of at least 140 mg/dl were considered to have normal glucose tolerance (NGT). Patient demographics and diabetes risk factors (age of at least 45 years, body mass index (BMI) of at least 25 kg/m^2, hypertension, ethnicity, and elevated random glucose) were assessed in 1382 patients (olanzapine n=982, haloperidol n=170, divalproex n=105, placebo n=105). TED was present in 1.3% of patients, with a median time to TED of 61.5 days. Comparing entry characteristics, patients subsequently identified with TED (n=18) were more obese (BMI 35.3±8.6 vs. 27.4±6.4 kg/m^2; p<0.001), older (45.8±10.9 vs. 39.2±12.0 years, p=0.019), had higher mean non-fasting glucose levels (139.4±40.8 vs. 95.0±15.4 mg/dl; p<0.001), and had more frequently hypertension (33.3% vs. 13.5%, p=0.028) and a non-Caucasian ethnicity (55.6% vs. 24.7%, p=0.005) than the NGT cohort (n=1307). Significantly more TED patients had at least 2 baseline risk factors for diabetes compared with the NGT cohort (94.4% vs. 36.6 %, p<0.001) and all TED patients had at least one baseline risk factor. In conclusion, in monotherapy clinical trials for the treatment of bipolar disorder, the short-term risk factors for diabetes in patients overlapped those of the general population.

PO2.27. EFFECT OF OXCARBAZEPINE ON PLASMA CONCENTRATIONS OF RISPERIDONE AND OLANZAPINE IN PATIENTS WITH BIPOLAR OR SCHIZOAFFECTIVE DISORDERS

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Oxcarbazepine, a keto-analog of carbamazepine, is a new anticonvulsant drug which may also be effective in patients with bipolar disorder. Unlike carbamazepine, which is an inducer of the cytochrome P450 isoforms and may accelerate the elimination of several therapeutic agents, including the novel antipsychotics risperidone and olanzapine, oxcarbazepine does not appear to induce these enzymes. In the present investigation, the effect of a treatment with oxcarbazepine on plasma concentrations of the new antipsychotics risperidone and olanzapine was evaluated in 22 patients, 12 females and 10 males, with bipolar or schizoaffective disorder. Oxcarbazepine, at a dose of 450-1200 mg/day, was administered for 4-6 consecutive weeks to 10 patients stabilized on risperidone therapy (2-6 mg/day) and 12 on olanzapine (5-20 mg/day). Steady-state plasma concentrations of risperidone and its metabolite 9-hydroxyrisperidone and olanzapine were measured by high pressure liquid chromatography before addition of oxcarbazepine after at least 4 weeks from the start of adjunctive treatment. There were only minimal and statistically insignificant changes in mean plasma concentrations of risperidone and its active metabolite 9-hydroxyrisperidone, and olanzapine during the study period. Oxcarbazepine co-administration with either risperidone or olanzapine was well tolerated. Our findings indicate that oxcarbazepine does not affect the elimination of risperidone and olanzapine. In view of the increasing use of anticonvulsants with mood-stabilizing properties in combination with new antipsychotics, the absence of an inducing effect of oxcarbazepine on the elimination of these agents might represent an important advantage.

PO2.28. OXCARBAZEPINE FOR HYPOMANIA IN BIPOLAR II DISORDER

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Oxcarbazepine (OXC) is an anticonvulsant that may also be effective in the treatment of bipolar I disorder, according to several controlled and uncontrolled studies. However, the potential usefulness of this compound in bipolar II disorder is still unknown. Twelve patients with DSM-IV bipolar II disorder currently experiencing a hypomanic episode were enrolled in this observational study. Their Young Mania Rating Scale score was above 12. OXC was introduced as an adjunctive treatment and titrated from 300 mg/day up to a target dose of 900 mg/day, depending on the clinical status and tolerability. Follow-up was 6 months. Five patients discontinued OXC for several reasons. There was a statistically significant improvement in hypomanic symptoms from week 2 onwards (Wilcoxon p<0.05). The most frequent side effect was diplopia (n=3). No case of hyponatremia was observed. OXC could be effective in the treatment of hypomania in bipolar II patients. Due to potentially high placebo response in this population, double-blind, randomized clinical trials should be carried on.

PO2.29. COMBINATION QUETIAPINE THERAPY IN THE LONG-TERM TREATMENT OF PATIENTS WITH REFRACTORY BIPOLAR I DISORDERS

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The objective of this study was to determine the long-term effectiveness of combination therapy with quetiapine in preventing relapses in

patients with refractory type I bipolar disorders. Twenty-one outpatients with type I bipolar disorder who had responded inadequately to standard treatments were treated in an open-label study with ongoing medication in combination with quetiapine (increasing doses until clinical response, 518±244 mg/day) for 26-78 weeks. Illness response was assessed using the Clinical Global Impression (CGI) scale. Relapse rates before and during quetiapine treatment were compared by computing incidence risk ratios. There were highly significant differences before versus during combination quetiapine treatment in the overall relapse rate (risk ratio = 2.9, 95% CI 1.5-5.6), the manic/mixed relapse rate (risk ratio = 3, 95% CI 1.5-7.1), and the depression relapse rate (risk ratio = 2.4, 95% CI 1.3-4.4). The mean CGI scores improved significantly during quetiapine treatment (p=0.002) and remained significantly better over a 52-week maintenance period (p=0.036). Long-term treatment with quetiapine combination therapy reduced the probability of manic/mixed/depressive relapses in patients with bipolar I disorder refractory to standard treatment.

PO2.30. EFFICACY OF TOPIRAMATE IN THE TREATMENT OF REFRACTORY BIPOLAR I AND II DISORDER

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The study aimed to examine the efficacy and tolerability of topiramate as an adjuvant mood stabilizer in treatment resistant bipolar I or II disorder. 22 patients with DSM-IV bipolar I or II disorder deemed refractory to an adequate trial with one or two mood stabilizers received additional treatment with topiramate (average endpoint dose 230 mg/day) for 12 weeks. There were 15 patients in a manic, hypomanic or mixed episode and 7 patients in a depressive episode. 11 patients were male and 11 female; their mean age was 39 years. Efficacy of treatment was tested on a monthly basis by the Young Mania Rating Scale, the Modified Mania State Rating Scale, the Hamilton Depression Scale, and the Clinical Global Impression. Side effects, including weight changes, were monitored. ANOVA with repeated measures showed a significant reduction in the mean scores of all efficacy measures. Medication was well tolerated, and the average weight dropped by seven pounds. Large scale, double blind studies are needed to further explore the efficacy and tolerability of topiramate in bipolar disorders.

PO2.31. OPEN ADD-ON OF LEVETIRACETAM IN BIPOLAR AND BIPOLAR SPECTRUM PATIENTS: FIRST EVIDENCE OF EFFICACY

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Levetiracetam (LEV) is a new effective antiepileptic drug, with a prevaling GABAergic mechanism of action. The study investigated the potential efficacy of LEV add-on to previous treatments, other than mood stabilizing agents, in 20 outpatients, 13 males and 7 females, affected by bipolar disorder (4 type I, 6 type II) or bipolar spectrum disorders (4 cyclothymic disorder, 2 mixed mania, 4 borderline personality disorder with mixed mood and conduct symptoms). The patients received LEV 500 mg twice a day orally for 60 days, added in an open design to previous antipsychotic and benzodiazepine treatments, not modified during the study period, that had induced an incomplete remission of excitement. The severity of mania and related symptoms was assessed at day 0, 15, 30 and 60 by the Bech-Rafaelsen Scale of Mania (BRSM) and the Brief Psychiatric Rating Scale (BPRS), 18 items version. Both BRMS and BPRS total and item scores showed a rapid and significant decrease following LEV add-on. The results provide a first indication of a positive effect of LEV in excited patients, suggesting an action of LEV on both mood and emotional features of the bipolar syndrome.

PO2.32. RE-DEFINING THE PREVALENCE OF BIPOLAR DISORDERS ACCORDING TO A BROAD CLINICAL BIPOLAR SPECTRUM

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The aim of the present study was to re-evaluate outpatients given a diagnosis of DSM-IV-TR mood disorder with criteria referring to a broader spectrum of bipolar disorder. All patients referring to the Anxiety and Mood Disorders Unit during a two years period were assessed by means of the Structured Clinical Interview for DSM-IV (SCID-I). Information from psychiatric records was routinely incorporated into the patient's interview, thereby ensuring a record of hypomania (and/or mania) if or when it occurred. Patients whose mood disorder diagnosis was confirmed were re-evaluated by a different interviewer according to criteria set for a broader definition of bipolar disorder spectrum, as proposed by Akiskal. 261 outpatients were included in the present study. According to DSM-IV-TR criteria, 220 (84.3%) were diagnosed as affected by a depressive disorder. 41 subjects were diagnosed as bipolars (15.7% of the whole group). When patients were reclassified according to the bipolar spectrum, 86 subjects switched from the unipolar to the bipolar group, yielding a proportion of unipolars and bipolars of 51.3% (n=134) and 48.7% (n=127) respectively. Therefore, a significant proportion of patients classified as depressives according to the DSM-IV-TR criteria could be re-classified as bipolars when we used the broadly defined bipolar spectrum. The proper recognition of the entire clinical spectrum of bipolarity has important implications for the treatment of patients affected by mood disorders.

PO2.33. BIPOLAR DISORDER IN CHILDREN AND ADOLESCENTS

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The purpose of this study was to describe the clinical characteristics and course of bipolar disorder in children and adolescents. It was carried out in 54 patients hospitalized at least once during the period 1996-2003. Bipolar disorder was diagnosed according to DSM-IV. In the first hospitalization, the patients' mean age was 15.8 years (range 12-19 years). The sex ratio was about 2:1 in favour of females. Heredity was found in 94% of cases. In patients below the age of 16, symptoms were frequently atypical. In those above the age of 16, drug abuse was often observed. The use of mood stabilizers in combination with psychotherapy and sociotherapy influenced significantly the subsequent course of the disorder.

PO2.34.
THREE CASE REPORTS ON THE USE OF RISPERIDONE IN THE LONG-TERM TREATMENT OF BIPOLAR DISORDER

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We report on three female bipolar patients who were partial responders to lithium, and unresponsive to other therapies (anticonvulsants, antidepressants, typical antipsychotics, various combinations). They had suffered from at least one manic and one depressive episode per year. All of them presented a complete remission of symptoms after combination therapy with lithium (plasma levels above 0.8 mEq/l) and risperidone 1-3 mg/day. Two of them have been asymptomatic for 16 and 17 months respectively. The third patient, after several months during which she was asymptomatic, discontinued lithium against the psychiatrist's advice and took only 3 mg of risperidone daily. For the next 18 months the patient has been on risperidone monotherapy and asymptomatic.

PO2.35.
PHARMACOLOGICAL TREATMENT AND QUALITY OF LIFE OF BIPOLAR PATIENTS: CORRELATION WITH CLINICAL FEATURES

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Bipolar patients are reported to have a significant impairment in health related quality of life when compared with the general population. There are reports showing that high levels of anxiety in bipolar patients are associated with impairment in community functioning. Also, the number of episodes, mainly the depressive ones, correlated negatively with inter-episode functioning. There are also reports that a poor adherence to treatment is associated with a poorer outcome. Nevertheless there is still lack of data concerning the clinical correlates of impairment, namely the type of pharmacological treatment and adherence to treatment. The objective of our study is to explore the relationship between health related quality of life, type of treatment and adherence to treatment, and the relationship between clinical features such as age of first episode, length and number of episodes, polarity of episodes, comorbidity with anxiety, current levels of anxiety, and quality of life. Forty euthymic patients (bipolar I and II) with a long follow-up in a psychiatric university hospital or a private clinic were assessed with the Well-Being Questionnaire (WBQ) and Psychological General Well-Being Schedule (PGWBS). We recorded the type of medication, adherence to treatment, number of episodes and hospitalizations, age at first episode, length and number of episodes and polarity of episodes by a semi-structured interview, complemented by the consultation of the clinical records. Anxiety symptoms were assessed by the Hamilton Anxiety Scale (HAMA) and a semi-structured interview. Preliminary results indicate that inter-episode anxiety has a strong negative correlation with quality of life. The use of atypical antipsychotics appears to be correlated with a better adherence to treatment, a decreased number of hospitalizations and a better quality of life versus the use of typical antipsychotics. The length and number of depressive episodes seem to be correlated negatively with quality of life (regardless the treatment).

PO2.36.
PLASMA LEVELS OF MOOD STABILIZERS AND RELAPSES IN BIPOLAR DISORDERS

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To date most studies have emphasised the role of mood stabilizers (MS) in the prophylaxis of bipolar disorders and pointed to discontinuation of such drugs as a leading cause of illness exacerbation. In contrast with this approach, the aim of our study was to identify bipolar patients experiencing affective episodes in spite of regular use of mood stabilizers and ascertain their demographic and clinical characteristics. Plasma levels of mood stabilizers (lithium, carbamazepine and valproate) were measured in fifty bipolar patients (DSM-IV diagnosis) upon hospital admission. Subjects with therapeutic and subtherapeutic MS plasma levels were compared on demographic variables and symptom profiles assessed with the Hamilton Depression Rating Scale and Young Mania Rating Scale. Thirty percent of patients had therapeutic levels of mood stabilizers upon admission. These subjects did not differ from those with sub-therapeutic levels as regards demographic characteristics and type and severity of symptoms. This preliminary study suggests that affective episodes are common among bipolar patients who regularly take mood stabilizers. Further research is warranted to investigate the role of non-pharmacological factors in bipolar disorder recurrence.

PO2.37.
LITHIUM AND CARBAMAZEPINE IN LONG-TERM TREATMENT OF BIPOLAR DISORDER

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Seventy-eight patients with stabilized bipolar I disorder were randomly assigned to monotherapy with carbamazepine (600-1200 mg/day), lithium (0.7-1.0 mEq/l) or placebo for 12 months. Carbamazepine and lithium were superior to placebo in prolonging the euthymic phases and reducing the intensity of recurrences. Carbamazepine was superior to placebo in prolonging the time to any mood episode, while lithium was superior to placebo in prolonging the time to a new manic or hypomanic episode. This trial confirms the previous data about the mood stabilizing properties of the two drugs. Although lithium was previously regarded as the first choice drug in the maintenance therapy of bipolar disorder, it seems more reasonable to use it in bipolar I disorder with predominant manic/hypomanic episodes.

PO2.38.
OXCARBAZEPINE IN THE TREATMENT OF BIPOLAR I DISORDER

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This was a six month, open-label, prospective trial of oxcarbazepine (OXC) in six patients, 18-65 years old, with a DSM-IV diagnosis of bipolar I disorder. Two patients were depressed, two manic, one euthymic and one showed a mixed state with psychotic symptoms. OXC was titrated from 150 mg/die up to 1200 mg/die. The evaluation was made by the Young Mania Rating Scale (YMRS), the Hamilton Rating Scale for Depression (HAMD) and the Global Assessment Schedule. One manic patient showed an improvement in YMRS >50% within 2 weeks. The other manic patient dropped out because

of severe sedation. Both depressed patients had an improvement in HAMD ≥50% within 3 months. The euthymic patient had an acute manic episode after 15 days, but responded to an increase of the dosage of OXC and was euthymic again at day 40. The patient with a mixed state showed an improvement in YMRS ≥50% within 2 weeks. The side effects were mild or moderate (epigastralgia, rash, dizziness, sedation). These very preliminary data suggest that OXC has both antimanic and antidepressant properties.

PO2.39. EFFICACY OF THE COMBINATION OF RISPERIDONE AND TOPIRAMATE IN THE TREATMENT OF PATIENTS WITH BIPOLAR DISORDER

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The study investigated the efficacy of the combination of risperidone and topiramate in patients with bipolar disorder. Thirty-nine patients (17 male and 22 female, aged 18-65 years), fulfilling DSM-IV criteria for bipolar disorder, were recruited. They were admitted to the hospital due to the acute exacerbation of bipolar disorder (20 patients had a manic episode and 19 had a depressive episode). They were administered risperidone (4-8 mg/day) plus topiramate (100-200 mg/day). The Clinical Global Impression (CGI), the Young Mania Rating Scale (YMRS) and the Montgomery-Asberg Depression Scale (MADRS) were used in order to assess the efficacy of the combination. The first assessment was made prior to initiation of the treatment. The second assessment was made after three months of continuous therapy. After three months, the YMRS total score improved in 11 patients. The MADRS total score improved in 9 patients. This is a preliminary evidence of the efficacy of the combination.

PO2.40. THE PREVALENCE OF BIPOLAR DISORDER IN AN ITALIAN POPULATION LIVING IN ARGENTINA: A PRELIMINARY STUDY

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Bipolar spectrum disorders, which include bipolar I, bipolar II, and bipolar disorder not otherwise specified, frequently go unrecognized, undiagnosed, and untreated, with great social and economical consequences. To our knowledge, there are no systematic studies evaluating the prevalence of bipolar disorder (BD) in an Italian population. We evaluated the prevalence of BD in the population living in Villa la Angostura (Argentina) including only people of Italian origin, meaning people born or with both parents born in Italy. The Mood Disorder Questionnaire (MDQ) was administered to a total of 122 people (average age 40.3+5.3 years; 50.8% males; 5 with elementary degree, 11 medium, 38 high school, 46 with university degree, 11 ongoing students, 11 did not complete university). Those with a total score of 7 or more (n=21) were re-evaluated in a in-depth psychiatric visit, to confirm the BD diagnosis. The crude prevalence of BD from MDQ administration was 13.9%. Of the 17 people with an MDQ total score of at least 7, 12 (70.6%) were confirmed as having BD. On the other hand, 36 of the 105 subjects with a total score below 7 (34.3%) showed mild to moderate psychiatric problems. Four (33.3%) of BD patients were unaware of their condition. Six out of the 8 aware patients were treated with a pharmacological treatment. All patients unaware of their condition started appropriate therapy during the visit.

PO2.41. OLANZAPINE IN THE TREATMENT OF MANIC EPISODE

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An open trial of olanzapine vs. haloperidol was carried out in 36 inpatients with mania (score of at least 20 on the Young Mania Rating Scale, YMRS, at baseline), aged 23-55 years, both sexes. Group A (n=17) received olanzapine (5-20 mg/day) and group B received haloperidol (3-15 mg/day) for four weeks. Evaluations (YMRS; Montgomery-Åsberg Depression Rating Scale, MADRS; General Clinical Impression; extrapyramidal symptoms, body weight) were made at baseline and after 3, 7, 14, 21 and 28 days of treatment. Both groups showed a significant clinical improvement, but the side effect profile and compliance were better in group A. The MADRS score increased during treatment in group B. Group B patients had somnolence in 43% of cases, extrapyramidal symptoms in 52% and hypotension in 13.2%. Some patients of group A presented weight gain (1-3.5 kg).

PO2.42. REMISSION IN MAJOR DEPRESSION: BEYOND HAMD-17 ≤ 7

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Remission is now widely accepted as the goal of treatment for major depressive disorder (MDD) and has been defined as a score on Hamilton Rating Scale for Depression (HAMD-17) ≤ 7. Patients who remit by this definition have been shown to have a lower risk of relapse and improved physical and social functioning. However, various symptom domains, such as physical symptoms and particularly painful physical symptoms, are increasingly recognized as playing a significant role in the morbid burden of depression, and no single scale captures all of these symptom domains well. Recently collected data regarding distinct symptom domains and global/functional remission metrics will be presented. Treatment of all symptom domains is more effective in achieving remission. Remission is best defined by utilizing multiple scales such as global or functional ratings, at various severity cutoffs.

PO2.43. THE CONSEQUENCES OF NON-REMITTED DEPRESSION ON HEALTH CARE UTILIZATION AND PRODUCTIVITY: A 23-YEAR FOLLOW-UP

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The study aimed to assess the association between remission status on health care utilization and productivity loss of a 23-year cohort of patients diagnosed with major depression. A cohort of 424 patients treated for unipolar depression in 1980 was followed longitudinally. After 23 years, 72.9% of the surviving cohort participated. DSM-IV

depression criteria were used to establish remission status for this analysis. The self-reported physician visits were higher for currently depressed vs. currently remitted respondents (9.0/year vs. 4.5/year, p=0.007). The currently depressed utilized more antidepressants than the currently remitted (1.9 vs. 1.0, p<0.001). The reduced activity days due to physical or emotional problems (8.5/30-day vs. 2.4/30-day) and days kept in bed by physical or emotional problems (4.1/30-day vs. 0.8/30-day) were higher for currently depressed vs. currently remitted (p<0.001). In conclusion, when controlling for the socio-demographic characteristics of age, sex, and education, self-reported health care utilization and losses in productivity are higher in currently depressed patients than currently remitted depressed patients. Despite treatment, 34% of the surviving cohort failed to achieve remission of symptoms and depression continues to negatively impact their work productivity and ability to function socially and result in increased overall health care utilization.

PO2.44.
IMPROVING MOTHER-INFANT INTERACTION HELPS REDUCE POSTNATAL DEPRESSION: RESULTS OF A RANDOMISED CONTROLLED TRIAL FROM PAKISTAN

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Recent community studies have reported high prevalence rates for post-partum depression in South Asia, ranging from 19.8% in Tamil Nadu, India to 28% in rural Pakistan, but little work has been done on developing feasible community-based interventions. We tested the effects of a child-focused intervention on levels of postnatal maternal mental distress over a period of 6 months. A randomised cluster design was used. 172 mothers from five union councils in a rural sub-district received the programme, whereas 153 mothers from the other five union councils acted as controls. The treatment group received a structured antenatal education programme ('Learning through Play') administered by a trained lady health worker. Subjects were assessed at baseline (about 6 weeks antenatal) and again about 10-12 weeks postnatal. The mental state of the mothers was assessed using the World Health Organization's Self Reporting Questionnaire (SRQ-20) that has been validated in the study area. The two groups of mothers had similar levels of mental distress at baseline as measured by the SRQ-20 (p=0.42). There was a significant improvement in SRQ scores in the intervention group (p=0.018), but not in the control group (p= 0.45). In conclusion, an intervention to improve the quality of mother-infant relationship reduced levels of postnatal maternal distress in the group receiving the intervention. Such child-focused interventions might be more practical and culturally acceptable in developing countries, and have health benefits for both mother and baby.

PO2.45.
ASSESSMENT OF THE EFFICACY OF A COGNITIVE-BEHAVIORAL GROUP PSYCHOTHERAPY PROGRAM FOR PATIENTS WITH DYSTHYMIC DISORDER

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This study aimed to evaluate the efficacy of a structured cognitive-behavioral oriented, manual based, group therapy programme for outpatients with dysthymic disorder in a mental health primary care setting. The psychotherapy programme was based on the operant conditioning and social learning theory and on Lewinsohn et al. model for psychotherapy of depression. ANOVA for repeated measures was used to analyze changes in Beck Depression Inventory (BDI), State-Trait Anxiety Inventory (STAI) and Quality of Life Depressive Scale (QLDA), administered at T1 (before beginning of the therapy), T2 (at the last session) and T3 (8 months after the last session). Demographic and clinical characteristics of 170 participants, as well as significant differences in some of these variables between patients completing the psychotherapy programme and dropouts, will be presented. The degree of clinical improvement after the therapy will be shown for all the measures. Variables with predictive value for greater improvement in BDI will be identified. This is the first report of an ongoing study, which demonstrates the long lasting efficacy of a group psychotherapy program for dysthymic patients in a mental health primary care setting.

PO2.46.
COGNITIVE FEATURES AND RESPONSE TO PHARMACOLOGICAL TREATMENT OF MAJOR DEPRESSION: AN EXPLORATIVE ANALYSIS

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Pharmacotherapy of mood disorders has reduced morbidity and improved outcomes for millions of individuals worldwide, but, unfortunately, not all subjects are responsive to treatment. Useful clinical predictors of response to antidepressants have not been well identified yet; metabolic and genetic differences among individuals have been hypothesized related to differential response to pharmacological treatments. On the other hand, cognitive features and personality traits may play a substantial role in the overall treatment outcome. The aim of the present study was to investigate the relation between treatment outcome of a major depressive episode and general intelligence, as expressed by the Intelligence Quotient (IQ), measured with the Weschler Adult Intelligence Scale-Revised (WAIS-R). The sample consisted of 57 inpatients affected by mood disorders (major depressives/bipolars 45/12; females/males 42/15; mean age at admission 51.9±13.3, mean age at onset 38.0±15.1). All subjects received the WAIS-R as a part of their psychological evaluation. Individuals with severe mental retardation, dementia, substance abuse/dependence, neurological disorder or clinical/laboratory indications of a severe organic disease were excluded from the sample. At intake, all patients were evaluated at baseline and weekly thereafter until the sixth week using the 21-item Hamilton Rating Scale for Depression (HAM-D-21). All patients were administered fluvoxamine, after a 7-day washout period, to reach 300 mg daily from day 8 until the end of the

trial. In our sample, IQ scores of non-responders to treatment (n=15) showed a trend to converge under the medium IQ score of 100. By comparing patients with a global IQ score lower than 100 and subjects with an IQ equal or higher than 100, we could observe significant differences regarding their response to fluvoxamine (p=0.024). Compared to other subjects, those with an IQ lower than 100 showed a more severe depressive symptomatology after three (p=0.03), four (p=0.018), five (p=0.03) and six weeks (p=0.049) of treatment. After the inclusion in the analyses of sex, educational level, age at onset and depression severity at the intake, results remained statistically significant. The present data support a relation between intelligence (IQ) and antidepressant treatment outcome. However, the small number of subjects (n=57) and of non-responders to fluvoxamine (n=15) represent major limitations of our study. Thus, further investigations on larger and independent samples are required.

PO2.47.
SHORT-TERM OUTCOME OF TREATMENT-RESISTANT DEPRESSION

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The study aimed to investigate the short-term course of depression during hospitalization in a group of patients who underwent electroconvulsive therapy (ECT) as compared to a group of patients who did not receive ECT. Twenty-seven patients with treatment-resistant depression were consecutively ascertained during an inpatient treatment: 20 patients were assigned to ECT sessions and 7 patients received a third standard antidepressant treatment because they had contraindications to ECT or refused it. Response criteria were defined a priory: 1) a > 50% total score decrease from baseline to endpoint of 17-item Hamilton Depression Rating Scale (HAM-D); 2) a score of one or two on the Clinical Global Impression - Improvement (CGI-I). An additional criterion of response with remission was defined as 3) a total score of < 7 on the 17-item HAM-D. The ECT group presented a significant greater proportion of responders than the psychopharmacological control group on the HAM-D (ECT group responders 17 of 20; control group responders 1 of 7; Fisher's exact test, p=0.002) and on the CGI-I (ECT group responders 17 of 20; control group responders 2 of 7; Fisher's exact test, p=0.01). Evaluating the more stringent criterion of full remission of depressive symptoms on the HAM-D the ECT group also responded significantly better than the control group: 14 patients of the ECT group reached the remission state but no patient of the control group achieved remission (Fisher's exact test, p=0.002). In conclusion, ECT continues to be an important option for patients with treatment-resistant depression when psychopharmacotherapy does not achieve a full remission of symptoms.

PO2.48.
EARLY SYMPTOM RESPONSE DURING TREATMENT WITH DULOXETINE 60 MG QD: HAMD-17 ITEMS

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Understanding of time to onset of response for various symptoms of major depressive disorder (MDD) can be clinically useful. Data were pooled from two 9-week trials that compared duloxetine 60 mg qd (n=244) with placebo (n=251) in the treatment of MDD patients. Mean changes in Hamilton Depression Rating Scale-17 (HAMD-17) items and a visual analog scale (VAS) for pain were analyzed. Duloxetine-treated patients experienced greater improvement compared with placebo-treated patients (p<0.05) at week 1 for depressed mood, guilt, suicidality, work/activities, psychic anxiety, as well as VAS back pain and shoulder pain; week 2 for retardation and VAS pain overall; week 3 for hypochondriasis; week 5 for somatic general, week 7 for middle and late insomnia, and week 9 for somatic gastrointestinal (GI), genital, insight, and early insomnia. Significant advantages for duloxetine were not achieved at any visit for agitation, somatic anxiety, or weight loss. At weeks 1 and 2, somatic GI and weight loss showed significant advantages for placebo. In conclusion, response to duloxetine therapy was most rapid for the core emotional and painful physical symptoms of depression. There were initial, transitory, unfavorable responses in GI-related symptoms. Slower responses (5 to 9 weeks) were achieved for sleep, genital, and non-painful somatic symptoms.

PO2.49.
EFFICACY OF DULOXETINE TREATMENT: ANALYSIS OF POOLED DATA FROM SIX PLACEBO- AND SSRI-CONTROLLED CLINICAL TRIALS

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Pooled clinical trial data were utilized to compare the efficacy of duloxetine with that of selective serotonin reuptake inhibitor (SSRI) comparators using the a priori specified primary efficacy outcome - mean change in Hamilton Scale for Depression (HAMD17) total score. Data were pooled from 6 double-blind clinical trials. Patients meeting DSM-IV criteria for major depressive disorder received placebo (n=513), duloxetine (40-120 mg/day; n=888), paroxetine (20 mg qd; n=362), or fluoxetine (20 mg qd; n=70) for 8 weeks. Mean change in HAMD17 total score for patients receiving duloxetine was significantly greater than that for SSRI-treated patients (p=0.023). In analyses focusing on subgroups of patients with successively higher baseline HAMD17 scores (≥19, ≥21, and ≥23), the magnitude of duloxetine's treatment advantage over SSRI became progressively larger. In comparing SSRI-naïve patients vs. previously-exposed patients, the treatment by stratum interaction was not significant (p=0.724), suggesting a similar advantage of duloxetine in the two strata. In SSRI-naïve patients, duloxetine was superior to SSRI (p=0.020). Duloxetine was also superior to SSRI (p=0.0003) in treating anxiety symptoms associated with depression. In conclusion, based upon a comparison of mean change in HAMD17 total and subscales, the efficacy of duloxetine was superior to that of SSRIs in the treatment of major depression. The superiority was also observed in SSRI-naïve patients.

PO2.50.
DULOXETINE: INFREQUENCY OF TREATMENT-INDUCED HYPOMANIA IN SUBJECTS WITH MAJOR DEPRESSION

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During clinical trials of antidepressant medications in major depressive disorder (MDD), two to three percent of patients with mood disorders may experience hypomania or mania. Studies have suggested

that treatment of depression with tricyclic antidepressants (TCAs) increase the risk of manic switch in depression. The newer class of agents with dual reuptake inhibition of serotonin and norepinephrine (SNRIs) have the efficacy of TCAs without the broad side effect profile. Duloxetine is a balanced and potent SNRI that is effective in the treatment of MDD. We investigated the rate of mania/hypomania and hypomanic-like symptoms observed during placebo-controlled clinical trials of patients with MDD who were treated with duloxetine. This investigation included data from eight placebo-controlled, double-blind, randomized clinical trials (n=1139 for duloxetine, n=777 for placebo). Adverse event data were collected throughout the course of the studies via investigator-elicited patient responses, as well as spontaneous patient reports. These data were reviewed for symptoms that were characteristic of mania or hypomania. One case of mania occurred in the placebo groups, and two cases of hypomania were observed in the duloxetine-treated groups. Insomnia was significantly higher in the duloxetine group than in the placebo group. Irritability approached significance, but was higher in the placebo group. In conclusion, duloxetine was associated with a very low incidence of treatment-emergent hypomania, mania or hypomanic-like symptoms among MDD patients. These data suggest that duloxetine may provide an improved risk profile for treatment-emergent hypomania, mania or hypomanic-like symptoms in the treatment of MDD.

PO2.51.
COMPLETE SYMPTOMATIC RELIEF IN DEPRESSED PATIENTS TREATED WITH VENLAFAXINE OR SELECTIVE SEROTONIN REUPTAKE INHIBITORS

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Data from a previous pooled analysis suggested that there are differential rates of remission among classes of antidepressants, with higher rates of remission associated with the serotonin-norepinephrine reuptake inhibitor venlafaxine than with the selective serotonin reuptake inhibitors (SSRIs). These data were further analyzed to evaluate rates of complete relief of physical, emotional, and functional symptoms of depression. Original patient data from 31 randomized, double-blind studies were pooled to evaluate remission rates in 7422 depressed patients treated with venlafaxine/venlafaxine extended release (XR) (n=3273), SSRIs (n=3217), or placebo (n=932) for up to 8 weeks. Relative rates of complete symptom relief (Hamilton Rating Scale for Depression, HAM-D item score = 0) on individual items of the HAM-D17 were compared. The last-observation-carried-forward (LOCF) method was used to handle missing data. Results at 8 weeks demonstrated a significant ($p<0.05$) advantage for venlafaxine relative to SSRIs and placebo in depressed mood, anxiety–psychic, anxiety–somatic, somatic-gastrointestinal, somatic–general, genital, feelings of guilt, suicidal ideation, work and activities, retardation, and agitation, and relative to placebo only for hypochondriasis, weight loss, and late insomnia. Significant differences between SSRIs and placebo ($p<0.05$) were observed on the same items, with the exception of the anxiety–somatic, genital, hypochondriasis, and agitation items. These results suggest that the higher remission rates achieved with venlafaxine are due to complete resolution of a broad range of physical, emotional, and functional symptoms of depression.

PO2.52.
COMPLETE REMISSION OF INDIVIDUAL SYMPTOMS AMONG DEPRESSED PATIENTS TREATED WITH VENLAFAXINE, SELECTIVE SEROTONIN REUPTAKE INHIBITORS, OR PLACEBO

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This study aimed to compare rates of complete remission of individual symptoms of depression among patients with severe symptoms treated with venlafaxine, selective serotonin reuptake inhibitors (SSRIs) or placebo. Original patient data from 31 randomized, double-blind studies were pooled to evaluate remission rates in 7422 depressed patients treated with venlafaxine/venlafaxine extended release (XR) (n=3273), SSRIs (n=3217), or placebo (n=932) for up to 8 weeks. The population of patients with more severe levels of each item of the HAM-D21 at baseline was identified, and the percentages of patients experiencing complete symptom relief (HAM-D21 item score=0) on individual items were compared. The last observation carried forward (LOCF) method was used to handle missing data. A significant advantage for venlafaxine over SSRIs and placebo was observed for 11 items: depressed mood, anxiety-psychic, somatic general, genital, hypochondriasis, weight loss, feelings of guilt, suicidal ideation, insomnia-early, insomnia-middle, and work and activities. Venlafaxine was associated with significantly greater rates of complete symptomatic relief compared to placebo only for diurnal variation, depersonalization, insomnia-late, and retardation; and to SSRIs only for somatic-gastrointestinal. SSRI vs. placebo comparisons were significant for depressed mood, anxiety–psychic, somatic–general, work and activities, feelings of guilt, suicidal ideation, insomnia–early, insomnia–late, diurnal variation, and retardation. Treatment with venlafaxine/venlafaxine XR is associated with significantly greater rates of remission of a wide variety of individual symptoms of depression relative to SSRI and placebo among patients with severe symptoms at baseline. These results were similar to those observed in the overall population of patients (i.e., regardless of baseline severity).

PO2.53.
REMISSION IN DEPRESSED PATIENTS TREATED WITH VENLAFAXINE XR OR SELECTIVE SEROTONIN REUPTAKE INHIBITORS USING TREATMENT ALGORITHMS

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The study aimed to compare remission rates among patients with major depressive disorder (MDD) treated with venlafaxine extended release (XR) or selective serotonin reuptake inhibitors (SSRIs) when dosed according to treatment algorithms and length of treatment guidelines. In this open-label, rater-blinded, multicenter study, outpatients with MDD and Hamilton Scale for Depression (HAM-D17) total score ≥20 were randomly assigned to receive treatment with flexible doses of venlafaxine XR (75-225 mg/day; n=688) or SSRIs (n=697). The SSRI was fluoxetine (20-80 mg/day; n=114) or paroxetine (20-50 mg/day; n=131) or citalopram (20-40 mg/day; n=259) or sertraline (50-200 mg/day; n=193) for ≤180 days. Treatment was initiated at the lowest effective dose, with dose increases permitted at days 30 and 60 based on treatment response and dosing guidelines. Remission was defined as a HAM-D17 total score <8. Remission rates were significantly greater in the venlafaxine XR group versus the SSRI group at days 30 (13% vs. 9%), 60 (23% vs. 18%), 90 (29% vs. 24%), and 135 (33% vs. 27%) (all $p<0.05$). Day 180 remission rates were

35.5% and 32% for venlafaxine XR and SSRIs, respectively (p=NS). Individual SSRI remission rates at day 180 were fluoxetine 36%, paroxetine 28%, citalopram 31%, and sertraline 33%. Mean maximum prescribed doses were venlafaxine XR 157 mg/day, fluoxetine 55 mg/day, paroxetine 41 mg/day, citalopram 35 mg/day, and sertraline 135 mg/day. These results suggest that venlafaxine XR is an effective treatment for MDD and may bring patients to remission earlier in treatment compared with SSRIs.

PO2.54.
CHANGES IN PERSONALITY CHARACTERISTICS OF DEPRESSIVE OUTPATIENTS UNDER TREATMENT WITH SELECTIVE SEROTONIN REUPTAKE INHIBITORS

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Previous studies have indicated that selective serotonin reuptake inhibitors (SSRIs) have effects on personality, which could be distinguished from their effects on mood. The aim of this study was to examine the effects of SSRI treatment on personality profiles in depressive patients. 108 patients (64 males) suffering from current major depressive episode, according to DSM-IV criteria, were included in the study. The age of the patients was 44.4±15.0 years. The SSRIs were: paroxetine (20-50 mg/day), citalopram (20-50 mg/day) and fluvoxamine (100-200 mg/day). The Hamilton Depression Rating Scale (HDRS) and the Minnesota Multiphasic Personality Inventory (MMPI) were administered before and after 8 weeks of SSRI treatment. Significant differences from baseline were found on the following MMPI scales: F (infrequency) ($p<0.05$); Hs (hypochondriasis) ($p<0.001$); D (depression) ($p<0.0001$); Hy (conversion hysteria) ($p<0.001$); Pd (psychopathic deviance) ($p<0.05$); Pt (psychasthenia) ($p<0.0001$); Sc (schizophrenia) ($p<0.001$); Si (social introversion) ($p<0.01$). Thus, symptomatic reduction took place not only on the scales related to depression and anxiety (Hs, D, Hy, Pt), but also on the scales related to impulsive aggression (Pd), withdrawal and self-incarceration (Sc), and social introversion (Si). The use of selective serotonergic drugs may help in understanding the role of serotonin in personality features of depressive patients.

PO2.55.
COMPARATIVE EFFICACY OF SERTRALINE AND VENLAFAXINE-XR IN MAJOR DEPRESSION

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The study aimed to compare the efficacy of sertraline and venlafaxine-XR in major depressive disorder (MDD) on measures of quality of life (Quality of Life Enjoyment & Satisfaction Questionnaire, Q-LES-Q) and traditional depression outcomes. It was an international, 8-week, double-blind study of 161 outpatients with MDD (70% female; mean age, 37; mean score on Hamilton Depression Rating Scale, HAM-D, 23), randomized to sertraline (50-150 mg/day; n=79) or venlafaxine-XR (75-225 mg/day; n=82), followed by a 2-week taper. Of the 161 patients, 75% had Q-LES-Q (n=120) and HAM-D (n=121) assessments available at week 8. Intent-to-treat analyses were performed at week 8 using last observation carried forward (LOCF), and repeated at week 8 amongst completers. Changes from baseline scores were analysed using ANCOVA; least square (LS) means and p-values are presented. Response was defined as >50% reduction in HAM-D; remission, HAM-D<7. Differences in response and remission were estimated using Cochran-Mantel-Haenszel tests. LS mean change from baseline in Q-LES-Q was comparable for sertraline and venlafaxine-XR (week-8/LOCF, 16.8±1.8 vs. 17.5±1.8; week-8 completers, 19.9±1.8 vs. 19.5±1.8). Sertraline and venlafaxine-XR produced comparable reductions in HAM-D (week-8/LOCF, -15.9±1.0 vs. -14.3±0.9, p=0.17; week-8 completers, -17.6±0.8 vs. -16.1±0.8, p=0.15). Both treatments showed similar response (week-8/LOCF, 71% vs. 67%; week-8 completers, 81% vs. 80%) and remission (week-8/LOCF, 54% vs. 49%; week-8 completers, 65% vs. 56%) rates. Anxiety symptoms responded in 72% of sertraline and 66% of venlafaxine-XR patients at week-8 (LOCF), and in 84% of sertraline and 76% of venlafaxine-XR week-8 completers. In conclusion, sertraline and venlafaxine-XR were found to have similar effects on quality of life, and comparable antidepressant efficacy in patients with MDD.

PO2.56.
COMPARATIVE EFFICACY OF SERTRALINE VERSUS VENLAFAXINE-XR IN SEVERE DEPRESSION

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The study aimed to compare antidepressant efficacy of sertraline with venlafaxine-XR in a subgroup of depressed patients with severe depression. It was an international, 8-week, double-blind study of 161 outpatients with major depressive disorder (MDD), randomized to sertraline (50-150 mg/day; n=79) and venlafaxine-XR (75-225 mg/day; n=82), followed by a 2-week taper. A severe depression subgroup was defined by baseline Hamilton Depression Scale, HAM-D total score ≥26 or Clinical Global Impression - Severity, CGI-S ≥5. Response was defined as >50% reduction in HAM-D; remission was defined as HAM-D <7. Intent-to-treat analyses were undertaken at week 8 using last observation carried forward (LOCF), and repeated at week 8 amongst completers. Changes from baseline scores were analysed using analysis of covariance; least square (LS) means and p-values are presented. The Cochran-Mantel-Haenszel test was used to produce p-values for differences in response and remission rates. 82 (51%) of 161 outpatients met criteria for severe MDD (74% female; mean age, 36; mean baseline HAM-D, 26). Of the 82 patients, 72% had HAM-D (n=59) assessments available at week 8 and were included in week 8 completer analyses. In this severe MDD subgroup, LS mean change from baseline on HAM-D total score was similar for sertraline versus venlafaxine-XR (week-8/LOCF, -17.8±1.7 vs. -15.4±1.6, p=0.24; week-8 completers, -20.1±1.5 vs. -17.9±1.5, p=0.25). Likewise, sertraline and venlafaxine-XR resulted in similar response (week-8/LOCF, 71% vs. 67%, p=0.55; week-8 completers, 79% vs. 83%, p=0.85), and remission (week-8/LOCF, 58% vs. 45%, p=0.21; week-8 completers, 69% vs. 53%, p=0.13) rates in this subgroup. In conclusion, sertraline and venlafaxine-XR were found to have similar antidepressant efficacy in severe MDD.

PO2.57.
COMPARATIVE EFFICACY OF SERTRALINE VERSUS VENLAFAXINE-XR IN ANXIOUS DEPRESSION

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The study aimed to compare the efficacy of sertraline with venlafaxine-XR in a subgroup of anxious depressed patients. It was an international, 8-week, double-blind study of 161 outpatients with major depressive disorder (MDD), randomized to sertraline (50-150 mg/day; n=79) or venlafaxine-XR (75-225 mg/day; n=82), followed by a 2-week taper. The anxious-depression subgroup was defined by baseline Hamilton Scale for Depression (HAM-D) anxiety-somatization score of at least 7. Intent-to-treat analyses were undertaken at week 8 using last observation carried forward (LOCF), and repeated at week 8 amongst completers. Changes from baseline scores were analysed using ANCOVA; least square (LS) means and p values are presented. Differences in HAM-D response and remission were estimated using Cochran-Mantel-Haenszel tests. 118 (73%) of 161 outpatients met criteria for MDD, anxious subtype (73% female; mean age 36 years; mean HAM-D, 24). Among anxious-depressives, sertraline was comparable to venlafaxine-XR in mean change from baseline on HAM-D total scores for week-8 completers (-18.7±1.0 versus -16.6±1.1; 95% CI for difference -4.6 to 0.5; p=0.11) and week-8/LOCF (-17.3±1.1 versus -14.8±1.0; 95% CI for difference -5.2 to 0.2; p=0.07). At week-8/LOCF, HAM-D responder rates (80% vs. 66%; p=0.13) and HAM-D remission rates (59% versus 48%; p=0.29) were not significantly different for sertraline vs. venlafaxine-XR, respectively. Anxiety symptoms had responded (>50% reduction in anxiety-somatization factor) in 82% of sertraline and 67% of venlafaxine-XR patients (p=0.10). Regarding the total sample (n=161), no significant differences were found between treatments on these outcome measures. Sertraline and venlafaxine-XR were found to have similar antidepressant efficacy in anxious-depression, a common clinical subtype of MDD.

PO2.58.
TOLERABILITY AND DISCONTINUATION EFFECTS FOR SERTRALINE VERSUS VENLAFAXINE-XR IN DEPRESSION

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The study aimed to compare the safety and tolerability of sertraline with venlafaxine-XR, including structured assessment of discontinuation symptomatology, based on the Signs and Symptoms of Discontinuation Scale (SSDS). It was an international, 8-week, double-blind study of outpatients with DSM-IV major depressive disorder (MDD) (n=161; 70% female; mean age, 37; baseline Hamilton Scale for Depression, HAM-D, 23), randomized to sertraline (50-150 mg/day; n=79) and venlafaxine-XR (75-225 mg/day; n=82). Following 8 weeks of double-blind treatment, subjects tapered off medication at a rate not exceeding 50 mg of sertraline and 75 mg of venlafaxine-XR every 4 days, during a 2-week taper period. Differences in incidence rates were tested using Fisher's exact test. Mean week-8 doses were 105 mg for sertraline and 161 mg for venlafaxine-XR. A greater proportion of patients discontinued from venlafaxine-XR compared to sertraline (28% vs. 16%; p=0.09). During tapering, patients on venlafaxine-XR experienced more discontinuation symptomatology, with a >10% higher incidence of the following SSDS events compared to sertraline: dizziness (44% vs. 33%; p=0.065), vivid dreams (42% vs. 26%; p=0.069), fatigue (33% vs. 22%; p=0.18), and vertigo (17% vs. 6%; p=0.052). The time to completion of drug tapering was similar between treatments (median time, 4 days for both treatments). In conclusion, although sertraline and venlafaxine-XR were found to be well-tolerated in the acute treatment of MDD, clear differences in discontinuation effects were found between sertraline and venlafaxine-XR during treatment withdrawal.

PO2.59.
IMPROVEMENT OF NEUROCOGNITIVE CHARACTERISTICS IN DEPRESSIVE PATIENTS UNDER ESCITALOPRAM THERAPY

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Cognitive impairment is common in major depression. Some antidepressants have anticholinergic side effects, which may worsen cognitive functions among depressive patients. The research hypothesis was to assess the ability of escitalopram (EC) to improve cognitive function in depressive patients. 30 patients (23 women) suffering from major depression, according to DSM-IV criteria, were included in the pilot study. Their age was 38.8±12.1 years. Doses of EC ranged from 10 to 20 mg/day. The research tool was a computerized neurocognitive battery ("CogScan" Anima-Scan Ltd) which included: Tapping Test, Inspection Time, Motion Perception Test, Simple Reaction Time, Choice Reaction Time, Time-Accuracy Trade-off Test, Immediated and Delayed Memory for Pictures, Words and Faces, Stroop Test, Digit Symbol Substitution Test (DSST), and Continuous Performance Test. All these tests were administered before and after 8 weeks of EC treatment. Significant improvements from baseline were found in immediate picture (p=0.016) and face recognition (p=0.013), time-accuracy trade-off (accuracy only, p=0.03); selective attention (Stroop: reaction time in neutral, p=0.001; congruent p=0.001 and non-congruent p=0.002), working memory and pair-associated learning (DSST, p=0.001). In conclusion, EC enhanced immediate recognition and working memory in depressive patients. We also found that EC improved the selective attention in these patients. As far as Stroop test is not only measuring selective attention, but is also an indicator of the inhibition control, its improvement could be associated with reduced impulsivity in these patients.

PO2.60.
ESCITALOPRAM VS. VENLAFAXINE XR TREATMENT OF MAJOR DEPRESSIVE DISORDER

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Escitalopram is a highly selective serotonin reuptake inhibitor (SRI) antidepressant. In contrast, venlafaxine is a non-selective SRI that also inhibits noradrenergic reuptake. Two randomised, double-blind, 8-week trials compared the efficacy and tolerability of escitalopram with that of venlafaxine in major depressive disorder (MDD). The primary

efficacy variable was the mean change from baseline in Montgomery-Åsberg Depression Rating Scale (MADRS) scores. In the study in general practice in Europe, 10-20 mg/day escitalopram (n=148) was at least as effective as 75-150 mg/day venlafaxine (n=145), with a superior side effect profile. Survival analysis of sustained response and sustained remission showed escitalopram to be significantly superior to venlafaxine ($p<0.05$). In the study in depressed outpatients in specialist settings in the US, 20 mg/day escitalopram (n=97) appeared to be more effective than 225 mg/day venlafaxine (n=98). In severely depressed patients (MADRS≥30, n=121), escitalopram was more effective than venlafaxine. The proportion of severely depressed patients who achieved remission (MADRS≤12) was 47% vs. 29% ($p<0.05$). The venlafaxine group had a higher overall incidence of treatment-emergent adverse events than the escitalopram group (85% vs. 68%), and more patients withdrew due to adverse events from the venlafaxine group than from the escitalopram group (16% vs. 4%; $p<0.01$). These results demonstrate that escitalopram has a better risk/benefit profile than venlafaxine in the treatment of MDD.

PO2.61.
SLEEP DISTURBANCE IN PATIENTS WITH DEPRESSION: THE EFFECT OF ESCITALOPRAM

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Psychiatric disorders are among the most common causes of secondary sleep complaints, particularly of insomnia. More than 80% of patients in primary care complaining of sleep disturbances are suffering from depression. The results from three 8-week studies in major depressive disorder are presented with respect to sleep problems. Analysis of pooled data from these randomised, double-blind, placebo-controlled studies, in which citalopram was the active reference, showed a significant improvement for escitalopram-treated patients (n=520) in the Montgomery-Åsberg Depression Rating Scale (MADRS) item 4 ('reduced sleep') scores at weeks 6 and 8 compared with placebo (n=398; $p<0.01$) and at weeks 4, 6 and 8 (n=403; $p<0.05$) compared with citalopram. Escitalopram-treated patients (n=254) with more severe sleep disturbances (MADRS item 4 score ≥4) showed statistically significant improvement of MADRS item 4 at weeks 4, 6, and 8 compared with patients treated with placebo (n=191; $p<0.05$) or citalopram (n=193; $p<0.01$). These patients also showed a statistically significant ($p<0.05$) and clinically relevant improvement in MADRS total score after escitalopram treatment compared with citalopram at weeks 1, 4, 6 and 8 (observed cases) and endpoint (-2.45; last observation carried forward, LOCF). Statistical significance in favour of escitalopram versus placebo treatment was found at all visits, including endpoint (-4.2; LOCF). In conclusion, escitalopram shows a significant beneficial effect compared with placebo or citalopram in reducing sleep disturbance in patients suffering from major depressive disorder.

PO2.62.
CITALOPRAM VERSUS ESCITALOPRAM: THE ROLE OF THE R- AND S-ENANTIOMERS

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Citalopram is a highly selective serotonin reuptake inhibitor (SSRI) antidepressant consisting of a racemic 1:1 mixture of R(-)- and S(+)-enantiomers. Nonclinical studies have shown that the selective serotonin reuptake inhibitory activity of citalopram is attributable to the S-enantiomer, escitalopram, which has been developed as a new single-enantiomer drug. Initial nonclinical and clinical studies comparing escitalopram and citalopram to placebo found that corresponding doses of these two drugs (that is, containing the same amount of the S-enantiomer), expected to have the same effect, resulted in a better effect for escitalopram. These results suggest that the R-enantiomer in citalopram counteracts the effect of the S-enantiomer. Escitalopram has greater efficacy and faster time to symptom relief than comparable doses of citalopram in biochemical, functional, and behavioural experiments. The lower efficacy of citalopram in these nonclinical studies is due to the counteraction of the effect of the S-enantiomer by the R-enantiomer, possibly via an allosteric interaction with the serotonin transporter. Data from controlled clinical trials in patients with major depressive disorder consistently show better efficacy, higher rates of response and remission, and faster time to symptom relief with escitalopram than with citalopram. Thus, the R-enantiomer present in citalopram counteracts the activity of the S-enantiomer, thereby providing a basis for the pharmacological and clinical differences observed between citalopram and escitalopram.

PO2.63.
AN ALLOSTERIC CITALOPRAM-BINDING SITE ANALYSED IN SITE-DIRECTED MUTANTS OF THE SEROTONIN TRANSPORTER

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The serotonin transporter (SERT) belongs to a family of sodium/chloride-dependent transporters mediating the uptake of amino acids and biogenic amines from the extracellular space. SERT is the major pharmacological target in the treatment of several clinical disorders, including depression and anxiety. In the present study we showed that the dissociation rate of [3H]-S-citalopram was decreased by serotonin, as well as by several antidepressants. The S- and R-enantiomers of citalopram were both highly potent, while serotonin, paroxetine and sertraline had low potency. EC50 values for S- and R-citalopram were 3.6±0.4 μM and 19.4±2.3 μM, respectively. Fluoxetine, venlafaxine and duloxetine had no significant effect on the dissociation of [3H]-S-citalopram. Allosteric modulation of dissociation was independent of temperature, as well as the presence or absence of Na+ in the dissociation buffer. Dissociation of [3H]-S-citalopram from a complex with the SERT double mutant, N208Q/N217Q, which is unable to self-assemble into oligomeric complexes, was decreased with an efficiency similar to that found with wild type, indicating the allosteric mechanism is mediated within a single subunit. A species-scanning mutagenesis study, comparing human and bovine SERT, revealed that methionine-180, tyrosine-495 and serine-513 are important residues in mediating the allosteric effect, as well as contributing to high-affinity binding of S-citalopram at the primary site. It is suggested the two distinct binding sites are partially overlapping and located within the same subunit and that the allosteric effect is mediated by steric trapping of the ligand at the primary binding site.

PO2.64.
OLANZAPINE/FLUOXETINE COMBINATION FOR TREATMENT-RESISTANT DEPRESSION

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Olanzapine/fluoxetine combination (OFC) has shown effectiveness in patients with treatment-resistant depression (TRD). The present post hoc subanalyses examined OFC in TRD patients who had experienced at least two treatment failures in their current episode, one while on a selective serotonin reuptake inhibitor (SSRI). Such a group is likely representative of TRD patients in clinical settings. Subjects had a diagnosis of unipolar, non-psychotic TRD. Study 1 was an 8-week randomized, double-blind trial comparing OFC, olanzapine, fluoxetine, and nortriptyline in subjects (n=500) with retrospective SSRI failure and prospective nortriptyline failure. Study 2 was a 12-week randomized, double-blind trial comparing OFC, olanzapine, fluoxetine, and venlafaxine in subjects (n=483) with retrospective SSRI failure and prospective venlafaxine failure. A mixed-effects model repeated measures regression analyzed the subsample of patients who had experienced an SSRI failure in their current depressive episode (Study 1: n=324, Study 2: n=350). In Study 1, the OFC group had significantly greater mean baseline-to-endpoint reduction in Montgomery-Åsberg Depression Rating Scale (MADRS) total score (-9.08) than the olanzapine group (-5.58, p=0.005), but was not different from the nortriptyline group (-7.10, p=0.176) or the fluoxetine group (-7.87, p=0.325). In Study 2, the OFC group (-14.64) had significantly greater mean baseline-to-endpoint reduction than the olanzapine (-9.42, p<0.001) and fluoxetine (-10.67, p=.006) groups, but was not different from the venlafaxine (-14.68, p=0.978) group. In conclusion, OFC showed significantly greater reductions in depressive symptoms than olanzapine (Studies 1 and 2) or fluoxetine (Study 2) in TRD patients whose depression was not responding to an SSRI in their current episode.

PO2.65.
RISPERIDONE FOR THE TREATMENT OF PSYCHOTIC AND AFFECTIVE SYMPTOMS IN PATIENTS WITH AFFECTIVE AND SCHIZOAFFECTIVE DISORDERS

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The study aimed to evaluate efficacy, tolerability and safety of risperidone add-on in patients with affective and schizoaffective disorders. Adult patients experiencing both psychotic and affective symptoms were enrolled in this 12-week prospective, open-label multicenter study. Patients were evaluated at baseline and after 4 and 12 weeks using the Brief Psychiatric Rating Scale (BPRS), Montgomery-Asberg Depression Rating Scale (MADRS), Young Mania Rating Scale (YMRS), CGI (Clinical Global Impression) and GAF (Global Assessment of Functioning). Adverse events (AEs) were recorded at each visit. 99 patients were enrolled (61% female, mean age 48±12 years). 40.4% had schizoaffective, 24.2% bipolar and 35.4% unipolar depressive disorder. The mean risperidone dose in schizoaffective patients was higher (2.9 mg/day) compared to patients with bipolar (1.9 mg/day) or depressive disorder (2.1 mg/day). BPRS significantly improved from baseline to endpoint (62.0 to 42,9, p<0.0001). Other efficacy items also improved significantly (MADRS 29.7 to 16.9; YMRS 10.8 to 4.6; CGI 5.4 to 3.9; GAF 42.7 to 61.2, p<0.001 for all rating scales). Risperidone was effective in schizoaffective patients (BPRS –20.2, MADRS –11.5, YMRS –7.2), bipolar (BPRS –15.4, MADRS –10.1, YMRS –6.7) and depressive patients (BPRS –20.5, MARDS –16.1, YMRS –4.6, p<0.001 for each scale). AEs were reported in 42 patients. The incidence of extrapyramidal symptoms was low (9.1%). Mean weight change was low (+1.5 kg). In conclusion, in addition to its established efficacy for psychotic symptoms, risperidone was effective and well tolerated in the treatment of affective symptoms associated with affective and schizoaffective disorders.

PO2.66.
AUGMENTATION WITH RISPERIDONE IN RESISTANT DEPRESSION (ARISe-RD): MAINTENANCE OF REMISSION IN A DOUBLE-BLIND PLACEBO-CONTROLLED TRIAL

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Nearly 40% of patients with major depression fail to respond adequately to available antidepressants. Preliminary results from the ongoing Augmentation with Risperidone in Resistant Depression (ARISe-RD) trial indicate that risperidone augmentation of an antidepressant in treatment-resistant patients is efficacious and well tolerated. Patients who had not responded to at least one antidepressant in the past nor to 4–6 weeks of treatment with citalopram received risperidone (0.25–2 mg/day) plus citalopram in a 4–6-week open-label trial. Patients in remission (Montgomery-Åsberg Rating Scale for Depression, MADRS ≤12) after augmentation continued in a 6-month, double-blind, placebo-controlled, relapse-prevention phase. Significant improvements from baseline to endpoint in mean total scores on the Hamilton Scale for Depression (HAM-D) (–1.1±6.9; p<0.0001), MADRS (–14.5±9.6; p<0.0001), Clinical Global Impression-Severity (CGI-S) (–1.7±1.2; p<0.0001), and Hamilton Scale for Anxiety (HAM-A) (–7.8±7.3; p<0.0001) were seen during risperidone augmentation (n=386). Remission (MADRS ≤12) was achieved by 59.3% at endpoint. Few patients (<5%) discontinued because of adverse events and no significant changes in movement disorder ratings were noted. A blinded analysis of the 246 patients who entered the double-blind relapse-prevention phase during which they received citalopram augmented with risperidone showed that 48% relapsed. Among those who relapsed, 111 elected to continue in the study as retrieved dropouts. Efficacy and safety results from the relapse-prevention phase will be presented. The results indicate that augmentation of an antidepressant with low doses of risperidone may provide safe, rapid, and robust improvement in depressive symptoms and associated anxiety. Positive results from the double-blind phase would suggest a role for risperidone augmentation for maintenance treatment in resistant depression.

PO2.67.
RESULTS FROM THE OPEN-LABEL PHASE OF AUGMENTATION WITH RISPERIDONE IN RESISTANT DEPRESSION (ARISe-RD)

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Augmentation with Risperidone in Resistant Depression (ARISe-RD) is an ongoing trial evaluating risperidone augmentation of citalopram in patients with major depression who have failed to respond adequately to available antidepressants. Patients who had not responded to at least one antidepressant in the past nor to 4–6 weeks of treatment with citalopram received risperidone (0.25–2 mg/day) plus citalopram in a 4–6-week open-label trial. Patients in remission (Montgomery-Åsberg Rating Scale for Depression, MADRS ≤12) after augmentation continued in a 6-month, double-blind, placebo-controlled, relapse-prevention phase. Of the 502 subjects, 88.8% did not respond (≤ 50% Hamilton Scale for Depression, HAM-D reduction) to citalopram monotherapy. During risperidone augmentation (n=386), mean total scores improved significantly from baseline to endpoint on HAM-D (–11.1±6.9; p<0.0001), MADRS (–14.5±9.6; p<0.0001), Clinical Global Impression-Severity (CGI-S) (–1.7±1.2; p<0.0001), and Hamilton Scale for Anxiety (HAM-A) (–7.8±7.3; p<0.0001). At endpoint, 59.3% of patients were in remission. Discontinuations due to adverse events were low (4.6%) and there were no significant changes in movement disorder ratings. These preliminary results from ARISe-RD, the largest trial of atypical antipsychotic augmentation in resistant depression, indicate that low-dose risperidone augmentation may provide safe, rapid, and robust improvement in depressive symptoms and associated anxiety.

PO2.68.
IMPROVEMENT IN QUALITY OF LIFE WITH RISPERIDONE AUGMENTATION IN TREATMENT-RESISTANT DEPRESSION

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The study aimed to evaluate the effect of adjunctive risperidone treatment on quality of life in patients with treatment-resistant depression (TRD). Data derive from the open-label treatment phase (4-6 weeks) of an international study designed to evaluate the efficacy, safety, and maintenance effect of risperidone augmentation to selective serotonin reuptake inhibitor (SSRI) treatment in TRD. Quality of life was evaluated using the short form of Quality-of-Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q). Change in Q-LES-Q from baseline was analyzed by paired t test. Correlation analyses between Montgomery-Åsberg Depression Rating Scale (MADRS) and Q-LES-Q change scores were performed using Pearson method. This analysis included 386 subjects, mean age 47.1. Baseline and endpoint mean (SD) Q-LES-Q scores were 42.8 (14.6) and 56.0 (18.6), indicating an improvement of 13.2 with risperidone augmentation (p<0.0001). Significant improvements were observed as early as day 7 (p<0.0001). Q-LES-Q item 15, medication satisfaction, was rated as good or very good by 61% of subjects. Correlation coefficient between Q-LES-Q and MADRS total change scores at endpoint was –0.6 (p<0.0001). These findings suggest that augmentation with risperidone rapidly and significantly improves quality of life in TRD patients. Consistent with previous work, the correlation between Q-LES-Q and MADRS indicate a meaningful relationship between quality of life improvement and symptom relief.

PO2.69.
STRESSFUL LIFE EVENTS IN RECURRENT DEPRESSION: PRELIMINARY RESULTS IN A SAMPLE OF 17,988 PATIENTS

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The interaction between life event exposure and the number of previous depressive episodes remains a matter of concern. The kindling model hypothesizes that the role of environmental stressors will progressively diminish with recurrent episodes of depression. The objective of this study was to test the kindling hypothesis in recurrent depression. 17,988 patients with major depression (DSM-IV criteria) were included in the study. Patients with bipolar disorder, psychotic disorder, neurological disorder or current antidepressant treatment were excluded. The number of previous episodes of depression, the duration and severity of the current episode and the impact of recent life events were recorded. Preliminary results show that the onset of depressive episodes may become less related to stressful life events in recurrent depression, depending on the number of previous episodes. These results argue for the kindling hypothesis in recurrent depression, showing an increase of vulnerability to stressful life events with recurrent episodes of depression.

PO2.70.
NEUROPSYCHOLOGICAL FUNCTIONING DURING ANTIDEPRESSANT TREATMENT IN DEPRESSED PATIENTS

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Cognitive distortions are a core symptom of major depression, because they predict a longer duration of depressive episodes, depression chronicity, increasing hopelessness and suicidality. It is a common clinical observation that some patients report high negative cognitions (low self-esteem, pessimism, suicidal thoughts) but appear to have modest levels of depressive symptoms, with a discordance between self- and observer-ratings of depression, and depressive complaints after the normalisation of rating scales. Since in depressed patients negative self-scheme elements predominate in self-description and recognition tasks, we developed a computerized test with two tasks: a self-description task during which subjects were asked to self-attribute or refuse positive and negative adjectives, and a recognition memory task during which subjects were asked to recognize the same adjectives randomly mixed with semantically similar others. The differences between the processing stimuli (the ratio between reaction times for positive and negative elements) of normal and depressed subjects allowed us to define a neuropsychological index of severity of depression, which was found to be independent of patients' and clinicians' biases. In the present study we evaluated pattern of changes over time of neuropsychological functioning and of other dimensions of the depressive syndrome during standard antidepressant treatment with fluvoxamine 300 mg/die. 46 consecutively admitted depressed inpatients affected by a major depressive episode were subdivided in two groups with differently time-lagged ratings. The first group (n=15) was administered the Hamilton Depression

Rating Scale (HDRS) and neuropsychological test at admission and after two, four and eight weeks. The second group (n=23) was tested every week from the admission day to the third week. The cognitive variables were sensible to the improvement of depressive symptomatology due to treatment, evaluated with Hamilton's scale. Both depressive syndrome and neuropsychological functioning significantly improved during treatment. Depressive syndrome, as rated on HDRS, showed the first significant change at week 1, while the only not significant difference was between the fourth and the eighth week. Neuropsychological variables showed a significant amelioration particularly at week 8 (self-attribution of positive elements, $p<0.0126$; ratio of latency of attribution, $p<0.0126$). Moreover, we observed a normalisation in the attribution of positive stimuli only after eight weeks. In conclusion, typical bias in depressive neuropsychological functioning significantly improved during antidepressant treatment, but with some delay with respect to depressive syndrome. This delay could explain depressive complaints after the normalisation of HDRS scores.

PO2.71.
RAPID ASSESSMENT OF COGNITIVE DISTORSIONS IN MOOD DISORDER

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Current methods of assessment of major depression are biased by discrepancies between self- and observer-ratings of depression. Cognitive distortions are a core symptom of major depression, and are associated with the development of hopelessness and suicidality. Based on previous studies showing that patients who were diagnosed with major depressive disorders denied positive statements and endorsed more negative statements about themselves than normal subjects, we developed a computerized test with two tasks: a self-description task during which subjects were asked to self-attribute or refuse positive and negative adjectives, and a recognition memory task during which subjects were asked to recognize the same adjectives randomly mixed with semantically similar others. We tested 294 normal subjects and 247 patients affected by a major depressive episode. In normal subjects frequencies and latencies of both self-attribution and recognition of positive stimuli were enhanced with respect to negative stimuli, while in depressed patients negative self-scheme elements predominated in self-description, and information processing was slower for positive and negative elements. Single output measures were combined in a single score (named depressive differential) based on canonical coefficients derived from discriminant function analysis, which could correctly classify 92% of patients and 98% of controls. Internal and external validity testing showed high correlations both with commonly used psychiatric rating scales and with instruments specifically developed to assess depressive cognitive style. Test-retest reliability was high. Further studies will define the diagnostic power with respect to depressive syndromes pertaining to diagnoses other than mood disorders, and will explore if, and when, the observed distortions normalize during antidepressant treatment.

PO2.72.
REALITY MONITORING AND PARANOIA IN REMITTED DELUSIONAL DEPRESSION

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A major unresolved question is if delusional depression is a more severe form of mood disorder, with psychotic features being linked to severity of the overall depressive syndrome, or psychoticism should be considered an individual characteristic that may be associated with affective illness. Recent studies supported the hypothesis that patients affected by psychiatric disorders with psychotic symptoms have specific abnormalities of reality testing of ongoing perception, which become evident with source monitoring tasks. This neuropsychological correlate of psychosis was not studied in mood disordered patients. The present study tested source monitoring in euthymic patients with a remitted major depressive episode with or without psychotic features. Sixty-three patients in stable euthymic conditions were studied. Psychopathological assessment included measures of paranoia, social adjustment, and depressive dysfunctional cognitions. Reality monitoring tasks were analyzed with signal detection analysis. Patients with a remitted major depressive episode with psychotic features used more lax criteria in evaluating self-generated, but not perceived stimuli with respect to patients who did not show psychotic features during previous illness episodes. This difference was unrelated to other psychopatological measures, which did not differ among the two groups. Our findings support the hypothesis of selective biases in reality monitoring as neuropsychological correlates of psychosis, which appear to be trait characteristics of affective patients.

PO2.73.
ANTIDEPRESSANT TREATMENT PATTERNS AMONG CHILDREN AND ADOLESCENTS DIAGNOSED WITH DEPRESSION

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This study was designed to use a single national data source to discern trends in the prevalence of office-based visits resulting in a diagnosis of depression among children and adolescents aged 5-18 years, and trends in the prescribing of antidepressants for its treatment. Data from the US National Ambulatory Medical Care Survey were used for the analysis. The number and rate of office-based physician visits resulting in a diagnosis of depression (ICD-9-CM codes 296.2 - 296.36; 300.4; or 311), and the prescribing of antidepressants were discerned for 1989-2000. Trend analyses used 4-year time intervals: 1989-92; 1993-96; 1997-00. US population-adjusted rate of office visits documenting a diagnosis of depression more than doubled, from 12.1 per 1,000 children and adolescents aged 5-18, to 29.4 per 1,000. The percent of patients prescribed an antidepressant increased from 39.6% to 59.5%; receipt of a selective serotonin reuptake inhibitor (SSRI) increased from 16.0% to 38.9%; and receipt of a tricyclic antidepressant declined from 21.5% to 3.1%. These data reveal significant growth in the rate of children and adolescents diagnosed with depression, and significant growth in the prescribing of SSRIs.

PO2.74.
SEROTONIN AND NORADRENALINE REUPTAKE INHIBITORS DIFFERENTIALLY AFFECT SLEEP-WAKE BEHAVIOUR IN RATS

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In this study, we investigated the effects of the selective serotonin reuptake inhibitors (SSRIs) escitalopram and paroxetine, the selective noradrenaline (NA) reuptake inhibitor reboxetine and the non-selective 5-HT and NA reuptake inhibitors duloxetine and venlafaxine on sleep EEG in rats by means of radiotelemetric techniques. The studies were conducted in compliance with EC Directive 86/609/EEC and with Danish law regulating experiments on animals. The transmitter was implanted in the peritoneum and EEG leads were placed supradurally, 2mm anterior to lambda and 2mm on either side of the midline for the frontal electrodes and 2mm anterior to bregma and 2 mm on either side of the midline for the parietal electrodes. The electromyographic leads were sutured in place on either side of the musculus cervicoauricularis. Drugs were tested one week post-surgery in the light part of the diurnal cycle. The EEG data were scored as wake (W), light slow-wave sleep (SWS-1), deep slow wave sleep (SWS-2) or paradoxical sleep (PS, which corresponds to rapid eye movement sleep in humans). The EEG recordings for each animal (minimum 8 per treatment group) were scored manually, in 10s epochs. Escitalopram (2.0 mg/kg) significantly increased SWS-1, whereas paroxetine (2.0 mg/kg) produced a significant decrease in PS. Reboxetine (20 mg/kg) significantly increased W and decreased SWS-1 and PS. Venlafaxine (20 mg/kg) and duloxetine (7.7 mg/kg) significantly increased W and decreased PS. The present study demonstrates that inhibitors of NA reuptake significantly increase the arousal state. This might predict problems when patients suffering from insomnia use these drugs. Furthermore, SSRIs differentially affect the sleep-wake cycle.

PO2.75.
MODAFINIL FOR MAJOR DEPRESSION WITH ATYPICAL FEATURES

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Augmentation with psychostimulants benefits some patients with treatment refractory depression, particularly those with significant fatigue and hypersomnia. The novel stimulant modafinil has shown benefit as adjunctive therapy in anergic depression and is approved for excessive daytime sleepiness in narcolepsy, suggesting a potential role in atypical depression. This study examined modafinil as monotherapy in adult outpatients with major depression with atypical features. Subjects with atypical depression were treated with open-label modafinil for 12 weeks. Efficacy assessments included measures of depression, fatigue, and sleep. Safety evaluation included changes in vital signs and weight and emergence of adverse events. Preliminary analysis of subjects enrolled to date (n=37) revealed a study sample that was predominantly female (n=36), Caucasian (n=27), and unmarried (n=23), with a mean age of 41 years. Thirty subjects (81%) completed the treatment period. Significant improvement in depression was observed in both the intention-to-treat and completers' samples ($p<0.05$), and the drug was well-tolerated. These findings suggest a role for the novel stimulant modafinil in the treatment of major depression with atypical features.

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PO2.76.
PREDICTING DROP-OUT IN THE TREATMENT OF DEPRESSION

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Non-compliance and/or drop-out are a major concern in the treatment of depressed patients, as adequate treatment may significantly alleviate the burden of disease. Still, patients may also terminate treatment because they experience significant improvement of their symptoms. In this study, drop-out rates were determined for patients in each of the treatment modalities studied. Drop-out was highest in patients using pharmacotherapy alone (29%) and in psychotherapy and in combined therapy it was both 16%. Most patients dropped out between 8 and 16 weeks of treatment. The vast majority had not experienced beneficial effects of treatment. Factors associated with high drop-out rates were being divorced (5 times higher chance of drop-out), and being younger then 30 years (3 times higher). Drop-out was also related to the severity of comorbid somatic symptoms, but was not associated with other depression characteristics. It is concluded that it is possible to distinguish patients with high risks of drop-out. Apart from the direct clinical relevance of these findings, they may also guide possible future strategies to prevent drop-out in high risk groups.

PO2.77.
LIGHT THERAPY IN THE MORNING: AUGMENTING STRATEGY OF ANTIDEPRESSANT TREATMENT

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Selective serotonin reuptake inhibitors are effective in approximately 70% of patients with a major depressive episode, but therapeutic changes usually require two weeks of administration to become clinically relevant. Adjunct light therapy has been proposed to hasten the effects of drug treatment. The purpose of the present study was to evaluate the effect of morning light therapy or placebo combined with citalopram in the treatment of patients affected by a major depressive episode without psychotic features. Thirty inpatients (major depressive disorder n=21, bipolar disorder n=9) were treated with citalopram 40 mg/day, and randomized in a 3:2 manner to receive 30 minutes of 400 lux green light treatment in the morning or placebo (exposure to a deactivated negative ion generator) during the first two weeks of drug treatment. Timing of light therapy was individually defined to obtain a 2 hours phase advance to morning light. Outcome was measured with Hamilton and Zung depression rating scales every week, and with visual analog scales three times a day during the first week. All outcome measures showed significantly better mood improvement in light treated patients, resulting in faster responses to antidepressant treatment. In conclusion, the combination of citalopram and light treatment was more effective than citalopram and placebo in the treatment of major depression. With an optimized timing of administration, low intensity light treatment significantly hastened and potentiated the effect of citalopram, thus providing psychiatrists with an augmenting strategy which was found effective and devoid of side effects.

PO2.78.
TRANSCRANIAL MAGNETIC STIMULATION MODIFIES THE PROCESSING OF EMOTIONAL STIMULI IN SUBJECTS WITH A MAJOR DEPRESSION EPISODE

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Neuropsychological studies of depression showed that the speed of processing of emotionally characterized stimuli varies in function of the mood level. In depressed patients the preferential processing is for negative stimuli, while normal subjects are more likely to process positive stimuli. Our group has developed a computerized test to measure the time of performing negative and positive adjectives. Every time subjects press "Q" key, for negative adjectives, or "P" key, for positive adjectives, our program finds the reaction time to recognition of emotional connotation. Through the ratio of latency (negative to positive stimuli), we obtained a good index of depression severity. 21 depressed patients have been administered the test before and after the application of rapid transcranial magnetic stimulation (TMS) (15 Hz, 2 sec, 10 trains of pulses with a intertrain interval of 30 sec). The same patients were also treated with slow TMS characterized by 300 pulses at 1 Hz. We divided the patients into a group 1 with higher time of latency (ratio >1) and a group 2 with lower times (ratio <1). Values higher than 1 represent a preferential processing for negative stimuli typically observed in severe depressed patients. The two groups in our study were made up by 7 (ratio >1) and 14 subjects (ratio <1), respectively. Performing a MANOVA with time (repetition of evaluation), group (according to the cutoff) and frequency of TMS as independent variables and the ratio of time of latency between negative and positive stimuli as dependent variable, we obtained the following results: a) group 1 showed higher time of latency than group 2 before and after the treatment (the group effect is strongly significative); b) rapid and slow TMS determined different effects about ratio of time of latency: a rapid frequency of stimulation reduced the ratio, improving the processing of positive adjectives; a slow frequency of stimulation caused an opposite effect (interaction effect of frequency and time is strongly significative). Our results suggest that TMS is able to acutely modify the processing of emotionally characterized stimuli in subjects with a major depressive episode.

PO2.79.
COGNITIVE BEHAVIORAL THERAPY PLUS STANDARD MEDICAL CARE VERSUS STANDARD MEDICAL CARE ALONE IN THE MANAGEMENT OF CHRONIC DEPRESSION

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It has been showed the both cognitive behavioral therapy (CBT) and pharmacotherapy are effective in the treatment of chronic depression. However, since some patients present symptoms continuously even under treatment, it seems important to analyse the effects of the combined treatment (CBT + standard medical care, SMC). This is a non-randomised controlled trial where patients will be assigned to either CBT+SMC or SMC alone. The SMC includes pharmacological treatment (venlafaxine 150-300 mg/day). CBT+SMC includes 14 groups sessions based on the operant conditioning and social learning theory and on Lewinsohn et al.'s model for psychotherapy of depression in adults. Subjects will be evaluated at baseline, at week 16 and at 12 months after the inclusion in the study.

PO2.80.
INFLUENCE OF COMORBIDITY OF PERSONALITY DISORDER ON RESPONSE TO COGNITIVE-BEHAVIORAL GROUP TREATMENT IN PATIENTS WITH DYSTHYMIC DISORDER

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The comorbidity of personality disorders is frequent in dysthymia, with a prevalence reported to be of about 50%. We used a cognitive-behavioral group treatment, based on Lewinsohn et al.'s model, in 50 patients with dysthymia, subdivided into two subgroups: with and without comorbid personality disorder. Using the Beck Depression Inventory (BDI) pre- and post-treatment and the Personality Diagnostic Questionnaire (PDQ-4) pre-treatment, we tested the degree of clinical change and compliance to treatment in the two groups. Preliminary results will be discussed.

PO2.81.
BIBLIOTHERAPY: A COGNITIVE-BEHAVIORAL SELF-HELP TREATMENT FOR DEPRESSION

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Recent investigations have shown that bibliotherapy – reading a self-help manual, based on a cognitive-behavioral intervention strategy – significantly reduces the scores of the Hamilton Rating Scale for Depression (HAMD) and the Beck Depression Inventory (BDI) in depressed patients. In this study we included patients with DSM-IV major depressive disorder or dysthymia diagnosed by the Mini International Neuropsychiatric Interview, in partial remission after optimal pharmacotherapy. Diagnoses were agreed upon by two experienced psychiatrists. Patients were randomised to two groups: one started immediately to read the German version of the self-help manual "Feeling good" by D. Burns (treatment group); the other remained in observation for another 6 weeks (waiting group). Pharmacotherapy remained unchanged. Fifty-six patients (males 17; females 39; mean age 47 years) have either completed the bibliotherapy or finished the 6 weeks waiting time. Our preliminary results indicate a significant improvement of HAMD ($p=0.049$) in the treatment group in comparison to the waiting group, but there is no significant reduction in BDI ($p=0.06$). Further investigations are needed to ascertain the impact of bibliotherapy.

PO2.82.
MEDICAL CONSEQUENCES OF MAJOR DEPRESSION IN PREMENOPAUSAL WOMEN: LESSONS LEARNED FROM THE POWER STUDY, A PROSPECTIVE STUDY OF BONE TURNOVER

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Major depressive disorder (MDD) is the most common psychiatric illness in adults. Subjects with MDD often exhibit hypercortisolism and other endocrine changes that may predispose them to low bone mass and other metabolic and immune alterations. The POWER (premenopausal, osteoporosis, women, alendronate, depression) study is a prospective study of the natural history of bone density in premenopausal women, aged 21 to 45 years, with MDD. We have enrolled and followed, for more than 12 months, 90 women with MDD and 44 matched controls. We report here some of the most interesting findings: a) women with MDD had a greater prevalence of low bone mineral density (BMD) at the femoral neck (16% in the MDD group vs. 2% in the controls; p= 0.02) with a trend of greater prevalence at total femur and spine. The changes in BMD observed at any of these sites examined between baseline and 12 months, in the subgroup of subjects that have already completed 12 months of follow-up (MDD, n= 56; controls, n= 26), were not greater than 1%; smoking, dietary calcium intake and level of physical conditioning were similar between patients and controls; b) after adjusting for weight, women with MDD had significantly greater waist circumference (p=0.01) and abdominal percent fat (p=0.03). In addition, plasminogen activator inhibitor–1, an index of cardiovascular disease (p=0.02) and fVIII levels (p=0.02) were significantly higher in the MDD group; c) in women with MDD, average 24 hr plasma pro-inflammatory cytokines (IL-1, IL-2, IL-6, TNF-alpha) and chemokines (MIP-1a, MCP-1, RANTES, IP-10, IL-8) were significantly higher, while anti-inflammatory cytokines (IL-10 and IL-13) were significantly lower than controls; d) adrenocorticotropin hormone (ACTH) levels were significantly higher in patients with atypical MDD than in controls. In conclusion, MDD is associated with clinically important medical consequences including bone loss, increased cardiovascular risk and immune changes suggestive of sub-clinical inflammation, in a sample of young, mildly depressed subjects. These findings underlie the importance of considering MDD also as a disease of the body and not only as a disease of the mind and call for early detection and treatment of these medical conditions in women with MDD.

PO2.83.
PERSONALITY DIFFERENCES BETWEEN DYSTHYMIA AND MELANCHOLIC AND NON-MELANCHOLIC REMITTED MAJOR DEPRESSION

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We explored personality differences between patients with non-melancholic major depressive disorder (NMDD), melancholic major depressive disorder (MMDD) and dysthymia (DD) by using the Temperament and Character Inventory (TCI). All patients (NMDD, n=60; MMDD, n=33; DD, n=30) were treated with selective serotonin reuptake inhibitors. Nobody was receiving psychotherapy at the moment of the assessment. TCI was administered after 12 weeks of pharmacotherapy, when the score on Hamilton Rating Scale for Depression (HRSD) was below 8. Profiles in NMDD and MMDD exhibited a similar pattern. Significant differences in persistence were found between the two subtypes of major depression. DD patients had higher scores on harm avoidance and lower scores on self-directedness, empathy, and resourcefulness scales. Our data suggest a possible relationship between the character dimensions of Cloninger's model and chronicity of depressive disorder.

PO2.84.
HOW HIGH IS THE PREVALENCE OF MIXED ANXIETY-DEPRESSION ACCORDING TO THE DSM-IV RESEARCH CRITERIA?

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Combined states of anxiety and depression are common in clinical practice and several authors have estimated a high prevalence for this sub-threshold disorder. Empirical data on this syndrome is, however, sparse. Estimates of the prevalence are highly variable, particularly in clinical studies. Mixed anxiety-depression was first included as a research diagnosis in the DSM-IV. This presentation will provide a review of the prevalence of mixed anxiety-depression in clinical settings and in the general population. Further, new results on the use of DSM-IV research criteria in a random sample (n=2064) of young women will be presented. For the first time, an estimation of the prevalence of mixed anxiety-depression according to the DSM-IV criteria is made available. The findings suggest that this condition is less frequent than originally expected.

PO2.85.
THE RELATIONSHIP OF ANXIETY AND DEPRESSION

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The study aimed to explore the relationship between anxiety disorders and depressive disorders. It was based on the screening for anxiety and depression in a population sample, followed by diagnostic work-up of prospective cases by the computerized version of the Composite International Diagnostic Interview (CIDI Auto). Of 2647 interviewed subjects, 1234 had an anxiety disorder and 1160 a major depressive disorder. There is high comorbidity among the anxiety disorders and the major affective disorders. The anxiety disorders start earlier than the affective disorders. Only generalized anxiety disorder (GAD) has the same mean age of onset as the affective disorders, 28 years. Simple phobia has the lowest mean age of onset (16.5 years), followed by social phobia (17.5 years) and agoraphobia (20.6 years). Panic disorder has a mean age of onset of 22.1 years and alcohol abuse and dependence have a mean age of onset of 25 years.

PO2.86.
ANXIETY PRECURSORS OF MAJOR DEPRESSIVE DISORDER: IMPACT ON SEVERITY

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This study examines the impact of anxiety on the severity of major depressive disorder (MDD), with the hypothesis that its onset before

that of MDD may define a specific endophenotype of MDD. A large population sample was screened for anxiety and depression, followed by further diagnostic work-up with the Composite International Diagnostic Interview. The probands met ICD-10 diagnostic criteria for MDD, single episode or recurrent, with age of onset (AGO) at age 13 or later. Our analysis was based on severity of illness, AGO of MDD, prevalence and AGO of five co-morbid anxiety disorders and their relationship with MDD. The cohort consists of 1,042 individuals diagnosed with MDD (male/female ratio 1:2.9). Those with severe MDD (36.9%) have an earlier onset ($p<0.01$), higher male/female ratio ($p<0.01$), and fewer cases without co-morbid anxiety ($p<0.001$). Having onset of anxiety before that of MDD did not differ between severe and mild/moderate MDD. Co-morbidity of anxiety disorders was significantly higher for severe MDD than for mild/moderate MDD. Anxiety co-morbidity is most marked for panic disorder, simple phobia and generalized anxiety disorder.

PO2.87. A STUDY OF PATIENTS WITH COMORBID ANXIETY AND DEPRESSION

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The study aimed to explore the clinical, psychosocial, biochemical and electrophysiological characteristics of patients with comorbid anxiety and depression (CAD). Twenty-five patients who met DSM-IV criteria for CAD, 30 patients with DSM-IV major depression (MD), 14 patients with DSM-IV generalized anxiety disorder and 6 patients with DSM-IV panic disorder (AD) were interviewed in semi-structured manner and were administered the Hamilton Scales for Depression and Anxiety, the Life Experiences Survey, The Source Skills Rating System, the Eysenck Personality Questionnaire and the Defensive Style Questionnaire. Plasma monoamine neurotransmitters were assayed and brain electrical activity mapping (BEAM) was performed. CAD patients were older, had a later and more acute onset and presented more severe clinical symptoms and more significant impairment than the other groups. CAD and MD patients had higher rates of suicide ideation or attempted suicide than AD patients. The social support scores of CAD patients were higher than those of AD patients. CAD patients had family function deficits, but less severe than the other groups. The three groups had similar personality features, but different defense styles. There were no significantly differences among three groups in plasma monoamine neurotransmitter levels and BEAM indices.

PO2.88. DEPRESSIVE SYMPTOMATOLOGICAL PROFILE IN THE ELDERLY

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Geriatric depression is a frequently unrecognised condition. This is mainly due to the high occurrence of anxiety, somatic complaints, cognitive impairment, and concurrent medical and neurological disorders, which may hinder the early detection of a major depression. The aim of the present study was to investigate the depressive symptomatological profile in a large sample of patients, analyzing the differences between older and younger subjects. Three hundred and twenty-three inpatients (<60 years: n=208; ≥60 years: n=115) affected by a major depressive episode (major depressives=174; bipolars=113) were included in the sample. Individuals with severe mental retardation, dementia, substance abuse/dependence, neurological disorder or clinical/laboratory indications of a severe organic disease were excluded from the sample. All patients were assessed by the 21-item Hamilton Depression Rating Scale (HAM-D) at intake. In our sample we observed significant differences between adults and elderly patients regarding their depressive symptomatological profiles. Compared to younger adults, older patients had a more severe overall depressive symptomatology ($p=0.004$) and higher HAM-D scores for depressed mood ($p=0.007$), psychomotor retardation ($p=0.046$), somatic anxiety ($p=0.014$), gastrointestinal symptoms ($p=0.02$), hypochondria ($p=0.001$) and weight loss ($p=0.003$). Moreover, a higher incidence of general somatic symptoms was observed ($p=0.049$). Our data support the view of a more severe depressive symptomatology in the elderly. Moreover, depression in the elderly seems to be characterised mainly by somatic complaints; those symptoms may lead to inaccurate diagnoses, and so the clinician must pay more attention to the detection of these signs in the diagnosis of depression for elderly patients.

PO2.89. SUBLIMINAL AFFECTIVE PRIMING IN CLINICAL DEPRESSION: A LONGITUDINAL INVESTIGATION IN THE COURSE OF INPATIENT PSYCHOTHERAPY

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Cognitive theories and research findings remain contradictory regarding the nature of emotional processing biases in clinical depression. The present study takes advantage of the immense work on the affective priming paradigm to examine the time course of cognitive bias in depressed patients. Patients meeting DSM-IV criteria for unipolar depression (n=22) and normal controls (n=22) were tested at admission and after about 7 weeks of inpatient psychotherapy. Half of the patients (n=11) suffered from a comorbid anxiety disorder. Affectively polarized prime words were presented briefly and masked, followed by positive or negative target words, which had to be evaluated. Subjects' affective state was assessed by self-report measures (Beck Depression Inventory, State/Trait Anxiety Inventory). In the course of psychotherapy, patients improved significantly. Qualitative group differences could be demonstrated: in non-comorbid depressed patients, a main effect of prime valence indicated a Stroop-like interference of negative prime words only, whereas prime-target interaction was observed in comorbid patients and normal controls. Interestingly, normal affective priming was observed in comorbid patients, while healthy subjects showed reversed priming effects. Our data indicate a processing bias for negative words in non-comorbid depressed patients. In these patients, processing resources seem to be automatically allocated towards negative information. This "negativity effect" is significantly correlated with the symptom level at admission and is abolished at the end of therapy. Higher pre-activation levels of emotional concepts in anxiety might account for the findings in comorbid patients.

PO2.90.
QUALITATIVE AND QUANTITATIVE DIFFERENCES OF DEPRESSION SYMPTOMS ACCORDING TO SEX, AGE AND SEVERITY

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The purpose of this study was the evaluation of possible differences in the clinical presentation of depressive mood according to sex, age and severity of the depressive syndrome. We reviewed 45 cases of patients with a diagnosis of depressive disorder according to DSM-IV criteria. All of them had filled in the Beck Depression Inventory (BDI) during the first contact with us. We divided them into subgroups according to the score on Beck's Inventory (minor, moderate and severe depression) and the age (young, middle and old age). The severity of depression and the clinical presentation were the same for both sexes, except for the presence of prominent despair in men. In all cases the more intensive symptoms were sadness, loss of pleasure, indecision, negative self-judgment, intense irritation, loss of energy, fatigue and loss of interest for the others. Significant differences were demonstrated among patients with different age and severity of depression.

PO2.91.
COGNITIVE APPRAISAL OF SHAME AND GUILT IN PATIENTS SUFFERING FROM DEPRESSION

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We assessed cognitive appraisal of shame and guilt in depressed patients compared with healthy controls. Our work is based on Scherer's cognitive appraisal theory and the International Survey on Emotional Antecedents and Reactions (ISEAR) questionnaire, which targets all five components of the appraisal process (intrinsic pleasantness, novelty, goal-hindrance, coping-ability, norm and self-compatibility). 80 depressed patients under clinical treatment and 120 healthy controls filled the ISEAR questionnaire. The Short Check List-90, revised (SCL-90-R) was used for the screening of the individuals in the control group. We found significant differences between the two groups concerning coping potential, goal-hindrance, norm and self-compatibility. Depressed patients stated that they are unable to influence the outcome of the given situation more often than controls (shame, coping potential: 56 vs. 29%, p=0.001; guilt, coping potential: 56 vs. 22%, p=0.001). They also estimated more often the negative impact of the listed events then the control group (shame, goal-hindrance: 72 vs. 40%, p=0.001; norm-compatibility: 48 vs. 20%, p=0.001; self-compatibility: 75 vs. 53%, p=0.010; guilt, goal-hindrance: 80 vs. 40%, p=0.001; norm-compatibility: 35 vs. 17%, p=0.031; self-compatibility: 71 vs. 52%, p=0.014). In conclusion, in line with the cognitive theories of depression, we found that depressed patients' situation appraisal differed from that of control persons (underestimation of coping ability, misjudgement of an event's negative effects on one's needs and goals). This inappropriateness of appraisal processes may well have a role in developing inappropriate emotional states and possibly damaged social functioning leading to affective disorders.

PO2.92.
THERAPEUTIC APPROACH TO COTARD'S DELIRE DE NEGATION: A REPORT ON FIVE CASES

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The "delire de negation" was first described in 1880 by Cotard, who believed it to be a new type of agitated melancholia. It has long been debated whether this is a syndrome which may be associated with a number of psychiatric conditions, most notably depression, or a separate clinical entity. We report on five patients with Cotard's syndrome in a context of an affective disorder. The psychopathological, clinical and therapeutic aspects of the syndrome are reviewed. We particularly focus on the potential significance of a subdivision of the syndrome into diagnostic types, as proposed by Berrios and Lugue, or stages, as introduced by Vamada and colleagues. These classifications may be useful, as treatment would, in each case, be different.

PO2.93.
DEPRESSION DURING PREGNANCY AND AFTER CHILDBIRTH

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Postnatal depression is a common cause of morbidity. A number of studies have focused on early detection of depression during postnatal stage, however the onset of depression may be during pregnancy. This study aimed to investigate depressive symptoms during pregnancy and after childbirth in Japan. A cohort study was conducted at the Sapporo Toho Hospital in Hokkaido, Japan. The study recruited subjects who attended the hospital for regular check-up between 26 and 34 weeks of pregnancy. Subjects who consented to the study were investigated for depressive symptoms by the Edinburgh Postnatal Depression Scale (EPDS) on two occasions: during pregnancy and at 4 weeks after childbirth. Since June 2002, 187 women completed the questionnaire at one month postpartum. A score above the cut-off point of 9 on the EPDS for depressive symptoms was observed in 5.3% of the women during pregnancy and 12.8% of the women at one month postpartum. There was a significant association between antenatal and postnatal depression. Five of the ten women who were depressed antenatally had also been depressed in the postpartum. In conclusion, not only the postnatal period, but also the antenatal period can offer an opportunity to identify women at high risk for depression by screening and promoting psychological well being during pregnancy.

PO2.94.
DEPERSONALIZATION SYMPTOMATOLOGY IN DEPRESSIVE PATIENTS

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Depersonalization symptomatology can be manifested within the continuum ranging from very mild, which could appear even in healthy population, up to the extremely prominent symptomatology in schizophrenia and depersonalization disorder. The objective of our research was to explore the existence of a specific increase of the depersonalization dimension in patients suffering from depression. Experimental and control group numbered 25 members each. A structured questionnaire for obtaining socio-demographic and medical history data

was used. The Patient Health Questionnaire-9 (PHQ-9) was utilized for determining the level of depressive disorder (mild, moderate, moderately high, high). Depersonalization symptomatology was estimated according to the Cambridge Depersonalization Scale (CDS). Results indicate that patients with depression have much higher levels of depersonalization in comparison to the healthy population (p=0.001). Depression intensity stands in positive correlation to levels of depersonalization (p=0.0029). Depersonalization is more prominent in more severe depression (moderately high and high). There are no significant correlates in terms of education, episode duration, illness duration, illness history and the modality of onset of the illness (gradual or abrupt).

PO2.95.
THE FACTORIAL STRUCTURE OF THE CES-D IN CLINICAL SETTING IN JAPAN

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The Center for Epidemiologic Study Depression Scale (CES-D), developed by the National Institute of Mental Health, is a 20-item inventory that has been widely used in assessing depressive symptoms. Radloff examined the factor structure of the CES-D and identified four factors: depressive affect, positive affect, somatic complaints and interpersonal problems. These four factors have been replicated in predominantly Caucasian populations. However, some researchers reported that there were differences among cultures and races. Concerning factor analysis of the Japanese version of the CES-D, there was no research using depressive patients although there were studies that examined non-clinical samples. Then, we are investigating the factorial structure of the Japanese version of the CES-D from the first intake at the outpatient clinic in the Department of Psychiatry of Tokyo Medical University for three years. In addition, we report differences by generation and differences of total score by severity of depression.

PO2.96.
THE EFFECT OF VENLAFAXINE TREATMENT ON SERUM BRAIN-DERIVED NEUROTROPHIC FACTOR LEVELS IN DEPRESSED PATIENTS

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Recent studies suggested the role of brain-derived neurotrophic factor (BDNF) in depression. This study was aimed to test the effect of venlafaxine treatment on serum BDNF levels in patients with major depressive disorder. We studied ten patients with major depressive disorder, two of whom had their first episode and were drug-naïve, and the others were drug-free for at least 4 weeks. Depression was rated by Hamilton Scale for Depression (HAM-D). The control group consisted of ten age- and sex-matched subjects. Blood samples were collected at baseline and after 12 weeks of venlafaxine treatment (during remission). Serum BDNF was assayed with an ELISA kit (Promega; Madison, WI, USA). In statistical analysis, Mann-Whitney Test and Wilcoxon Test were performed. The mean age of the study group was 31.8±14.3 years and 8 of the ten patients were female. At baseline, mean serum BDNF level was 17.9±9.1 μg/ml and mean HAM-D score was 23.2±4.6. Serum BDNF level of the study group was significantly higher than the control group (p=0.007). Venlafaxine treatment was started with a dose of 75 mg/day. Final venlafaxine dose was 225 mg/day in two patients, 150 mg/day in three patients, and 75 mg/day in the rest. At the end, mean serum BDNF level (34.6±7.1 μg/ml, p=0.007) increased while mean HAM-D score (8.2±3.9, p=0.005) decreased significantly, and serum BDNF level at remission was not different from the control level (p=0.43). In conclusion, this study suggests that venlafaxine treatment of depression improves serum BDNF level as well as HAM-D score.

PO2.97.
PROTEIN S100B CORRELATES WITH MONOAMINERGIC FUNCTION IN MAJOR DEPRESSION

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S100B is an astrocytic, calcium-binding protein which exerts neuroprotective and regenerating effects on neurons and glia cells at nanomolar concentrations. In cell culture and animal experiments S100B has been shown to be regulated by serotonin via 5-HT1A receptors. We hypothesized that the increased S100B concentration detected in major depression might depend on the functionality of the serotonergic system. In 18 patients with major depression, S100B serum concentration was determined and monoaminergic function was measured by oral citalopram (n=10) and reboxetine (n=8) challenge tests. S100B serum concentration correlated significantly with the serotonergic function. In addition, a negative correlation between noradrenergic function and S100B concentration was observed. This study provides evidence that not only in cell culture and animal experiments but also in a clinical setting S100B concentrations might be influenced by the serotonergic system in depressed patients. The role of noradrenaline in this respect needs further clarification.

PO2.98.
DIFFERENT PROTEIN EXPRESSION LEVELS AFTER ANTIDEPRESSANT TREATMENT ON EBV CELLS OF DEPRESSED PATIENTS

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In recent years it became obvious that the targets of antidepressant drug action are more likely to lie beyond the receptor level. Although the molecular loci of antidepressant drug action have not yet been fully established, it is known that antidepressant treatment modulates gene expression at the genomic level. The aim of the present study was to investigate the effects of mirtazapine, reboxetine and fluoxetine on the protein expression levels in Epstein-Barr virus transformed (EBV) cells of depressed patients as a peripheral model using antibody microarrays ("protein chips"). Lymphocytes were prepared from whole blood and immortalized via EBV transformation. The cells were incubated with the medium plasma level concentration of each antidepressant drug for 48 hours and compared with an untreated sample of the same cell line. The protein chips contained 380 monoclonal antibodies on glass slides (proteins of signal transduction, cell-cycle regulation, gene transcription, apoptosis, oncogenesis). First results show clear differences in the protein expression. Especially the levels of three proteins (neurogenin 3, K-channel a, JNK1), which play a role in signal transduction processes, were altered after

incubation with each antidepressant. Our data suggest that mirtazapine treatment modulates to a great extent the expression of proteins involved in signal transduction and neuronal plasticity. These results have to be validated in further studies.

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PO2.99. HORMONE REPLACEMENT THERAPY WITH ANDROGEN AS AN ADJUNCTIVE TREATMENT TO TREAT POSTMENOPAUSAL DEPRESSION

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Androgens improve libido and cognition, although there are few studies in depression. This study aimed to evaluate hormone replacement therapy (HRT) with and without androgens in menopausal depressive women. Seventy-two depressive (DSM-IV) women, mean age 53.6 years, followed for 24 weeks, were all treated with venlafaxine (37.5 – 225 mg/day) and randomized according to a double blind design into four HRT groups: G1 (n=20) - estrogen (0.625 mg) plus medroxyprogesterone acetate (2.5 mg) and methyltestosterone (2.5 mg); G2 (n=20) - estrogen (0.625 mg) plus medroxyprogesterone acetate (2.5 mg) and methyltestosterone placebo; G3 (n=16) - estrogen placebo plus medroxyprogesterone acetate placebo and methyltestosterone (2.5 mg); and G4 (n=16) - estrogen placebo plus medroxyprogesterone acetate placebo and methyltestosterone placebo. Outcomes measured by Montgomery-Asberg Depression Rating Scale (MADRS) were analyzed by repeated measures technique, after using multiple imputation for missing responses due to drop outs. At baseline, the mean MADRS score was 30.7. No significant difference was observed between groups on drop-out rates (p=0.43). A statistical difference among the groups was observed for remission rates at the end of the study: G1 100%; G2 86.7%; G3 77.8%; G4 55.6% (p=0.023). These results suggest a better patient outcome with HRT plus androgens added to venlafaxine to treat postmenopausal women with depression.

PO2.100. ANTIPSYCHOTICS IN THE TREATMENT OF DEPRESSIVE EPISODE AND RECURRENT DEPRESSION

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We evaluated the rationale for the prescription of antipsychotics (APs) in depressive episode and recurrent depression. We analyzed data from inpatients at the Department of Psychiatry, Ruzinov Hospital, Bratislava, Slovakia, in years 1999-2001. Overall, 149 patients were hospitalized with the ICD-10 diagnosis F32 (n=35) or F33 (n=114). We found the use of APs and choice of AP type (typical or atypical) independent of the diagnosis and severity of the disorder. Overall, 44% of patients were treated with APs, 26% with typical and 22% with atypical drugs. Duration of hospitalization was significantly longer in patients using APs and was unrelated to the severity of the disorder (tested for F33). The type of AP did not influence the duration of hospitalization. The number of patients re-hospitalized in one-year interval after discharge was unrelated to AP treatment or AP type. Treatment with APs did not yield different improvement on the Clinical Global Impression Scale (CGI) when assessed one year after release from hospital (in F33). Considering CGI scores, typical and atypical APs were equally effective. Our data do not confirm an unequivocal benefit from AP treatment for patients with depressive episode and recurrent depression. However, the findings suggest that APs may be used in patients with insufficient response to antidepressants and perhaps in patients expressing certain disorder-related symptoms. In such cases the use of APs may well be justified.

PO2.101. EFFICACY AND TOLERABILITY OF ST. JOHN'S WORT EXTRACTS IN MAJOR DEPRESSIVE DISORDER

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There is ongoing controversy on the efficacy of St. John's wort extracts (hypericum) in major depression. We performed a systematic review and meta-analysis of all randomised-controlled trials with a DSM-III/IV or ICD-10 diagnosis of major depressive disorder and response ratios measured by >50% improvement on HDRS or final score ≤8. We found 13 comparisons with placebo, and seven with tryciclics (TCAs) and selective serotonin reuptake inhibitors (SSRIs) each. There were three three-arm trials comparing hypericum with placebo and a standard antidepressant. Attrition was not significantly different between hypericum and placebo or SSRIs, but was significantly lower in comparison to TCAs (absolute risk reduction, ARR 5%, 95% CI 14-33). There was no significant difference in number of patients reporting side effects in the meta-analyses of the placebo and hypericum groups. The ARR in comparison to SSRIs was 9% (95% CI 8-20) and in comparison to TCAs was 22% (95% CI 4-5). Although four placebo-controlled trials did not show superiority in respect to response, the meta-analysis shows an ARR of 16% in favour of hypericum (95% CI 6-7). The ARR with respect to response with TCAs or SSRIs was 4% and 3%, respectively. One of the three-arm trials could not show antidepressant superiority of the standard medication above placebo and was excluded from the meta-analysis. The ARR for the remaining two studies was 23% (95% CI 3-6). In conclusion, in outpatients with mild to moderate major depressive disorder, hypericum extracts combine excellent tolerability with antidepressant efficacy comparable to standard antidepressants. This may be interesting for patients with intolerable side effects on traditional antidepressants and for low income countries.

PO2.102. UTILIZATION OF ANTIDEPRESSANT DRUGS: A LONG-TERM RETROSPECTIVE ANALYSIS IN PRIMARY CARE

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The objective of the study was to investigate the utilization of antidepressant drugs (ADs) in primary care. An observational cohort study was conducted among all population (356,000 inhabitants) listed in the databases of the Local Health Unit of Ravenna and exposed to ADs from 1996 to 2000. Pharmaco-utilization profile was defined

according to the mean number of renewed prescriptions per year, calculated on the interval between the first and the last prescription; the exposure was categorized as continual (≥5) non-continual (between 1.5 and 5) or occasional (≤1.5). A cohort of 27,139 patients was retrospectively evaluated. Part of them (n=5,989, 22.1%) received a variable treatment combination including heterocyclics or selective serotonin reuptake inhibitors (SSRIs) or other drugs. With reference to monotherapy, 39.1% of patients (n=10,612) were exposed to heterocyclics, 7.3% to SSRIs (n=1,990), and 31.5% (n=8,548) to different drugs. Among evaluated patients, 18.6% (n=5,044; mean age 63±17 years; 65% female) were exposed to a continual treatment, 23.1% (n=6,271; mean age 61±18 years; 69% female) to a non-continual treatment, and 58.3% (n=15,824; mean age 54±20 years; 63% female) to an occasional treatment. In the groups with a continual exposure, we found the lowest percentage of patients treated with heterocyclics (21.8%; p<0.001) and the highest percentage of patients treated with SSRIs (12.0%; p<0.001). Results from population-wide databases show a 5 year cumulative AD exposure of 7.6%; however, just a small proportion of these patients (18.6%) were on a continual exposure.

PO2.103. DEPRESSION, DIABETES AND CONCOMITANT CARDIOVASCULAR DISEASES: POLYPHARMACOTHERAPY IN THE 'REAL' PRACTICE

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This observational cohort retrospective study measured concomitant pharmaco-utilization for diabetes, hypertension, coronary artery disease and dyslipidaemia in subjects treated with antidepressants (ADs). It was conducted among all population (356,000 inhabitants) listed in the administrative databases of the Local Health Unit of Ravenna. In a time horizon of 5 years (1996-2000), all patients exposed to ADs were included. AD pharmaco-utilization profile was defined according to the mean number of renewed prescriptions per year; the exposure was categorized as continual (≥5), non-continual (between 1.5 and 5) or occasional (≤1.5). At least 3 prescriptions in the follow-up period of antidiabetics, antihypertensives, cardiovascular therapy and cholesterol-lowering drugs defined cardiopathic, diabetic, hypertensive and dyslipidaemic patients. A cohort of 27,139 patients was evaluated: 18.6%, 23.1% and 58.3% were respectively exposed to continual, non-continual and occasional AD treatment. Concomitant exposure for comorbidities resulted as follows: 7.7% diabetes; 48.8% hypertension; 15.2% coronary artery disease; 9.1% dyslipidaemia (continual AD setting); 5.9%, 45.2%, 13.2%, 7.5% (non-continual) and 4.2%, 33.3%, 8.2%, 5.5% (occasional). Polypharmacotherapy in patients exposed to ADs is frequent; taking the picture of the 'real' pharmaco-utilization is the first step to tailor evidence based clinical and pharmacological guidelines with the main aim to assure patients the best practice and clinical outcomes.

PO2.104. RISK OF ABNORMAL BLEEDING ASSOCIATED WITH LEVEL OF SEROTONIN REUPTAKE INHIBITION BY ANTIDEPRESSANTS

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Serotonin plays a role in platelet aggregation. Since antidepressants influence the level of serotonin, an increased risk of abnormal bleeding may be associated with their use. The aim of this study was to estimate the risk of abnormal bleeding associated with the use of antidepressants and to establish the relation between the extent of serotonin reuptake and the risk of bleeding. We conducted a nested case-control study in a cohort of over 64,000 new antidepressant users out of (general) psychiatric practice in 1992-2000. Cases were identified as all patients with a hospitalization for a primary diagnosis of abnormal bleeding. Controls were matched on age and gender. We classified exposure according to the extent (high, intermediate or low) of inhibition of serotonin reuptake, and performed logistic regression analysis to calculate odds ratios. A total of 196 cases with abnormal bleeding were found. Risk of hospitalization increased with use of intermediate inhibitors of serotonin reuptake (OR 1.9 [1.1-3.5]) and high inhibitors of serotonin reuptake (OR 2.6 [1.4-4.8]). In conclusion, in a large population of new antidepressant users we found a significant association between the extent of serotonin reuptake inhibition by antidepressants and the risk of hospital admission for abnormal bleeding as the primary diagnosis.

PO2.105. ECCHYMOSES AS AN ADVERSE EFFECT OF FLUOXETINE TREATMENT

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Abnormal bleeding has been reported with several antidepressants, especially selective serotonin reuptake inhibitors. Only 25 cases have been reported in the literature, covering a spectrum from abnormal subclinical laboratory findings to ecchymoses and bleeding. Although there are theories concerning the etiopathogenic mechanisms, data are inconclusive. We report a case of ecchymoses following fluoxetine use. A 28 year old female patient suffering from DSM-IV major depression was not receiving any medication during the previous 6 months. She was started on fluoxetine 20 mg daily and after three weeks the dose was increased to 40 mg. After about a week and while the patient started responding to treatment, she manifested 7 ecchymoses in the inner surface of both thighs. All laboratory investigations, including blood and biochemical testing, liver and renal function, prothrombin time, partial prothrombin time and bleeding time, were normal. She was changed to sertraline (gradually up to 200 mg daily). Depressive symptoms resolved within the next four weeks. About one and a half month after fluoxetine discontinuation and still under sertraline treatment ecchymoses gradually disappeared. From the history of the patient, it is clear that there was a temporal relationship between ecchymoses and fluoxetine treatment.

PO2.106.
TEMPORARY RESPONSE OF A TREATMENT RESISTANT DEPRESSED PATIENT TO A COMBINATION OF VENLAFAXINE PER OS AND INTRAVENOUS CLOMIPRAMINE

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We report the case of a 33-year old woman with major depression refractory to treatment. The patient had received various adequate trials with many different agents and all of them had lasted at least four months. Therefore, it was decided to try a more aggressive treatment with high doses of i.v. clomipramine in combination with venlafaxine per os. The maximum dose reached at day 15 was 6 amp clomipramine i.v. plus 225 mg venlafaxine per os. The patient responded on day 15, with a dramatic remission of symptoms, almost to normothymic state. This remission lasted for 37 days, and then the patient attempted suicide by swallowing tablets. These 37 days were the only normothymic days of her last 7 years.

PO2.107.
IMPROVEMENT OF COGNITIVE FUNCTIONS AFTER TRANSCRANIAL MAGNETIC STIMULATION IN A PATIENT WITH TREATMENT RESISTANT MAJOR DEPRESSION

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A 79 years old woman who had been suffering from major depression for the last 2 years, and had been treated unsuccessfully with sertraline (150 mg/day) and venlafaxine (150 mg/day), underwent transcranial magnetic stimulation (rTMS). At admission the Hamilton Depression Scale (HAMD-17) score was 18. The score of the clock-drawing test was 3. The patient was not able to name the exact day of the month. Before rTMS, in order to avoid seizures, the dose of venlafaxine was decreased to 75 mg/day. The parameters of the performed left prefrontal rTMS were 10 Hz, 20 trains, 5 sec., number of pulses – 50, 110 % MT. After 10 procedures, the dose of venlafaxine was restored up to 150 mg/day and rTMS procedures were continued. After 5 additional procedures the psychomotor activity of the patient increased significantly and the score of the HAMD-17 became 9. She began to smile; speech was fully understandable, the contact with the patient became easy. The score of the clock-drawing test became 4. Two months after the procedures, the patient preserved the same condition using the same medications. Thus, the 15 sessions of rTMS markedly improved not only the depressive symptoms of this patient with drug resistant depression but also her cognitive functions.

PO2.108.
HEART RATE VARIABILITY AS A PREDICTOR OF RESPONSE TO ELECTROCONVULSIVE THERAPY IN MAJOR DEPRESSIVE DISORDER

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The aim of the study was to test the hypothesis that heart rate variability could predict response to electroconvulsive therapy (ECT). 40 consecutive patients who gave consent were recruited. After the diagnosis was confirmed, Beck's Depression Inventory (BDI) was used for rating severity and response to treatment. Digital electrocardiogram (ECG) was acquired in standard conditions and analysed using Show ECG version 2.0 software. The heart rate, root mean successive differences and high-frequency power were studied. All patients received modified, right unilateral thrice-weekly ECT. Twenty-five patients completed the protocol. At the end of two weeks, patients were divided into two groups - "remitted" and "not remitted" - and their baseline values were compared. The patients who completed the protocol were not significantly different from those who did not. Patients improved significantly after receiving ECT. Remission was defined as a BDI score of 9 or less. Of the parameters studied, higher high-frequency power (p=0.01) predicted remission at the end of two weeks. This finding suggests that high frequency power can potentially be used as a prognostic measure for response to ECT.

PO2.109.
A COMPUTERISED INTEGRATED PATHWAY FOR ELECTROCONVULSIVE THERAPY

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The Scottish ECT Audit Network (SEAN) has been established for six years. Data on all patients having electroconvulsive therapy (ECT) are routinely collected from all 28 clinics in Scotland, including information on demographics, process and outcome. We have developed an integrated care pathway, initially on paper and now electronically, which covers the steps from the decision to give ECT, through the ECT process to assessing outcome including side effects. The electronic pathway only allows ECT to be given once the appropriate checks, for example legal status and consent, have been entered. ECT in Scotland is given at a rate of 142 treatments per 100,000 population, mainly to white (99%) adult patients with a diagnosis of depressive illness (87%). The ratio of females to males is approximately 2:1 and ECT is not given disproportionately to the elderly. The majority of patients (82%) are able to give consent, the remainder being treated under legal provisions. Equipment and facilities are of a high standard. Outcome data using verified scales shows a definite improvement in over 72% of patients. Early analysis of data suggests a correlation between indication for ECT and outcome.

PO2.110.
A NEW METHOD FOR MONITORING OUTCOME FROM ECT USING THE ANCHORED VERSION OF THE BRIEF PSYCHIATRIC RATING SCALE

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The Brief Psychiatric Rating Scale (BPRS) is frequently used as an outcome measure for electroconvulsive therapy (ECT) in both clinical practice and research. The purpose of this study was to develop and apply a psychometrically sophisticated method for determining whether a patient undergoing ECT has improved, remained stable, or deteriorated. Inter-rater reliability estimates for the BPRS anchored version (BPRS-A) individual items and total score, reported by Lachar et al., were used to calculate the standard error of difference and reliable change confidence intervals (70%, 80%, and 90% CI). A new quick reference reliable change table was used to evaluate 20 patients undergoing an index or maintenance course of ECT. Their mean age was 62.5±17.7 years. On average, the patients evidenced a significant improvement in global psychiatric symptoms, as measured by the total

score (pre-ECT: 48.5±14.7; post-ECT: 38.3±9.4; p<0.02; d=.85, large effect size). To be 80% certain that a patient has improved or declined beyond the probable range of measurement error, his or her total score must change by 13 or more points, and individual item scores must change by either one or two points. Sixty percent of the patients improved, 15% remained stable, 20% showed evidence of both improvement and deterioration on individual items, and 5% (one patient) clearly worsened. The reliable change methodology is psychometrically sophisticated and easy to use in day-to-day clinical practice.

PO2.111.
THE COMPARATIVE HEMODYNAMIC EFFECTS OF METHOHEXITAL AND REMIFENTANIL IN ELECTROCONVULSIVE THERAPY

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Remifentanil is a short acting opioid frequently used to supplement general anesthesia for brief procedures. Narcotic agents are known for their ability to blunt autonomic responses to stimuli such as laryngoscopy and intubation and do not alter seizure threshold. We hypothesized that the combination of remifentanil and methohexital for induction would produce favorable suppression of sympathetic response during electroconvulsive therapy (ECT). Patients were enrolled in a prospective, randomized, double-blind, crossover study of methohexital alone versus remifentanil with an adjuvant of low-dose methohexital. One hundred ten ECT treatments were evaluated and subjects were treated in an alternating fashion with one of two induction protocols: methohexital alone in an 80-100 mg IV bolus or remifentanil 500 mcg IV bolus combined with methohexital 40 mg IV. Bilateral ECT was performed in standard fashion and systolic blood pressure and heart rate were recorded throughout the procedure. No significant differences were found in baseline hemodynamic values between the two groups. Heart rate was significantly lower in the remifentanil group vs. methohexital group at one minute post-induction and just prior to ECT stimulus. Pre-ECT systolic blood pressure was not significantly different between the two groups. Heart rate remained lower in the remifentanil group at all measured timepoints during the treatment and continuously for five minutes after the seizure. Systolic blood pressure was significantly lower at one minute following the end of seizure and five minutes after end of seizure. Remifentanil's short duration of action, favorable side effect profile, apparent lack of effect on seizure duration and ability to suppress hemodynamic response make it a potential novel drug for ECT induction.

PO2.112.
THE TIME OF SUICIDE IN ITALY

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It has been known for over 150 years that suicides predominantly take place in the daytime and that their number is at a maximum in the months of May and June. Only very recently has it become known that season also has an impact on the 24-h distribution of suicides. These time-related effects on suicidal behaviour are appreciated at best when time of day and time of year are taken into account simultaneously. This approach has been applied when studying time patterns of suicidal behaviour in a large national population of suicides. Data regarding all suicides in Italy during the years 1997-1999 (n=9196), as registered by the Office of Judicial Statistics from the National Institute of Statistics (ISTAT) in Roma, were examined. As a preliminary result it can be reported that suicides in Italy are virtually limited by the boundaries of sunrise and sunset. During the daylight hours, subgroups, characterised by motive for suicide, method, sex, age and geographic location, show considerable differences in their time patterns. It was found that the spring peak, if present, is predominantly located in the morning hours. Further analysis of the dataset, regarding the 24-h x seasonal distribution of suicides, may yield some of the main factors regulating the timing of a suicide.

PO2.113.
OPEN TRIAL OF MIRTAZAPINE IN THE TREATMENT OF MAJOR DEPRESSION IN HIV-INFECTED OUTPATIENTS

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Mirtazapine, an alpha-2, 5HT-2, and 5-HT-3 antagonist, with low potential for drug interactions, has been found to be well tolerated with few adverse effects, and effective for the treatment of depression in HIV-1 infected patients in a previous small trial. The aim of our study was to examine the efficacy and tolerability of mirtazapine for the treatment of depression in a sample of HIV-1 infected patients. In a prospective, longitudinal, open-label, observational study, 27 HIV-1 infected outpatients with major depression were assessed at baseline and after 1, 2, 4, 8 and 16 weeks of treatment with mirtazapine using the Hospital Anxiety and Depression Scale (HADS), the Beck Depression Inventory (BDI), and the Clinical Global Impression (CGI). Side effects were recorded. The outcome of completing patients was analysed using ANOVA or Friedman test. Sixteen patients dropped out before reaching the last visit, mainly due to somnolence and dizziness (5 patients). Completing patients (41%) showed a significant (p<0.05) improvement in all measures: 58% on CGI, 53% on BDI, and 46% on HADS depression subscale. Most patients showed an improvement in insomnia during the first week of treatment. No side effects on sexual functioning were observed. No significant changes of weight were observed. Despite the risk of drop-outs due to side effects, mirtazapine should be considered in the treatment of depressed HIV-1 infected patients, because of its rapid improving effect on all measures of depression, especially on sleep disturbances.

PO2.114.
TRAZODONE IN SEXUAL DYSFUNCTIONS OF DEPRESSED PATIENTS RECEIVING SELECTIVE SEROTONIN REUPTAKE INHIBITORS

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We tested the efficacy of trazodone in the treatment of sexual dysfunctions (mainly erectile dysfunction) in patients with major depressive episode (DSM-IV-TR) who previously received a selective serotonin reuptake inhibitor (SSRI). A group of 8 patients, males, age between 28 and 42, with a diagnosis of major depressive episode in the last month, who had received before the admission an SSRI, was

evaluated using the Hamilton Depression Rating Scale (HAMD), a structured interview regarding the quality of life during the treatment period and the Sexual Health Inventory for Men (SHIM). At the time of admission, all patients had erectile dysfunction. Trazodone treatment was initiated at 150 mg/day and the SSRI was discontinued. We found a decrease in HAMD mean score (from 24.6 at the time of admission to 16.4 at two weeks after the switch of the drug), an improvement in the quality of life and a decrease in SHIM mean score from 18 to 7. After two weeks of trazodone treatment, 4 patients reported a marked improvement in sexual dysfunction (SHIM score between 7 and 12), one presented a moderate improvement (SHIM score of 14) and the rest of patients reported no change in their sexual functioning. These data suggest that trazodone is a useful treatment for depression-associated sexual dysfunctions and can be helpful for SSRI-induced or aggravated sexual symptoms.

PO2.115.
TIANEPTINE IN THE TREATMENT OF MIXED ANXIETY AND DEPRESSION DISORDER IN THE ELDERLY

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Mixed anxiety and depression disorder (MAD) has been recognized in ICD-10 as a diagnostic group including those anxious and depressed patients who do not fulfill criteria for any major axis I disorder. Clinical experience indicates that MAD might be particularly prevalent in geriatric patients. The treatment of MAD in the elderly represents a special challenge mostly due to tolerability issues. Tianeptine, a relatively novel antidepressant, has been shown to possess both antidepressant and anxiolytic-like properties and is usually well tolerated by the old. We conducted a retrospective analysis of treatment effectiveness and tolerability of tianeptine (25 mg bid) in 26 MAD geriatric subjects (mean age: 73), with or without accompanying cognitive deficits. Twenty-two of 26 (85%) completed an 8 week trial of tianeptine. Two patients discontinued due to side effects (dry mouth and nausea) and 2 due to drug-unrelated reasons. At week 8, 19 patients (73% of initially recruited and 86% of completers) were considered responders (Clinical Global Impression score 1 or 2). The response rate did not differ in subjects with a score on Mini-Mental State Examination (MMSE) lower than 25 points (n=11). In conclusion, tianeptine might represent an alternative option in the treatment of MAD in the elderly, with or without cognitive deficits.

PO2.116.
MANAGEMENT OF DEPRESSION IN PATIENTS WITH SUBSTANCE ABUSE

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Patients admitted between July and December 2001 to a rehabilitation center for substance abuse were assessed on admission and discharge using the Mini-Mental Exam and the Hamilton Depression scale (HAM-D21). Demographic data and details on the extent and nature of drug use were also obtained. 64 patients were admitted during this period: 24 were excluded from analysis due to psychiatric co-morbidity, 7 were excluded due to their abandoning treatment prematurely. Of the 33 remaining, 16 had a HAM-D21 score of ≥15. 3 were diagnosed with bipolar disorder or psychotic depression, and excluded from further analysis. 12 of the 13 patients without co-morbidity were treated with antidepressants and a combination of therapeutic techniques including the 12-Step Program, support groups, individual and family therapy. There was a marked reduction in the symptoms of depression during inpatient treatment. In 11 cases, the HAM-D21 score fell to ≤8. Demographic characteristics, cognitive performance and type(s) of drugs used did not influence the results.

PO2.117.
DEPRESSION IN PEOPLE OF PAKISTANI FAMILY ORIGIN AND WHITE EUROPEANS IN UK

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Depressive disorders are a major cause of disability and distress worldwide. There is evidence that people of ethnic minority groups in UK and USA experience more depression than white Europeans. This prospective epidemiological study is investigating the prevalence, associations, service use and 6-month outcome of depression in people of Pakistani family origin and white Europeans in the UK. Baseline screening for common mental disorders using the Self Rating Questionnaire (SRQ) has been completed with 928 people of Pakistani family origin and 947 white Europeans. Based on SRQ score, a stratified sample of 332 people of Pakistani family origin and 316 white Europeans have been assessed using the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) diagnostic interview and Life Events and Difficulties Schedule (LEDS). Baseline findings indicate a high prevalence of depression among Pakistani women (32%), compared with European women (19%), European men (13%) and Pakistani men (9%). Pakistani women have a higher prevalence of depressive disorder than the other groups at all ages. Among those aged 50 years or more, 65% of Pakistani women have depressive disorder compared with less than 20% in each of the other groups. Possible reasons for this high prevalence, including chronic social difficulties, generational effects and access to health and social services will be presented.

PO2.118.
PAIN SCORE AND DEPRESSION IN PEOPLE OF PAKISTANI FAMILY ORIGIN AND WHITE EUROPEANS IN UK

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There is a close association between pain and depression in population surveys. We assessed whether there was any difference in the relationship between depression and pain in two ethnic groups in the UK. This cross-sectional population-based study assessed depression using a two-phase design with the Self Rating Questionnaire (SRQ) and the Schedules for Clinical Assessment in Neuropsychiatry (SCAN). Pain was assessed by asking respondents to mark on a manikin any points in their body where they experienced persistent pain. Scores used in the analysis were a simple count of the pain marks and separate scores on the SRQ for psychological items (max 12 items) and somatic items (8 items). Data were collected from 928 people of Pakistani family origin and 947 white Europeans. The correlation coefficients for SRQ somatic and psychological score were almost identical for the four groups: Pakistani women, European women, European men and Pakistani men (0.61-0.7). The correlation coefficients for SRQ psychological and pain score were similar for Pakistani and white European

women (0.41 and 0.42) and for the men of each ethnic group (0.39 and 0.29). Depressed women had significantly higher pain scores than non-depressed women and this held within each ethnic group. There was no significant difference between the pain scores for depressed vs. non-depressed men in either ethnic group. In conclusion, the pattern of association between pain and depression differs in men and women, but the patterns are similar across people of Pakistani family origin compared to white Europeans.

PO2.119.
DEPRESSION IN LATER LIFE

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Developing depression in elderly patients results from imbalance between predisposing, precipitating and protective factors. The predisposing factors for depressive disorders in old age are represented by increasing levels of disability and chronic disease. The increasing prevalence of minor depression in later life is related to risk factors associated with the stress of growing old: loss of life partner and friends, living in large cities, poor health, functional limitation, decrease in social networks. Organic causes of late life depression are becoming significant with the increased understanding of brain function: neurodegenerative changes in the periventricular areas and subcortical white matter, reduction in cerebral monoamine oxidase and decreased levels of depression neurotransmitters, the high incidence of cerebrovascular disease. The symptoms of depressive disorders in the elderly differ from adults because of an increased emphasis on somatic complaints in older people. The major goals of the pharmacological treatment in elderly patients are to improve the quality of life, maintain people in community, delay or avoid the placement in nursing homes. As a general rule, the lower possible dose should be used to obtain the therapeutic effect, so that the individualization of dosage is essential in geriatric psychopharmacology.

PO2.120.
DEPRESSIVE DISORDERS IN PATIENTS WITH EPILEPSY

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We studied the prevalence and nature of mental disorders in patients with epilepsy observed in the epileptological room of our Institute. Among 102 patients with epilepsy, 59.4% presented an affective symptomatology, consisting of irritability, depressed mood, emotional lability, anxiety. "Somatic" complaints were frequent: headache of various character and intensity, feelings of fatigue, unpleasant sensations in different parts of the body, general weakness. In 7 patients (6.9%) a psychogenic precipitant of depression could be found, including the diagnosis of epilepsy in four cases, and the separation from the partner in the others.

PO2.121.
EPILEPSY, DEPRESSION AND RISK FOR SUICIDE

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Compared to the general population, the suicide rate in epilepsy is 5-fold increased. In particular, patients with temporal lobe epilepsy have an 8-fold increased risk of suicide. Certain psychiatric disorders, including primary mood disorders, also increase the risk for suicide. Among people with epilepsy, psychiatric comorbidity is common, with an elevated rate of major depression. A review of the literature about the association between epilepsy, depression and suicide highlights the lack of evaluation of intensity, pervasiveness and characteristics of suicidal ideation in epileptic patients compared with patients with a diagnosis of major depression. Our study investigated a sample of patients with temporal lobe epilepsy and one of patients with a diagnosis of major depression according to DSM-IV, using the Beck Depression Inventory, the Zung Depression Rating Scale, the Hamilton Depression Rating Scale, the Montgomery-Asberg Depression Rating Scale and the Buss-Durkee Hostility Inventory. Current suicide risk was quantified by the suicidality module of the Mini-International Neuropsychiatric Interview. Preliminary results show in epileptic patients the presence of suicidal ideation independently from the severity of depressive symptoms.

PO2.122.
SEASONALITY IN THE COURSE OF AFFECTIVE DISORDERS

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The study aimed to assess the prevalence and character of seasonal pattern in recurrent and bipolar depression. 133 patients with recurrent and bipolar depression (ICD-10 research criteria) were investigated (101 women and 32 men; mean age 46.2±11.9). An accurate chronological analysis showed that 41 patients (30.8%, 33 women and 8 men) fulfilled DSM-IV diagnostic criteria for seasonal affective disorder (SAD). A steady seasonal course of the affective disorder was found in 43.7% of patients. The seasonal pattern was more frequent in bipolar affective disorder. The seasonal pattern most frequently appeared from the onset of the disorder (54.4%). The most frequently occurring variant of SAD was the winter type (28.2%). A "dissociated" bipolar SAD was observed, in which depressive phases had a seasonal pattern and hypomanic phases did not.

PO2.123.
MULTI-ANNUAL SOLAR ACTIVITY AND AFFECTIVE DISORDERS

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This study takes into consideration two variables: the multi-annual oscillations of the solar activity (i.e., the solar cycle) and the multi-annual oscillations of affective disorders. By studying all cases with a diagnosis of affective disorder (F30-F33 in the ICD-10) admitted to the Timisoara Psychiatric Clinic between 1986 and 1996 (the period covering a complete solar cycle of 11 years), we have found there is a correlation between the number of admissions for bipolar affective disorder (both manic and depressive) and the intensity of the solar activity during the multi-annual cycle (number of sunspots). There were no significant correlations between the number of admissions with a diagnosis of unipolar depressive disorder and the intensity of solar activity.

PO2.124.
THYROID DYSFUNCTION IN NEUROTIC DEPRESSION

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Out of 55 patients with neurotic depression (according to ICD-10), 33 women and 22 men, a screening by auricolodiagnostics identified 17 cases (15 women and 2 men, age between 15 and 65 years) of suspect thyroid dysfunction. Further clinical and laboratory investigations of this group detected 2 cases of clinical hypothyroidism, 6 of subclinical hypothyroidism and 9 of secondary (central) hypothyroidism. These patients received L-thyroxin (75-100 mcg per day) as the only therapy, and depression improved in all cases. These results confirm the importance of the assessment of thyroid function in neurotic depression.

PO2.125.
SEXUAL DYSFUNCTIONS INDUCED BY NEWER ANTIDEPRESSANTS

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Sexual dysfunctions (SD) are common during treatment with new antidepressants. Rates observed in clinical practice may be higher than those reported in product information. We analysed available literature data on this topic. Published studies suggest that between 30% and 60% of patients treated with selective serotonin reuptake inhibitors experience some form of SD. The mechanisms involved are the interference with 5-HT pre-synaptic facilitation of sympathetic activity; the inhibitory effect on the orgasm mediated by central 5-HT2 activation; the effects on smooth musculature involved in orgasmic contractions, due to increased peripheral 5-HT levels; the antidopaminergic indirect effects; the inhibition of nitric oxide synthetase (NOS), the elevation of prolactin levels, and the cholinergic and alpha1-adrenergic receptor blockade. Paroxetine is the only agent which exerts a NOS inhibition. This activity explains data reported by several authors of higher incidence of SD during paroxetine treatment. SD occur in 10% of patients treated with venlafaxine and 11.7% of those treated with bupropion.

PO2.126.
PAROXETINE AUGMENTATION TO TIANEPTINE TREATMENT CAUSES EXACERBATION OF DEPRESSIVE SYMPTOMS: PRESENTATION OF TWO CASES

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Although tianeptine has structural similarities with tricyclic antidepressants, unlike tricyclic agents or selective serotonin reuptake inhibitors, it enhances 5-HT reuptake, leading to decreased availability of the transmitter in synaptic cleft. Thus, efficacy of tianeptine as an antidepressant agent caused a challenge to the concept of serotonergic deficit theory in depression. Paroxetine and tianeptine are found equally effective in treatment of major depression, but no data is available for combined use of these two agents. Two patients with moderate to severe depression were administrated 37.5 mg/day of tianeptine. As they had insufficient response, paroxetine 20 mg/day was given as augmentation therapy to tianeptine. A slight exacerbation of symptoms was observed after this drug was added. Both medications were stopped and clomipramine 125 mg/day was administered, which resulted in remission. The inverse pharmacological mechanisms of actions of paroxetine and tianeptine might be responsible for the exacerbation of depressive symptoms in the acute phase of combination treatment. We believe this clinical feature of tianeptine and paroxetine combination is very important and needs confirmation by randomized and controlled studies with larger samples.

PO2.127.
DYNAMICS OF ANXIOUS DEPRESSION UNDER TIANEPTINE AND SERTRALINE TREATMENT: COMPARATIVE CLINICAL-BIOCHEMICAL INVESTIGATION

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We studied the dynamics of anxious depression under tianeptine and sertraline treatment. 61 patients whose diagnosis was F32.1 (n=21), F33.1 (n=38), and F34.1 (n=2) were investigated. The presence of anxiety in the clinical picture of depression was the inclusion criterion. 31 patients received tianeptine (37.5 mg/day) and 30 received sertraline (50 mg/day). The percentage of responders was 74% for tianeptine and 77% for sertraline. In tianeptine responders, the mean global score of the Hamilton Depression Rating Scale decreased from 21.8 (baseline) to 6.7 (2 weeks of therapy) to 0.9 (4 weeks of therapy). The corresponding figures for sertraline were 24.6, 6.3 and 1.4. The figures on the Hamilton Anxiety Rating Scale were 30.0, 8.2 and 0.6 for tianeptine and 30.8, 5.5 and 1.3 for sertraline (all $p<0.01$). Patients were characterized by increased platelet monoamine oxidase activity and middle molecules concentration and decreased amine oxidase activity and albumin functional activity ($p<0.05$). After 2 weeks of therapy, in responders receiving tianeptine and sertraline we found changes in the opposite direction of all investigated parameters. Tianeptine exerted pronounced anxiolytic and antiasthenic effects. Sertraline exerted an effect on all components of the depressive syndrome with a reduction of psychic and somatic elements of anxiety.

PO2.128.
THE ANTIDEPRESSANT ACTION OF TIANEPTINE MAY BE RELATED TO AN INCREASE OF SEROTONIN TURNOVER IN THE SYNAPSE

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The neurochemical mechanism of the antidepressant action of tianeptine – a serotonin reuptake enhancer – remains unknown. We assessed 43 patients with anxious depression (F32.1; F33.1), a condition which is thought to be characterized by a decrease in serotonergic activity. We found a significant increase of platelet monoamine oxidase (MAO) activity in the patients. The therapeutic effect in responders to tianeptine treatment was accompanied by a decrease of MAO activity. On the basis of our own and the literature data we propose a working hypothesis about the mechanism of the antidepressant action of tianeptine. According to this hypothesis, tianeptine increases serotonin turnover rate in the synapse, that is, not only it enhances serotonin reuptake but also increases its release into the synaptic cleft. This leads to an increase in serotonin concentration at postsynaptic receptors. The synchronous decrease of MAO activity contributes to the maintenance of serotonin concentration in the synaptic cleft at a level which allows display of its neurotransmitter functions.

PO2.129.
BIOCHEMICAL PROFILE IN PATIENTS WITH ANXIOUS DEPRESSION UNDER TIANEPTINE AND SERTRALINE THERAPY

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The aim of the study was to compare the biochemical profiles of patients with anxious depression under treatment with tianeptine, a serotonin reuptake enhancer and sertraline, a selective serotonin reuptake inhibitor. Platelet monoamine oxidase (MAO) and serum amine oxidase (AO) activities, level of middle molecules (MM) and parameters characterizing functional properties of serum albumin were investigated in 43 patients with anxious depression (F32.1 and F33.1). In comparison with healthy controls, patients with anxious depression showed a significant increase in MAO activity and the level of MM and a significant decrease in AO activity and functional albumin activity. In responders to tianeptine and sertraline treatment, the therapeutic effect was accompanied by changes of all investigated parameters in the opposite direction. In nonresponders receiving tianeptine, metabolic changes were more similar to those of responders than in nonresponders receiving sertraline. This study is the first to demonstrate these changes in a comparative clinical-biochemical investigation of the effects of serotonergic antidepressants with different mechanisms of action.

PO2.130.
SERUM DEHYDROEPIANDROSTERONE SULFATE AND CORTISOL LEVELS IN PATIENTS WITH DIFFERENT TYPES OF DEPRESSION

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Dehydroepiandrosterone sulfate (DHEAS) is a circulating steroid with various important neurophysiological functions. It has been hypothesized that DHEAS is a more sensitive parameter for the evaluation of the severity of depression than cortisol. The aim of the study was to investigate cortisol and DHEAS levels in different types of depression. We examined 11 patients with a depressive episode (F32.1; DE) and 21 patients with recurrent depressive disorder (F33.1; RDD). Serum cortisol and DHEAS levels were measured using an immune-enzyme method before antidepressant treatment. In patients with depressive episode, DHEAS levels (1.97±0.25 μg/ml) were significantly higher ($p<0.05$) than in patients with RDD (1.29±0.20 μg/ml). Cortisol levels (610±130 nmol/ml) in the whole group of patients were almost twice higher ($p<0.05$) than in normal controls (318±85 nmol/ml). There were no differences in cortisol levels between patients with DE and RDD. Cortisol/DHEAS ratio in patients with DE (309±69) was significantly lower ($p<0.05$) than in patients with RDD (421±97). We postulate that DHEAS levels and the cortisol/DHEAS ratio can be valuable indices in the differential diagnosis of different forms of depression.

PO2.131.
PREVALENCE OF DEPRESSION AND ANXIETY USING THE PATIENT HEALTH QUESTIONNAIRE IN PRIMARY CARE SETTINGS IN JAPAN

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This study was conducted at 11 primary care sites in Niigata, one site in Fukui, one site in Nagano, and one site in Tokyo in Japan. Consecutive patients coming for a routine medical appointment to their physician or psychiatrist were approached for entry into the study. The purpose of the study was briefly explained to them and written informed consent was obtained. A total of 1409 adults patients (611male, 797 female, mean age±SD: 56.2±20.4) completed the Patient Health Questionnaire (PHQ). The prevalence of any mood or anxiety disorders was 25.0%. 15.8% of the patients were diagnosed with mood disorders (6.4%: major depression, 9.4%: other depressive disorders). 13.2% of patients were diagnosed with anxiety disorders (9.4%: panic disorder; 3.8%: other anxiety disorders). The odds ratio for co-occurrence of major depressive disorder with panic disorder was 5.45 (95% CI: 3.03-9.731). The odds ratio for co-occurrence of major depressive disorder with other anxiety disorders was 30.4 (95% CI: 13.19-70.28). These findings support the frequency of co-occurring depression and anxiety in primary settings in Japan.

PO2.132.
AN AUSTRALIAN STORY: BEYONDBLUE AND BLUEVOICES, PARTNERSHIP AND ADVOCACY FOR DEPRESSION AND ANXIETY RELATED DISORDERS

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For too long depression and anxiety related disorders have been left unaddressed, quietly devastating many lives. 330 million people worldwide experience depression. Tragically, 800,000 suicides occur globally every year. About 90% of those who commit suicide are depressed before they do it. The World Health Organization believes depression will rank second only to heart disease as the world's leading cause of death and disability by 2020. These statistics and the projected future impact on Australia's society prompted the Australian Federal and Victorian State Governments to establish Beyondblue: the National Depression Initiative. Beyondblue has focussed on persons with the lived experience of depression and anxiety related disorders. The initiative has been brave, facing issues head on. Encouraging real-life experiences to be told nationally through forums and workshops. The emerging concerns have been embraced and those with the lived experience have been invited to participate collaboratively with all mental health service providers to change current attitudes and practices. The lived experience is a powerful reality and fundamental evaluating stick that is the core to determining the quality of services provided in our communities. The voices echo what works and what doesn't, allowing providers to learn, adapt and change. Beyondblue has heard the voices of a despairing community and has established a new organisation, Bluevoices: a consumer and carer group dedicated to the advocacy, education and support of persons and their families who live with depression and anxiety. Beyond-

blue and Bluevoices is about presenting these measuring sticks to drive mental health reform. This is an Australian story about partnerships, advocacy and empowerment from the lived perspective. This presentation will demonstrate that persons and their carers with the lived experience of depression and anxiety related disorders can make a difference.

PO2.133. ANXIETY RESPONSES TO CO2 INHALATION IN SUBJECTS AT HIGH RISK FOR PANIC DISORDER

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A number of reports have shown that patients with panic disorder have greater anxiety responses to the inhalation of enhanced carbon dioxide mixtures than do well controls or patients with other psychiatric illnesses. Three earlier studies have shown that well individuals who have first-degree relatives with panic disorder also experience more anxiety following CO2 then do controls without such a family history. The following was undertaken to confirm and extend these findings. Well subjects at high risk for panic disorder (HR-P, n=132) had a first-degree family member with treated panic disorder but no personal history of panic attacks. Low-risk subjects (LR-C, n=85) had no such family history. All underwent a diagnostic interview with the Schedule for Affective Disorders and Schizoprhenia and completed a battery of self-rating scales before undergoing two CO2 challenges. One involved a single vital capacity breath of air and then of 35% CO2 and the other five minutes of air and then five minutes of 5% CO2. In comparison to the LR-C group, HR-P subjects had higher scores on self-ratings of anxiety and depression and were more likely to have a lifetime diagnosis of major depressive disorder (MDD) or of an anxiety disorder. NEO neuroticism and a history of MDD were the most important of these measures in separating the high-risk and low-risk groups. As predicted, the HR-P subjects experienced more anxiety following 35% CO2 exposure. The removal of individuals with lifetime diagnosis of MDD or of an anxiety disorder eliminated the relationship of neuroticism to CO2-induced anxiety and strengthened the relationship between the CO2 response and a family history of panic disorder. Anxiety following exposure to five minutes of 5% CO2 did not distinguish HR-P from LR-C subjects. For both 35% and 5% exposures CO2 dose correlated significantly with anxiety for the high-risk subjects but not for the control subjects. These results confirm earlier findings indicating that a family history of panic disorder conveys a liability to experience anxiety with CO2 exposure. They also suggest that this anxiety may reflect several discrete diatheses of relevance to the heritability of panic disorder.

PO2.134. SHORT-TERM TREATMENT OF PANIC DISORDER WITH VENLAFAXINE XR: A PLACEBO-CONTROLLED STUDY

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This study aimed to evaluate the efficacy, safety, and tolerability of venlafaxine XR in short-term treatment of panic disorder. In this multicenter, double-blind study, 343 adult outpatients with DSM-IV panic disorder (with or without agoraphobia) were randomly assigned to flexible-dose venlafaxine XR (75-225 mg/day) or placebo for 10 weeks (n=155 per group, intention-to-treat population). The primary outcome measure was the percentage of panic-free patients (Panic and Anticipatory Anxiety Scale, PAAS). Key secondary measures included Panic Disorder Severity Scale (PDSS) score and Clinical Global Impression-Improvement (CGI-I) response (score 1 or 2). Additional secondary efficacy measures included reduction in full-symptom panic attack frequency, mean CGI-I and CGI-Severity (CGI-S) scores, assessments of anticipatory anxiety and limited-symptom panic attacks (PAAS), and fear and avoidance factors of the phobia scale. At endpoint (final on-therapy evaluation), there was a trend toward a greater percentage of panic-free patients in the venlafaxine XR group (51%) vs. placebo (41%; p=0.056%). Mean change from baseline in PDSS total score was significantly greater with venlafaxine XR treatment (-8.90) vs. placebo (-7.36; p=0.020), and significantly more venlafaxine XR-treated patients achieved CGI-I response (71%) vs. placebo (59%; p=0.031). When adjusted for baseline severity, reduction in full-symptom panic attacks was significantly greater for venlafaxine XR vs. placebo (p=0.040). Venlafaxine XR was associated with significant improvements vs. placebo on four additional secondary efficacy measures (mean CGI-I and CGI-S scores, and fear and avoidance factors of the phobia scale). Venlafaxine XR was generally safe and well tolerated. Discontinuation rates due to adverse events were low (venlafaxine 6% and placebo 5%). In conclusion, venlafaxine XR was effective, safe, and well tolerated in short-term treatment of panic disorder.

PO2.135. THE RESPONSE TO CLOMIPRAMINE IN PANIC DISORDER PATIENTS AND CONTROLS

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Serotonin neurotransmission is thought to play a central role in the pathophysiology of panic disorder. This hypothesis seems to be confirmed by the observation of an initial exacerbation of symptoms induced by selective serotonin reuptake inhibitors in the treatment of panic disorder patients, by the results of tryptophan depletion studies and by the evidence that the relatively selective serotonin reuptake inhibitor clomipramine produces anxiety-like symptoms in panic disorder patients. The present study is an attempt to replicate these findings with the aim to reinforce the role of serotonin system in the pathogenesis of panic disorder and the importance of the challenge with clomipramine to induce panic like symptoms under laboratory controlled conditions. According to a double blind, case-control design, healthy volunteers and patients with panic disorder underwent the infusion of placebo and clomipramine. Blood pressure, heart rate, respiratory rate, subjective and objective anxiety were measured. Both healthy volunteers and drug free panic disorder patients reacted to the clomipramine challenge showing mild to moderate anxiety or severe anxiety. On the contrary, treated panic disorder patients did not react and presented high level of anxiety surrounding the challenge. In conclusion, clomipramine challenge is a valid method to induce panic-like symptoms in healthy volunteers and panic disorder patients under laboratory controlled settings and this confirms the central role of serotonin in the pathogenesis of anxiety.

PO2.136.
DOSE RESPONSE EFFECTS OF LORMETAZEPAM IN THE TREATMENT OF DEPRESSIVE INSOMNIA

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Benzodiazepines can shift the phase of circadian rhythms in mammalian species, but few data are available on their phase-response effects in humans and on the possible link between timing of administration and clinical effects. On the other hand, clinical studies about manipulations of the sleep-wake rhythm in mood disorders suggest that advancing the sleep phase exerted rapid antidepressant effects. These studies suggest that hypnotic medications in major depression should be timed in order to obtain a phase advance of night sleep. The purpose of the present study is to evaluate if hypnotic benzodiazepines phase-advance sleep in depressed patients, if there is a relationship between phase-shifting and hypnotic effect of these drugs and if the acute phase shifting effect is coupled with an antidepressant effect. With a placebo-controlled cross-over design, we evaluated the hypnotic effect of lormetazepam 0.03 mg/kg and placebo in a sample of 38 inpatients affected by a major depressive episode. Patients were divided in three groups, which received treatments at 18:00, at 20:00, or at 22:00. All subjects were free of any psychotropic medication for at least 1 week before study outset. Sleep-wake rhythm and daytime sleepiness during treatment were assessed by a daily administration of Pittsburgh Sleep Quality Index (PSQI), a sleep diary, Epworth Sleepiness Scale and Stanford Sleepiness Scale. Patients showed a significant amelioration in sleep latency, duration and efficiency, and in benefit from hypnotic medication, with no significant change in daytime dysfunction. These ameliorative effects were indipendent of severity of depression, which remained unchanged. A two-way repeated measures analysis of variance with time and treatment groups as independent variables and PSQI scores as dependent variable showed that time of treatment administration did not influence the effect of lormetazepam on PSQI score. Timing of treatment did not influence the overall hypnotic efficacy, but influenced changes in sleep phase observed with active treatment. Patients who received treatment at 20:00 showed a phase-advance of sleep onset; patients who received treatment at 22:00 showed a phase-delay of morning awakening and patients who received treatment at 18:00 showed a non-significant trend in the same direction. Despite this absence of a group effect on hypnotic efficacy, phase-advances of sleep onset after lormetazepam were significantly correlated with improvement of PSQI score (Spearman R=0.399, t=2.61, p=0.012). Similar correlations were observed with sleep diary variables. The present results suggest that effects of lormetazepam on the phase of the sleep-wake rhythm of patients affected by a major depressive episode depend upon timing of administration, and, given the possible relationship between changes in phase of biological rhythms and patophysiology of major depression, warrant interest for the definition of a phase-response curve for benzodiazepines in depressive insomnia.

PO2.137.
EFFECTIVENESS AND TOLERABILITY OF MELATONIN IN ADULTS AND CHILDREN WITH SLEEP DISORDERS

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Melatonin is a neurohormone secreted by the pineal gland in higher concentration after the onset of darkness, when it promotes sleep. Since it was first isolated, it has been studied in sleep disordered adults and children. Some trials with small numbers of developmentally delayed and visually impaired children reported improvements, but one study using lower doses found no improvement. Most studies reported no adverse effects, but one study described an increase in seizure frequency in epileptic children treated with melatonin. This is mainly a retrospective study of a series of patients prescribed melatonin. New patients are still being added. Data are being collected on patients' age, sex, diagnosis, type of sleep disorder, concomitant medication, effective and ineffective dose, length of treatment and reported side effects. To date 38 patients have been prescribed melatonin. 28 have used it for at least a week. 14/28 reported a complete normalisation of their sleep pattern and 11/28 reported partial improvement, 2/28 patients have not yet reported back, and 1/28 found it unhelpful. The maximum effective dose was 15 mg in children and 20 mg in adults. Even with long-term use (up to 6.5 years) no adverse effects were reported and no increase in seizure frequency. The experience suggests that higher doses than are commonly used may be effective and safe, even after long-term use.

PO2.138.
HYPERACTIVE EXECUTIVE CONTROL IN OBSESSIVE-COMPULSIVE DISORDER: A NEUROPSYCHOPHYSIOLOGICAL INVESTIGATION

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In patients with obsessive-compulsive disorder (OCD), a dysfunction of fronto-subcortical circuits has been reported by several neuropsychological, brain imaging and neurophysiological studies. However, the functional meaning of the observed dysfunction in the pathogenesis of OCD is still debated. In the present study, the hypothesis that this dysfunction might be related to a hyperactive executive control is explored by means of neuropsychological and neurophysiological measures. The experimental sample included 32 drug-free patients with DSM-IV OCD and 32 healthy controls, matched with patients for age, gender and handedness. Multilead quantitative EEG (QEEG) characteristics were investigated in both groups. Neuropsychological performance on tests exploring executive functions, attention, short-term memory and the ability to learn supraspan recurring sequences was investigated in the patient group. Group comparison on QEEG indices showed a reduction of the slow alpha band power in OCD patients with respect to healthy subjects. The correlation analysis between neuropsychologial and neurophysiological indices in the group of patients showed a negative association between the slow alpha band power and the time to complete a neuropsychological test exploring executive functions: the more reduced the slow alpha band power, the slower the performance on this test. The hypothesis of a hyperactivity of attention/executive control mechanisms in patients with OCD is supported by these findings.

PO2.139.
NEUROPSYCHOLOGICAL INDICES IN SUBJECTS WITH OBSESSIVE-COMPULSIVE DISORDER BEFORE AND AFTER TREATMENT WITH SEROTONIN REUPTAKE INHIBITORS

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Several studies reported that patients with obsessive-compulsive disorder (OCD) are slower than healthy controls in performing neuropsychological tests. To our knowledge, no study has investigated the effects of serotonin reuptake inhibitor (SRI) treatment on neuropsychological performance in OCD patients. A neuropsychological battery including tests assessing executive functions and incidental learning was administered to 52 drug-free patients with DSM-IV OCD and 52 matched healthy controls. Psychopathological evaluation included the Yale-Brown Obsessive-Compulsive Scale (YBOCS) and the Hamilton Depression Rating Scale. In 18 patients, neuropsychological and clinical assessments were repeated after 6 months of treatment with SRI. Group comparison on neuropsychological indices showed that patients were slower than controls in the execution of tasks assessing executive functions: the spatial and non-spatial conditional associative learning tasks (SCAL, NSCAL) and the self-ordered pointing task for drawings (SOPT-D). Significant changes observed after SRI treatment included an improvement on all items of the YBOCS, a reduction of the mean time on the SCAL and the SOPT-D, and an improvement of the mean perseveration index on the SOPT-D. No significant correlations were observed between cognitive and clinical improvement. Cognitive improvement observed after SRI treatment does not seem to be related to aspecific factors, such as the repetition of the test battery, since it is confined to tasks assessing executive functions, and might be mediated by increased levels of serotonin in the fronto-subcortical circuits. The absence of correlations between clinical and neuropsychological improvement suggests that neurocognitive impairment in OCD is not secondary to psychopathological aspects of the syndrome.

PO2.140.
NEUROPHYSIOLOGICAL INDICES AND RESPONSE TO TREATMENT WITH SELECTIVE SEROTONIN REUPTAKE INHIBITORS IN SUBJECTS WITH OBSESSIVE-COMPULSIVE DISORDER

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Obsessive-compulsive disorder (OCD) is, among psychiatric syndromes, one of the most refractory to treatment, and the identification of response predictors is highly needed. In the present study we investigated quantitative electroencephalography (QEEG) mapping characteristics in 26 drug-free subjects with a DSM-IV diagnosis of OCD, and 23 sex- and age-matched healthy controls (HC); patients were assigned to treatment with either fluoxetine or fluvoxamine. A comprehensive psychopathological, electrophysiological and neuropsychological evaluation was carried out at baseline and after 10 weeks of treatment. The electrophysiological indices investigated included the log transformed values of both absolute and relative power (LAP and LRP, respectively). Correlations between baseline neurophysiological indices and treatment-induced psychopathological changes were evaluated. At the baseline, the slow alpha LAP and LRP were reduced in OC patients with respect to HC and the differences were more pronounced in the anterior brain regions. In the patient group, the slow alpha band showed a significant negative correlation with the mean speed on neuropsychological tests exploring frontal and fronto-temporal functioning: the greater the reduction in the slow alpha band, the slower the tests execution. Electrophysiological measures did not show any significant correlation with clinical changes observed after 10 weeks of treatment. According to these preliminary findings, baseline QEEG characteristics tend to confirm an involvement of frontal lobe in OCD, but do not predict clinical response to treatment with selective serotonin reuptake inhibitors.

PO2.141.
GROUP COGNITIVE BEHAVIOURAL THERAPY IN OBSESSIVE-COMPULSIVE DISORDER: A TRIAL CONTROLLING FOR GROUP EFFECTS

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Cognitive behavioural therapy (CBT) is known to be effective in the treatment of obsessive-compulsive disorder (OCD) and, in this context, there has been much recent interest in whether this treatment remains effective in a group setting. Initial results have been promising but there is a dearth of properly controlled trials in this area. In the only large controlled trial to date, group CBT was similarly effective to individual CBT, but this particular study did not include a control condition for group effects. In this study we compared group CBT with group relaxation therapy (RT). Individual RT is known to be a neutral treatment in OCD, so using group RT as a control condition allowed us to measure the benefits of regular group interaction that might be expected to occur, and to ascertain whether group CBT exerted additional improvements above and beyond this. Forty-one participants with OCD took part in the study and there were 6 groups in total (3 for each condition). The drop-out rate was considerably higher in the group RT condition, suggesting that patients may find group CBT to be a more acceptable treatment. However, there were no differences in terms of improvement on the primary outcome measure (Yale-Brown Obsessive Compulsive Scale or any of the secondary measures). We conclude that the apparent benefits of group CBT arise through group mechanisms that are independent of the therapy itself.

PO2.142.
INTERPERSONAL PSYCHOTHERAPY FOR POST-TRAUMATIC STRESS DISORDER

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This paper describes pilot testing of interpersonal psychotherapy (IPT) adapted to treat post-traumatic stress disorder (PTSD). Unlike most psychotherapies for PTSD, IPT is not exposure-based, but instead focuses on interpersonal sequelae of trauma. Fourteen subjects with DSM-IV chronic PTSD from various traumas were treated in an open 14-week IPT trial. They received no pharmacotherapy. Treatment was well tolerated. All subjects reported declines in PTSD symptoms across all three symptom clusters. After 14 weeks, 12 of 14 subjects no longer met full diagnostic criteria for PTSD. Depressive symptoms and anger reactions also improved. Eight subjects reported improved interpersonal functioning. Treating the interpersonal sequelae of PTSD appears to improve other symptom clusters. IPT may be an efficacious alternative for patients who do not want repeated exposure to past

trauma. This represents an exciting extension of IPT to an anxiety disorder.

PO2.143.
VENLAFAXINE XR, SERTRALINE, AND PLACEBO IN THE TREATMENT OF POST-TRAUMATIC STRESS DISORDER

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The study aimed to compare the efficacy of venlafaxine XR and sertraline in reducing symptoms of moderate-to-marked post-traumatic stress disorder (PTSD). Adult outpatients (n=537) with a primary diagnosis of DSM-IV PTSD, PTSD symptoms for ≥6 months, and the 17-item Clinician-Administered PTSD scale (CAPS-SX17) score ≥60 were randomly assigned to treatment with placebo, flexible-dose venlafaxine XR (37.5-300 mg/day) or flexible-dose sertraline (25-200 mg/day) for 12 weeks. After day 5, the minimum daily doses of venlafaxine XR and sertraline were 75 mg and 50 mg, respectively. The primary efficacy measure was the change from baseline to endpoint in the CAPS-SX17 score. Secondary assessments included remission rate (CAPS-SX17 ≤20), symptom-free days, and changes from baseline to endpoint in CAPS-SX17 symptom cluster scores. Mean baseline-to-endpoint changes in CAPS-SX17 scores were -41.8, -39.4, and -33.9 for venlafaxine XR ($p<0.05$ vs. placebo), sertraline, and placebo, respectively. Changes for venlafaxine XR, sertraline, and placebo in CAPS-SX17 cluster scores were -13.0, -11.7, and -11.0 for re-experiencing (cluster B); -17.1, -16.8, and -13.7 ($p<0.05$ both active treatments vs. placebo) for avoidance/numbing (cluster C); and -11.8, -10.9, and -9.2 ($p<0.05$ venlafaxine vs. placebo) for hyperarousal (cluster D). Week 12 remission rates were venlafaxine XR 30.2% ($p<0.05$ vs. placebo), sertraline 24.3%, and placebo 19.6%. Venlafaxine XR was superior to placebo at week 12 for symptom-free days ($p<0.05$). Mean maximum daily doses were 225 mg venlafaxine XR and 151 mg sertraline. Both treatments were generally well tolerated. These data suggest that venlafaxine XR is effective in the short-term treatment of patients with PTSD.

PO2.144.
TIAGABINE FOR POST-TRAUMATIC STRESS DISORDER: EFFECTS OF OPEN-LABEL AND DOUBLE-BLIND DISCONTINUATION TREATMENT

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Preliminary results suggest a potential benefit of agents that enhance gamma-aminobutyric acid (GABA) neurotransmission in treating post-traumatic stress disorder (PTSD). Tiagabine is a selective GABA reuptake inhibitor (SGRI) that enhances normal GABA tone. This study evaluated tiagabine in patients with PTSD. Twenty-nine subjects with PTSD were treated with open-label tiagabine for 12 weeks. Of 19 subjects completing open-label period, 18 subjects responded to treatment and were randomly assigned to 12 weeks of double-blind treatment with either tiagabine or matching placebo. Efficacy assessments included measures of PTSD, anxiety, depression, resilience, sleep quality, and disability. Safety evaluation included changes in vital signs and weight and emergence of adverse events. In subjects completing open-label treatment (n=19), significant improvement was observed on all outcome measures ($p<0.05$), and the treatment was well-tolerated. Eighteen subjects responded to open-label treatment and were randomized into the double-blind phase. These findings suggest a role for the SGRI tiagabine in the treatment of PTSD. Tiagabine appears to be a promising and innovative approach in the management of PTSD.

The study was sponsored by Cephalon, Inc.

PO2.145.
POST-TRAUMATIC STRESS DISORDER AND SUICIDAL BEHAVIOUR AMONG FORMER PRISONERS OF WAR SUBJECTED TO TORTURE

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This study was carried out in 95 refugees exposed to severe trauma under captivity. It aimed to investigate the prevalence of peritraumatic experiences associated with later development of suicidal behaviour in refugees/former prisoners of war with diagnoses of post-traumatic stress disorder (PTSD). The interface between alexithymia and self-destructive ideation in the pathogenesis of PTSD was also explored. Alexithymia was evaluated with the Alexithymia Provoked Response Questionnaire. Suicidal behaviour was assessed using records of suicide attempts, communication of detailed suicidal plans, or anamnestic report of recurrent/intrusive suicidal thoughts with identification of a suicidal method. Suicidal behaviour associated with PTSD diagnoses was significantly higher than among the non-PTSD cases ($p=0.05$). Alexithymia was found highly significant among the PTSD cases exhibiting suicidal behaviour ($p=0.0003$). The study discusses whether PTSD patients may present alexithymic behaviour both as expression of trauma sequelae and as a coping strategy. In the latter case, alexithymia may represent a revival of the original coping strategy (in the same fashion that a current flashback represents a revival of the original trauma). Our previous reports on the association between content of suicidal ideation and trauma stressors (the particular methods used in torture were similar to those later used by the torture survivors in their suicidal behaviour), may be related to findings of increased alexithymia among PTSD sufferers.

PO2.146.
FACTOR ANALYSIS OF THE LIEBOWITZ SOCIAL ANXIETY SCALE IN SOCIAL ANXIETY DISORDER: RELATIONSHIP TO DISABILITY SCORES

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The Liebowitz Social Anxiety Scale (LSAS) rates 24 items for both anxiety and avoidance, resulting in 48 individual ratings. Several analyses of the LSAS have been published, but there is less on the relationship of LSAS factors to disability scores and treatment outcomes. LSAS baseline data from three studies (n=1704) were submitted to a factor analysis. Factors were identified using a maximum likelihood approach and rotated with a varimax rotation to ease interpretation. Analysis of covariance was used to assess the relationship of LSAS factors to disability scores and treatment outcomes. A 6-factor model was chosen. The six factors were: 1) talking to or meeting strangers, 2) eating and drinking in public, 3) being centre of attention in a small

group, 4) functioning in a public space, 5) work, and 6) party. These factors were differentially associated with different areas of disability. Escitalopram was, however, significantly superior to placebo for all factors: factors 1,2,3,4,6 ($p<0.001$), and factor 5 ($p<0.05$), for both observed-case and last-observation-carried-forward analysis. In conclusion, a 6-factor model was supported by the distinctive association between the factors and different areas of disability. Nevertheless, this model did not predict differential response to escitalopram, which was significantly superior to placebo in all symptom clusters.

PO2.147.
COMBINATION OF A SELECTIVE SEROTONIN REUPTAKE INHIBITOR AND RISPERIDONE IN REFRACTORY OBSESSIVE-COMPULSIVE DISORDER

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We report the results of an open-label trial of the combination of a selective serotonin reuptake inhibitor (SSRI) with risperidone in 17 treatment-resistant outpatients with obsessive-compulsive disorder (OCD). The patients were diagnosed according to ICD-10 and DSM-IV criteria and all of them had a previous psychiatric history of more than 12 months. They had been treated with an SSRI at adequate dose for at least 6 months, with poor therapeutic response. Risperidone was titrated up to 4 mg/day over 12 weeks. Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Maudsley Obsessional Compulsive Inventory and Clinical Global Impression (CGI) were administered at baseline and throughout the trial. After three months, 41% of the patients had a positive response, with a decrease of the total score on Y-BOCS and Maudsley Obsessional Compulsive Inventory and an improvement on CGI. In conclusion, the addition of risperidone seems to be a useful strategy for augmenting SSRI effectiveness in treatment-resistant OCD patients.

PO2.148.
SECONDARY OBSESSIVE-COMPULSIVE DISORDER RELATED TO DIASCHISIS AFTER PONTINE INFARCTION SUCCESSFULLY RESPONDING TO PAROXETINE

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We report on a 71 year old male patient who, after suffering from pontine infarction, complained that an image of knife recurrently and persistently appeared in his mind, and that he was afraid he might kill or injure others or himself by this knife, which was considered to be an aggressive obsession. Brain magnetic resonance imaging showed a low-density area only in the right pons, while brain single photon emission computed tomography showed low cerebral blood flow in temporal lobe as well as in pons. Serotonergic neurons, which play an important role in obsessive-compulsive disorder (OCD), originate from raphe nucleus in pons and project to various areas in the brain including temporal lobe. In this case, the local dysfunction at the pontine level caused the dysfunction at the temporal lobe via the neural projection network (diaschisis). This dysfunction at the temporal lobe, including hippocampus, might lead to secondary OCD. Obsessive-compulsive symptoms in aged people need careful examination including brain imaging to check brain organic disease.

PO2.149.
OBSESSIVE-COMPULSIVE DISORDER: CONCERNING THE FOLLOW-UP OF 32 PATIENTS

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The objective of this study was to explore the prevalence of comorbidity and the latency to treatment in obsessive-compulsive disorder (OCD). 32 patients suffering from OCD were included in the study. 50% of the patients had a lifetime comorbidity for depression. The average latency between the onset of symptoms and the first psychiatric consultation was 4.3 years. Only 1/8 of patients had ever received cognitive or behaviour therapy. These results demonstrate that comorbidity is frequent among patients with OCD, that the first psychiatric consultation is occurring too late and that management of these patients should be improved.

PO2.150.
QUALITY OF LIFE CHANGES IN PATIENTS WITH OBSESSIVE-COMPULSIVE DISORDER TREATED WITH A SELECTIVE SEROTONIN REUPTAKE INHIBITOR PLUS RISPERIDONE

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Obsessive-compulsive disorder (OCD) is associated with significant impairments in the patient's quality of life (QOL). The purpose of this study is to evaluate quality of life changes in OCD patients treated with a combination of a selective serotonin reuptake inhibitor (SSRI) and risperidone. The study sample consisted of 17 treatment-resistant OCD outpatients, diagnosed according to ICD-10 and DSM-IV criteria. They received risperidone as add-on treatment to previous SSRI therapy. Symptom severity was measured using the Yale-Brown Obsessive Compulsive Scale (YBOCS). Quality of life was measured using Flanagan's Quality of Life Scale (QOLS) modified by Burckhardt. These instruments were administered at baseline and 12 weeks after risperidone augmentation (up to 4 mg/day). YBOCS scores significantly improved with treatment, as did scores on the majority of the QOLS items, especially those which refer to socializing, working, learning, reading and relationships with parents and relatives. However, 59% of patients were still reporting low satisfaction with their quality of life.

PO2.151.
FUNCTIONAL NEUROIMAGING AS A TOOL FOR OPTIMIZATION OF STEREOTACTIC EFFECTS IN PATIENTS WITH INTRACTABLE ANXIETY-OBSESSIVE SYMPTOMS

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Stereotactic surgery was carried out in 27 patients with intractable anxiety-obsessive symptoms (ICD-10 obsessive-compulsive disorder, 7 patients; organic mental disorder, 6 patients; schizophrenia, 3 patients; Tourette syndrome, 11 patients) according to the decision of a board of specialists. The severity of patients' state was estimated by standard scales: Clinical Global Impression (score of at least 5) and Yale Brown Obsessive-Compulsive Scale (score of at least 32). Stereotactic targets

(anterior cingulate, bilateral crus anterior capsulae internae, MD and VL thalamic nuclei, area of substantia innominata) were selected according to a clinico-physiological approach. 18F-FDG positron emission tomography (PET) revealed a decreased metabolism in the caudate heads in 9 patients before stereotactic effects. In 3 patients there was a hypermetabolism in the anterior cingulate. A clear reduction of anxiety-obsessive symptoms was observed in 18 patients after stereotactic surgery. A worsening of clinical state or surgical complications were not observed in any case (catamnesis from 2 to 14 years). Metabolic changes detected by 18F-FDG PET positively correlated with clinical state in all cases after stereotactic surgery.

PO2.152.
ATTACHMENT STYLES AND ALEXITHYMIA IN PANIC DISORDER

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Few studies have investigated the implications of an insecure attachment style and alexithymia for treatment planning. This study, evaluating attachment style and alexithymia in subjects with panic disorder (PD), is aimed to obtain information about intervention planning. Twenty subjects with PD were compared to matched healthy controls. Attachment styles were investigated with the Bartholomew Scale (BS), the Attachment Style Questionnaire (ASQ) and the Parental Bonding Instrument (PBI). Alexithymia was evaluated with the Toronto Alexithymia Scale-20 items (TAS-20). A thorough psychopathological evaluation was also carried out. PD subjects, as compared to healthy controls, showed: a) lower "confidence" and higher "emotional overinvolvement" on the ASQ; b) a greater difficulty in the identification and description of feelings on the TAS-20. An insecure attachment style and a higher degree of alexithymia might underlie difficulties experienced in the initial phase of psychotherapeutic intervention by PD patients. An intervention targeting emotional experience, to increase the ability to identify and express different emotions, might be highly advisable in patients with PD.

PO2.153.
STRESSFUL LIFE EVENTS IN PANIC DISORDER WITH AND WITHOUT AGORAPHOBIA

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The presence of agoraphobia in patients with panic disorder is typically associated with impairment in social and vocational functioning, and with the subsequent severity of course of the disorder. In this study, the Social Readjustment Rating Scale (SRRS), a questionnaire measuring major life events, was administered to 130 subjects with panic disorder with or without agoraphobia. We compared the clinical characteristics between high (150>) and low (100<) SRRS score groups. There was a statistically greater incidence of comorbid agoraphobia in the high SRRS score group.

PO2.154.
KEEPING SAFETY OBJECT TO DEAL WITH ANTICIPATORY ANXIETY IN PANIC DISORDER PATIENTS

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In this study, sixty eight (41 females and 27 males) DSM-IV panic disorder with agoraphobia (PDA) patients were compared to nineteen (8 females and 11 males) panic disoder without agoraphobia (PD) patients in terms of anticipatory anxiety and coping mechanisms to deal with it. Sixty five patients with PDA (95.5%), and 13 patients with PD (68.4%) had showed anticipatory anxiety and the difference between the groups was statistically significant (p=0.0059). Ten patients with PDA (15.38%) showed keeping relatives near by, excessive concentration on working or singing a song to deal with anticipatory anxiety. Thirty patients (46.15%) reported carrying medicine pills in their pocket, 6 patients (9.23%) only fluid, 2 patients (3.1%) alcohol and drug, 8 patients (12.3%) medicine pills and fluid and food altogether as well. Five patients with PD (38.46%) reported carrying medicine pills with them, 1 patient alcohol, 1 patient only fluid, 1 patient medicine pills plus fluid and 1 patient reported concentration on different topics to deal with anxiety. The rate of developing coping mechanisms against anticipatory anxiety was found statistically significantly higher among PBA patients comparing to PB patients (p=0.02). The most preferred pills to carry with among patients were found to be alprazolam, antihypertensives/antiarrhythmics, tricyclic antidepressants, vitamins (in order of frequency).

PO2.155.
PSYCHIATRIC COMORBIDITY IN PATIENTS WITH PANIC DISORDER

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This study explored the prevalence of psychiatric comorbidity in patients with panic disorder with or without agoraphobia. The study was conducted in 80 patients hospitalized in the Psychiatric Clinic of Arad between 1998 and 2003. Their average age was 33.5 years; the majority were women (80%) living in urban areas (94%). Patients were divided into two groups: group A, consisting of 44 patients diagnosed with panic disorder with agoraphobia, and group B, consisting of 36 patients diagnosed with panic disorder without agoraphobia. The diagnosis was made according to DSM-IV and ICD-10. Comorbidity was assessed using the same criteria. Depression occurred in 50.8% of cases, being more frequent in patients of group A (60%) than in those of group B (31%) (p<0.03). The prevalence of alcohol abuse was 40% in patients of group A and 13.8% in those of group B (p<0.02). Hypochondriasis was present in 60% of patients of group A and 10.3% in those of group B (p<0.05). Personality disorders (types: avoidant, histrionic and borderline) were present in 32.3% of the patients, with a prevalence of 50% in group A. Anticipatory anxiety was present in 91.4% of patients of group A and 55.2% of those of group B. 74.3% of patients of group A and 41.7% of those of group B developed generalized anxiety. These data support the idea that, in anxiety disorders, comorbidity is a common phenomenon and not an exception.

PO2.156.
NOCTURNAL PANIC AND RECENT LIFE EVENTS

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Nocturnal panic (NP) refers to waking from sleep in a state of panic. Recurrent nocturnal (= sleep) panic attacks occur in 18% to 45% of panic disorder patients. Biological and cognitive models have been proposed and some studies support the notion that NP represents a specific subtype of panic disorder with its own characteristics. There is some evidence for a relationship between trauma and NP: panic disorder patients with histories of traumatic events are more likely to report nocturnal panic attacks than patients without such histories, but the relationship between life events and the onset of the disorder has not been examined to date. The purpose of this study was to investigate whether NP is associated with a higher frequency and/or a higher severity of life events prior to panic disorder onset (in the year before the onset). Our sample was comprised of 125 outpatients with a principal DSM-IV diagnosis of PD, verified by the Structured Clinical Interview for DSM-IV (SCID). All patients were assessed using a semistructured clinical interview for the collection of socio-demographic and clinical variables. For the evaluation of recent life events, patients were assessed with the Paykel's schedule for life events. Patients with a history of sleep panic were compared to patients without NP. Twenty-eight percent of patients (n=35) reported having recurrent nocturnal panic attacks. No differences were found between the groups in the frequency and severity of life events occurring in the year before the onset of panic disorder. In conclusion, our study failed to support the hypothesis that recent life events predispose to nocturnal panic onset.

PO2.157.
AGE OF ONSET OF PANIC DISORDER WITH VS. WITHOUT COMORBID ANXIETY DISORDERS

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This study aimed to compare the age of onset of panic disorder and agoraphobia (PDA) with vs. without comorbid anxiety disorders (CAD) - specific phobia, generalized anxiety disorder, and social phobia. 124 consecutive outpatients with PDA participated in the study. Diagnoses of PDA and (lifetime and/or current) CAD were made on the basis of the Structured Clinical Interview for DSM-IV (SCID-I). The age of onset was defined as the age when patients first met DSM-IV criteria for panic disorder. The comparison of patients with only one CAD and patients without CAD did not show statistically significant differences, although patients with CAD were somewhat older at onset. PDA patients with jointly comorbid specific phobia, generalized anxiety disorder and social phobia were significantly older at onset than PAD patients without CAD.

PO2.158.
A COMPARISON OF SERTRALINE AND THE COMBINATION OF SERTRALINE WITH COGNITIVE BEHAVIOUR GROUP THERAPY IN THE TREATMENT OF PANIC DISORDER

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Forty patients meeting ICD-10 criteria for panic disorder were allocated to sertraline, and treated over 12 weeks. A fixed dose medication procedure was used. Twenty of them (two groups of ten) were randomly assigned to cognitive-behavioral group therapy during the same period of 12 weeks. The sessions (12 for each group) were run regularly once a week and lasted 2 hours. The treatment response and outcome measures included Panic Disorder Severity Scale (PDSS) and Clinical Global Impression Scale (CGI). A decrease of the number of panic attacks and of their intensity as well as of the level of anxiety, depression and worry about attacks was found in most of the patients in both groups, but outcome measures at the end of treatment and at six month follow-up revealed the superiority of the combined treatment with respect to treatment with sertraline only. The group with combined treatment revealed a lower incidence of subsequent treatment interventions at six month follow-up.

PO2.159.
INTEGRATED TREATMENT FOR PANIC DISORDER: A 3-YEAR FOLLOW-UP STUDY

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We have developed a model of integrated treatment of panic disorder that is a combination of three therapies: pharmacological therapy (selective serotonin reuptake inhibitors), cognitive-behavioural therapy (according to G. Andrews' model) and short-term psychodynamic oriented psychotherapy. In this study we analyse the results of 50 patients with panic disorder with or without agoraphobia (DSM-IV criteria) recruited after a clinical and instrumental assessment and randomized to either the integrated treatment or psychopharmacological therapy alone. At 36-month follow-up, the integrated treatment seems to be more effective than the control in reducing panic symptoms and avoidance. Patients receiving integrated treatment show an early and clear physical, emotional and social improvement.

PO2.160.
INTEGRATED TREATMENT FOR PANIC DISORDER

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Comparative clinical trials and meta-analytic studies provide a growing body of evidence that two treatment strategies, pharmacotherapy and cognitive-behavior therapy (CBT), are effective for the treatment of panic disorder. However, few studies tried to investigate and develop an integrated treatment model. During the last 7 years we have offered an integrated treatment strategy to patients with panic disorder. The purpose of this prospective study was to assess the advantages of an integrated treatment in a sample of subjects with panic disorder treated in our outpatient unit. Ninety-nine consecutive patients with DSM-IV panic disorder were studied. Treatment consisted of 1 hour individual sessions conducted bi-weekly for 6 months. The main treatment components are pharmacological therapy with paroxetine (dosage increase to a maximum of 40 mg/day, with a weekly increment of 10 mg/day); psychoeducation; emotions and beliefs monitoring; cognitive intervention (cognitive restructuring); exposure interventions; relapse prevention. Degree of phobic avoidance, state and trait anxiety, depressive symptoms and social disability were assessed at baseline and end of treatment. There was a significant improvement in all areas. Integrated treatment appears to be effective as suggested by short-term results. However, a study to assess the stability of the advantages and long-term effects is warranted.

PO2.161.
THE EFFECTIVENESS OF COGNITIVE BEHAVIOURAL THERAPY VERSUS PAROXETINE IN THE TREATMENT OF PANIC DISORDER: A FOUR YEAR FOLLOW-UP STUDY

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There are few long-term outcome studies of panic disorder in the usual clinical setting. The aim of this study was to evaluate the long term follow-up of patients with panic disorder with agoraphobia treated with cognitive behavioural therapy (CBT) or paroxetine according to a standardized protocol. A sample of 139 consecutive patients with DSM-IV panic disorder with agoraphobia were partially randomized to receive paroxetine or CBT. Sixty-seven were treated with CBT, 72 with paroxetine (20-60 mg/die). Forty-one (61%) became panic free after 15-20 weekly CBT sessions and 48 (66%) after 6-8 month paroxetine treatment. A 2 to 6 year (median = 4 years) follow-up was performed. Patients were assessed every two years with the Panic Disorder Severity Scale, the Marks-Sheehan Phobia Scale and the Montgomery-Asberg Depression Rating Scale. Kaplan-Meier survival analysis was employed to characterize the clinical course of patients. Eighteen of the 48 patients (37%) who received paroxetine and seven of the 41 patients (17%) who received CBT had a relapse of panic disorder at some time during follow-up. The relapse prevalently occurred during the first two years. In conclusion, CBT was found to be significantly more effective than paroxetine in reducing relapse rate, during a 4 year follow-up.

PO2.162.
NEUROPSYCHOPHYSIOLOGICAL-ORIENTED PSYCHOTHERAPY IN THE TREATMENT OF GENERALIZED ANXIETY DISORDER AND PANIC DISORDER

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Neuropsychophysiological (NPP)-oriented psychotherapy is based on the understanding of the differential functioning of the two cerebral hemispheres and on the stimulation of their respective abilities in an integrated way. Only the knowledge of the mechanisms that produce thoughts and emotions enables us to single out the pathological component of a patient's way of thinking and to stimulate those abilities he or she is lacking, as well as to inhibit the automatism, fostering a conscious activity in the management of information processing. In the present study we will describe the therapeutic principles of the NPP psychotherapy and its effects in the treatment of generalized anxiety disorder and panic disorder.

PO2.163.
COGNITIVE BEHAVIOUR THERAPY PREVENTS RELAPSE IN PANIC DISORDER AFTER DISCONTINUATION OF PHARMACOTHERAPY

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The aim of this study was to examine the relapse rate of patients with panic disorder who received cognitive behaviour therapy (CBT) and pharmacotherapy, after discontinuation of drugs. 20 patients (17 females and 3 males), who fulfilled ICD-10 criteria for panic disorder with or without agoraphobia, were treated with CBT (approximately 16 sessions) and paroxetine (30-40 mg daily) for a maximum of 6 months. At 18-month follow-up all patients were panic-free. In a further group of 21 patients with the same diagnosis, we used CBT alone. We added four more sessions (total of 20). The process of therapy was more difficult, and in these patients we had to add medication (for 6 months). At 18-month follow-up, all patients were panic-free. Finally, in a group of 10 patients with the same diagnosis, we used medication alone for 1 year. All but two patients relapsed. These data seem to suggest a prophylactic effect of CBT in panic disorder after discontinuation of pharmacotherapy.

PO2.164.
REFLECTIONS ON THE PSYCHOPATHOLOGY OF PANIC ATTACKS

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In this report we examine whether panic attacks represent an individual psychopathological entity or just a symptom, a signal that may indicate biological promptness, but also accompany different disease entities, mainly depressive disorders. From 1990 until today, we studied 20 patients with panic attacks and different personality structures and symptoms who underwent psychoanalytic psychotherapy with or without medications. In this report we examine the psychodynamics of these patients with the help of Mentsos' three-dimensional model of symptom's creation (ego maturation, walking through the conflict, traumatic fixation). Individuals characterized by pseudo-autonomic behavior tend to react with panic in situations of conflict between dependence and autonomy. Because traumatic fixation can happen in a long period of time (individualization-separation phase), these patients can express different ego maturation and use defense mechanisms of different maturity. This explains the appearance of panic attacks in persons with different personality structure and different coexisting symptoms (from hysteria to bipolar disorder).

PO2.165.
DRAMATHERAPY IN PANIC DISORDER

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We use dramatherapy as a therapeutic approach to panic disorder. We work on either known texts and role parts or on stories and role parts created by the patients themselves. A play which is especially suitable is "A delicate balance" by Edward Albee, where a pair of role parts present panic disorder. Whilst panic is a condensed experience, during the dramatherapy procedure, the possibility is given for it to "spread" in space and time and to be worked through. Through the role playing, panic is embodied and therefore it is possible to control it. Through the team's holding, the individual faces the avoiding behavior, that develops under the state of panic. On the cognitive level, it is possible to investigate alternative solutions through the creation of different scenarios. Panic itself can take the form of a role or a symbolic object and a dialogue can develop with it, thus creating a "transitional space". The procedure of playing itself creates a meaning and fills in the psychic gap which often exists in panic disorder.

PO2.166.
VULNERABILITY TO ANXIETY: STAI-T AS A MEASURE OF CLINICALLY SIGNIFICANT CHANGE IN GENERALIZED ANXIETY DISORDER FOLLOWING PSYCHOLOGICAL THERAPY

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Several studies have proposed generalized anxiety disorder (GAD) as a condition of vulnerability to suffer anxiety. The Trait version of the Spielberger State-Trait Anxiety Inventory (STAI-T) has been considered as a good measure of this vulnerability and a valid instrument to assess change after treatment. We applied a structured cognitive-behavioral oriented group therapy programme and evaluated its efficacy in a sample of 48 outpatients who meet the DSM-IV criterion for GAD, in a mental health primary care setting. Jacobson's metodology to define clinically significant change was used to assess the rate of clinically significant change in the T version of STAI, administered before treatment and at the last session. The degree of clinic improvement after the therapy will be shown allocating each patient to one of four mutually exclusive treatment outcomes: a) realiable deterioration; b) no change; c) reliable improvement within the dysfunctional population, and d) reliable improvement from the dysfunctional to the normal population or recovery.

PO2.167.
CLINICAL AND PSYCHONEUROENDOCRINOLOGICAL EFFECTS OF COGNITIVE THERAPY IN PATIENTS WITH GENERALIZED ANXIETY DISORDER

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Psychosocial stress is known to induce an adaptive response mainly mediated by neural and neuro-endocrine components, involving the release of catecholamines and the activation of the limbic–hypothalamic-pituitary-adrenal (HPA) system, with the consequent release of corticotropin releasing hormone (CRH), adrenocorticotropin hormone (ACTH), and cortisol. Chronic stress, as occurring in various anxiety disorders, may lead to the persistent activation of the HPA axis, resulting in sustained increase of cortisol levels. It has been shown that patients with chronic anxiety disorders have been successfully treated with cognitive therapy, alone or in combination with pharmacotherapy. We evaluated the efficacy of cognitive therapy in the treatment of patients with generalized anxiety disorder, performing clinical assessment and testing biochemical indicators of HPA function, such as plasma cortisol levels. Significant changes at both levels were observed after completion of treatment. These observations suggest that the effect of psychotherapy may be studied at both psychological and biological levels.

PO2.168.
OPEN LABEL, FIXED DOSE MIRTAZAPINE TREATMENT OF SOCIAL PHOBIA: PRELIMINARY RESULTS

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Twenty-five adult outpatients with social phobia, according to DSM-IV criteria, were recruited and treated with a fixed dose of mirtazapine (30 mg/day) for 12 weeks. Measures were the Liebowitz Social Phobia Scale (LSPS), the Interaction Anxiousness Scale (IAS), the Audience Anxiousness Scale (AAS), the Hamilton Anxiety Rating Scale (HAM-A), the Beck Depression Inventory (BDI) and the Clinical Global Impression Scale - Improvement (CGI-I). The efficacy was principally assessed by the change in mean total LSPS score from baseline to last assessment (50% or greater reduction in total LSPS score) and by having ratings of 1 or 2 on the CGI-I. 22 patients (78%) completed the study and three (12%) dropped out due to side effects. 16 out of 22 patients (72.7%) were classified as responders. An overall improvement was seen at endpoint on all rating scales and, among non-responders, no one reported a worsening of symptoms during treatment. Generally mirtazapine was well tolerated and the most frequently reported side effects were sedation and weight gain. The results of this preliminary trial support the notion that mirtazapine is effective in the treatment of social phobia. However, these findings must be viewed with caution and further investigation is needed.

PO2.169.
SUBLINGUAL ALPRAZOLAM EFFICACY IN PRIMARY INSOMNIA AND IN SLEEP DISORDERS ASSOCIATED WITH ANXIETY STATES

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The study aimed to assess the short-term efficacy and tolerability of alprazolam, 0.5 mg sublingual tablets (SL-ALP), used as sleep aid in primary insomnia and in sleep disorders associated with anxiety states. We carried out a comparative, multicentre, randomised, double blind, placebo controlled, crossover study. Sixty one patients (44 women, mean age 48±13 years), treated with SL-ALP or placebo for 8 days, with a four-day washout period between both treatments, were evaluated. Patients received the treatments in a random order. Treatment was initiated with 1 tablet at bedtime and the dose could be duplicated as necessary from the fourth night of treatment. The efficacy was assessed by Patient General Impression (PGI), Analogue Visual Scale (AVE) and Pittsburgh Sleep Quality Index (PSQI). According to PGI, 91.9% of the patients improved with SL-ALP and 36.1% with placebo ($p<0.01$). AVE scores were: at baseline, 2.72±1.44; after SL-ALP, 7.82±2.00; after placebo, 3.86±2.09 ($p<0.01$). PSQI scores were: at baseline, 13.80±3.02; after SL-ALP, 4.26±2.84; after placebo, 11.41±4.37 ($p<0.01$). There were no statistically significative differences between treatments regarding tolerability. In conclusion, alprazolam given as sublingual tablets was found to be more effective than placebo as sleep aid or hypnogenic, with similar tolerability.

PO2.170.
DIAZEPAM LONG-TERM USERS: A STUDY IN PRIMARY CARE CENTERS IN CAMPINAS, BRAZIL

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The aim of this research was to investigate the long-term use of diazepam. We studied 41 outpatients from primary care services in Campinas (Brazil) who had been taking prescribed diazepam daily during 3 years. Our study was divided in two parts. First, we investigated the chronic use of medication, focusing on dosage and origin of prescription. In the second part of the study, we administered the Hospital Anxiety and Depression Scale (HAD) and the Schedules for Clinical Assessment in Neuropsychiatry (SCAN). Diazepam use was examined using a semistructured interview designed to cover the following areas: reasons for use, drug effects, perceptions of their doctor's attitude to the prescription, efforts to stop taking the tablets. Our results showed that long-term users tend to be white women, aged 50-69 years, with low educational and sociodemographic levels, with depressive illness inappropriately diagnosed and treated with benzodiazepines. By SCAN we found that 63.4% of subjects had depressive symptoms, 29.6% had benzodiazepine dependence, and 14.6% sleep disorders. Our conclusion points to the need to establish guidelines for prescription of benzodiazepines and intervention programs based on orientation of patients and professionals of the public health system.

PO2.171.
SUCCESSFUL TREATMENT OF A WOMAN WITH TOURETTE'S DISORDER WITH AMISULPRIDE

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We report the case of a 40 year old woman suffering from Tourette's disorder. At the age of 5, she had for the first time involuntary head movements, at the age of 8 involuntary leg movements and by the age of 12-13 years vocal tics. During the previous 10 years the patient had received mirtazapine, buspirone, valproate and sulpiride. Only sulpiride had had a weak effect. The patient was assessed with the Yale Global Tics Severity Scale. Her baseline motor score was 16, her phonic score 18 and her impairment score 30. She was put on amisulpride 100 mg per day. Three weeks later her scores dropped to 9, 10 and 20 respectively. Amisulpride was raised to 200 mg daily and after another three weeks her scores were 5, 6 and 10 respectively. A further titration to 400 mg/day was made but without further improvement. The patient decreased the dose to 100 mg/day without any deterioration in her condition. For the next three months the patient continued treatment and her condition remained stable. Then she decided to discontinue because of amenorrhea and within 20 days the symptoms reappeared. Her scores climbed to 10, 11 and 30. The patient decided to restart amisulpride treatment and simultaneously started visiting a gynecologist for the treatment of amenorrhea.

PO2.172.
CHILDHOOD HISTORY OF ANXIETY DISORDERS AMONG ADULTS WITH ANXIETY DISORDERS AND ITS CORRELATES

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This study examined the rates and correlates of a childhood history of anxiety disorders in adults with anxiety disorder. The presence of a childhood history of anxiety disorders was assessed by a structured interview. The association with co-morbid disorders, anxiety severity, functional impairments and chronicity variables were examined. 110 patients (52 social phobia and 58 panic patients) were recruited for this study. Among them, 37.3% met criteria for anxiety disorders during childhood, but the rates of the childhood history of anxiety disorders were significantly higher in social phobia than in panic disorder patients (48.1% vs. 27.6%). The past history of childhood anxiety disorders was associated with early age of onset, greater anxiety morbidities, lower global functions, greater severity of fear and avoidance of social situations. These results indicate that the majority of adult anxiety disorders patients, especially those with social phobia, have a history of anxiety disorders in childhood, and that the presence of childhood anxiety disorder is linked with more severe pathological characteristics.

PO2.173.
CONSTITUTIONAL AND BIOLOGICAL CORRELATES OF ANXIOUS PERSONALITY DISORDER

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We examined 135 patients with anxious personality disorder (ICD-10 diagnostic criteria), 87 women and 48 men. The mean age of patients was 39.4±1.0 years. The control group consisted of 300 mentally and physically healthy men and women. The mean age of the control group was 40.2±1.0 years. The methods of investigation were clinical, anthropometric, somatoscopic, immunological, neurophysiologic. The aspects associated with anxious personality disorder included asthenic somatotype, anthropometric characteristics of somatic sexual retardation, increased rate of gynecomorphous features in the body, accumulation of regional morphological dysplasias. We found a relationship in these patients between asthenic somatotype, somatic constitutional pathology (weakness of connective tissue, abdominal ptosis, etc.) and steadily substantial psycho-vegetative syndrome.

PO2.174.
TREATMENT OF MIXED ANXIETY AND DEPRESSIVE REACTIONS IN PATIENTS WITH ANXIOUS AND ANANKASTIC PERSONALITY DISORDER

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We studied 12 patients (5 females and 7 males; age 20-45 years) with anxious and anankastic personality disorder who developed a mixed anxiety and depressive reaction following a stressful life event. Tianeptine in therapeutic doses (37.5 mg/day) was used as the drug of choice, because of the specificity of its anxiolytic action, in the absence of sedative and other side effects, and of any negative impact on social behaviour. The therapy was combined with clonazepam at 2 mg/day. The choice of this drug was determined by the combination

of a tranquilising effect with the decrease in responsiveness to visceral stimuli through a stabilising effect on vegetative system. In patients with a positive response to therapy, both affective and anxiety symptoms decreased slowly, at the end of the second or beginning of the third week of treatment.

PO2.175.
ANXIETY AND HEALTH IN THE ADOLESCENCE: IMPACT OF FAMILY RELATIONSHIPS?

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The present research aims at comparing family relationships and adolescents' beliefs about their own health in a sample of adolescents with and without anxiety disorder. 672 "healthy" adolescents completed the Multidimensional Health Locus of Control questionnaire and Olson scale questionnaire describing their family of origin. They were compared to a sample of 81 adolescents diagnosed with anxiety disorders. Family relationships are more cohesive and adaptable in the healthy sample (p=0.007; p=0.017). Adolescents with anxiety disorder feel less responsible for their own health (p=0.003), are more dependent from their relatives (p=0.0001) and believe more in chance (p=0.023). These data suggest that family relationships and health locus of control should be considered as targets for intervention in anxiety disorders.

PO2.176.
PSYCHOPHYSIOLOGICAL FEATURES OF PATIENTS WITH NEUROCIRCULATORY DYSTHONIA

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A complex anamnestic, psychopathological, psychological, vegetative and psychophysiological examination of a group of young patients (16-25 years, both males and females) with neurocirculatory dystonia has been performed, which allowed estimation of several psychophysiological features (time of sensory-motor reaction, quality of attention and visual memory, individual minute test, stabilometric test, vegetative maintenance of higher nervous activity, etc.) and their correlation to the mental state of the patients and expressivity of symptoms of neurocirculatory dystonia. Statistical analysis of the data achieved in different tests revealed correlations between the signs of neurocirculatory dystonia and social and psychological factors. It also showed significant relations between the mental and psychophysiological state of the patients and their psychophysiological reaction to physical loads. Several clinical and psychophysiological patterns in patients with neurocirculatory dysthonia have been described, and several corresponding strategies of treatment and prophylaxis of its further progressing and complications have been proposed.

PO2.177.
CONSTANCY OF PERCEPTION IN ANXIETY VS. DEPRESSIVE SYNDROMES

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Among anxiety-depressive syndromes, there are many cases where the predominance of anxiety or depression is not obvious, because of a dissociation between the phenomenological quality of feeling and its behavioral expression. The dynamic clinical-experimental evaluation of 373 anxiety patients and 272 depressive patients demonstrated that psychotic anxiety is associated with different forms of reduced constancy of perception, while the melancholic syndrome is revealed by its hyperconstancy. A reliable method of their differentiation has been worked out. The pseudo-scopic inversion of the inner side of a plastic doll's face, in most patients with psychotic anxiety, failed after more than one minute observation through pseudoscope, while in most cases of melancholic syndrome the inversion took place within a minute even without pseudoscope.

PO2.178.
A DIDACTIC SONG ABOUT ANXIETY

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The study aimed to verify if the main anxiety aspects, reported in verses, have a pedagogical function, teaching students and community members about how a carrier of anxiety disorder feels his symptoms. We composed a popular song (lyrics and melody) denominated "Fears". Verses include descriptions which illustrate anxiety symptoms. Several psychopathological features of social phobia are exemplified in rhymes: dizziness, dyspnea, palpitation, paleness, shame, blank mind, stress, bradycardia, tachycardia, sensation of being watched, vertigo, fears of becoming mad or to die. Words of a tune can be utilized as a significative and illustrative didactic resource in lessons and lectures; musical compositions describing conspicuous aspects in psychiatry should be stimulated and published.

PO2.179.
DISSOCIATION SYMPTOMATOLOGY IN ANXIETY DISORDERS

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Apart from dissociation disorders, dissociation symptomatology can also be observed in other psychiatric disorders, especially in schizophrenia, affective disorder and post-traumatic stress disorder. Moreover, a number of studies have indicated that dissociation symptomatology can appear in general population as well. Dissociative symptomatology is usually present in conditions of high arousal, which frequently accompanies anxiety disorders. Our research was aimed at determining the presence of dissociation symptomatology in patients suffering from anxiety disorders, and detecting any significant connection between the two conditions. Experimental and control group numbered 25 members each. A structured questionnaire for obtaining socio-demographic and medical history data was used. The Dissociative Experiences Scale, a dimensional questionnaire, was utilized for the assessment of dissociation symptomatology. Anxiety was assessed by the Beck Anxiety Inventory. Results indicate that anxiety patients manifest significantly higher values of dissociation in comparison to the healthy population (p=0.004). High anxiety level interviewees have higher average values of dissociation in comparison to other groups. Female patients suffering from anxiety disorder manifest higher levels of dissociation in comparison to male patients. Younger patients (up to 25 years of age) have statistically significant higher values of dissociation in comparison to the healthy population (p=0.001). Dissociation score decreased with the prolongation of the episode.

PO2.180.
DISSOCIATIVE IDENTITY DISORDER - IS IT BOUND BY CULTURE

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Multiple personality disorder, now known as dissociative identity disorder, has long been a controversial phenomenon. Patients with symptoms suggestive of dissociation are often misdiagnosed as malingering or even schizophrenia, the former as a result of clinicians overlooking the fact that suggestibility itself plays a key role in the emergence and perpetuation of this illness and the latter due to the lack of knowledge of the whole dissociative disorder spectrum, which often resembles that of a psychotic disorder. The lack of experience and skills in this field, and also fear of humiliation by sceptics, may contribute to the underdiagnosis of dissociative identity disorder and other dissociative states. In Malaysia, various culture bound syndromes often present with symptoms that mimic dissociative identity disorder. This paper will attempt to understand dissociative identity disorder from a local context using a case study as a reference point. In this case, therapy failed because the cultural perspective was overlooked.

PO2.181.
MUTUAL REGULATION OF NARRATIVE PERSPECTIVE IN THERAPEUTIC INTERACTION: THE CASE OF A DISSOCIATIVE IDENTITY DISORDER

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In this paper we examine the construction and functioning of narrative self in the course of therapeutic interaction by analysing the mutual regulation of narrative perspective (NP) taken by patient and therapist. The concept of NP is used to define the narrator's position with respect to the story plane, the time and place of its actions, actors, and characters. The authors describe their own model of NP defined in linguistic terms, operating with the structural properties of texts, being able to capture the continuous shifting of NP, and accounting for the interactants' mutual determination of each other's NPs, and shifts of NP. We distinguish three levels of perspective differing with respect to insight, knowledge, and emotional involvement. By analysing excerpts from a therapeutic session with a patient suffering from dissociative identity disorder we show that NP plays a formative role in the construction of self-narratives, since there is a close causal relationship between the narrator's perspective, and the kinds of memories that he has access to. Our analysis reveals that the surfacing of different narrative selves - and the isolated self-states they represent - is tied to NP, and hence, the formation and realization of the narrative self is the function of NP.

PO2.182.
DIFFERENTIATED REHABILITATIVE PROGRAMS FOR HYSTERIC STATES

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We studied 144 patients with hysteric states: 98 with hysteric personality disorder (F60.4) and 46 with disorders of the neurotic range (F44.4-44.7). We applied six differentiated rehabilitative programs based on psychotherapeutic, psychopreventive and psychopharmacological components. Two of them were applied in hysteric personality disorder and four were intended for hysteric disorders of neurotic spectrum. The analysis of the results indicates a higher efficacy of the therapy in dissociative disorders as compared with hysteric personality disorder. Catamnestic investigation of treated patients has shown maintenance of achieved results and a stable clinical recovery in 89.1% of cases of dissociative disorders and 65.1% of cases of hysteric personality.

PO2.183.
GUIDED SELF-HELP COGNITIVE-BEHAVIORAL AND WEIGHT-LOSS TREATMENTS FOR BINGE EATING DISORDER

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The aim of this study was to perform a randomized controlled trial to test the relative efficacy of cognitive-behavioral therapy (CBT) and behavioral weight loss treatment (BWL) for binge eating disorder (BED). To control for the non-specific influences of attention, a third control (CON) treatment condition was added. Given the promising results from initial studies using minimal therapist guidance, treatments were tested using a guided self-help approach. Ninety overweight (mean body mass index 35.5; mean age 46.3 years) patients (19 males, 71 females) with a DSM-IV diagnosis of BED were randomly assigned (5:5:2 ratio) to one of three treatments: CBT (n=37), BWL (n=38), or CON (n=15). The three 12-week treatment conditions were administered individually following guided self-help protocols that included six brief meetings with research clinicians and daily self-monitoring of eating, binge eating, and physical activity. The CBT treatment condition followed Fairburn's protocol and the BWL treatment condition followed Brownell's protocol. Detailed assessments were performed at baseline, 4, 8, and 12 week time points. The primary outcome measure was remission from binge eating defined as zero binges for 28 days. Secondary measures included body mass index and dimensional measures of the features of eating disorders. Of the 90 patients, 70 (78 %) completed treatment; CBT (87%) and CON (87%) had significantly higher completion rates than BWL (67%). Intent-to-treat analyses revealed that CBT had significantly higher remission rates (50%) than either BWL (19%) or CON (13%). Weight loss was minimal and differed little across treatments.

PO2.184.
A COMPARISON OF THE EFFECTS OF OLANZAPINE AND RISPERIDONE VERSUS PLACEBO ON EATING BEHAVIORS AND GHRELIN PLASMA LEVELS IN NORMAL HUMAN SUBJECTS

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The addition of atypical antipsychotics to the armamentarium utilized in the treatment of schizophrenia has substantially advanced our ability to combat this illness. However, in considering a patient's overall health, the practitioner often is faced with the side effect of weight gain. Recently, a gastric peptide, ghrelin, has been reported to influence eating and weight gain in animals and hunger and quantity of food eaten in humans. In light of these findings the effects of the

atypical antipsychotics on pre-prandial ghrelin plasma levels and the area under the ghrelin plasma concentration-time curve (AUC) are of interest. This study is a randomized double blind, parallel group trial comparing the effect of a two week treatment with olanzapine and risperidone vs. placebo on ghrelin plasma levels and eating behavior in 48 healthy human subjects. This project utilizes the current state of the art feeding lab procedures to better characterize the effect of the compounds on eating behaviors including appetite, satiety, amount of nutrient ingested and the resting energy expenditure. This project will help to determine the difference in biological markers and objective eating behavior parameters between the atypical antipsychotics olanzapine and risperidone compared to placebo.

PO2.185.
EVENT-RELATED POTENTIALS TOPOGRAPHY AND CORTICAL SOURCE IMAGING IN SUBJECTS WITH DEFICIT AND NONDEFICIT SCHIZOPHRENIA

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Different electrophysiological abnormalities have been reported in patients with deficit and nondeficit schizophrenia. In the present study, event-related potentials (ERPs) recordings were obtained during a three-tone oddball task in clinically stable patients with deficit (DS) and nondeficit schizophrenia (NDS) and matched healthy control subjects (HCS). DS and NDS patients were comparable for duration of illness and severity of disorganization and positive symptoms. The N100 component did not show amplitude differences among groups. A topographic abnormality (rightward shift of the negative area) was observed in the DS group, as compared to both NDS and HCS. P300 amplitude was significantly reduced over the left posterior temporal regions only in NDS patients vs. HCS; topographic P300 abnormalities, including a posterior shift of the negative area and a rightward shift of the positive area, were observed only in NDS patients. Low-resolution brain electromagnetic tomography (LORETA) showed that, when compared to HCS, in DS patients, N100 current source density was reduced in the left cingulate while, in NDS subjects, the reduction of the P300 current source density involved temporo-parietal regions of the left hemisphere. According to our findings, subjects with DS and those with NDS show a different pattern of ERP abnormalities, which suggest different etiopathogenetic mechanisms.

PO2.186.
VOXEL BASED MORPHOMETRY IN ANOREXIA NERVOSA. A PRELIMINARY CONTRIBUTION

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Patients with anorexia nervosa are often impaired in some neuropsychological functions, such as attention, concentration, visuo-spatial ability, short-term memory and lower processing speed. Neuroimaging studies have shown sulci widening, loss of brain parenchyma and ventricular enlargement; the reversible nature of such brain alterations is still debated. We conducted a voxel-based-morphometry analysis of the brain magnetic resonance imaging (MRI) of 10 right-handed patients suffering from anorexia nervosa since more than 5 years (mean 16.09±10.2; body mass index, BMI: 15.49±2.38) and 5 right-handed patients with early anorexia nervosa (mean duration of illness 1.2±0.44 years; BMI: 15.36±1.3) compared with 10 age matched right-handed women with normal BMI. Correlations between MRI findings, BMI, disease duration and neuropsychological performance (Wechsler Adult Intelligence Scale) were also calculated. No significant neuropsychological deficits were found in anorexia nervosa patients. Focal reduction of grey matter was found in occipital lobes, especially in the right one, precentral right, left parietal, right crus and right cerebellar hemisphere. These findings slightly correlated with BMI without reaching a significant value. No correlation was found between grey matter atrophy and disease duration. No white matter loss was found. The lack of correlation between clinical and neuroimaging data may be due to the limited number of patients. Nevertheless, the occipital grey matter loss, above all on the right side, may suggest a dysfunction in the right visual areas which could be responsible for a wrong visual perception. Our research is progressing to identify correlations between these morphological alterations and clinical picture.

PO2.187.
MELANOCORTIN-4 RECEPTOR (MC4R) GENE MUTATIONS IN BINGE EATING DISORDER

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Binge-eating disorder (BED) is a provisional diagnosis delineated in the DSM-IV, that involves recurrent episodes of binge eating without compensatory behaviours. Therefore, people with BED gain weight up to become obese. A genetic predisposition to eating disorders is widely recognized. Recently, in a population of obese individuals, it has been reported that BED was present in all the carriers of melanocortin-4 receptor (MC4R) variants, suggesting a causal link between mutations in the MC4R and BED, since MC4R is part of the endogenous system regulating eating behaviour. It is known that about 20% of BED individuals are not obese. Therefore, an approach to assess a possible association between MC4R mutations and BED could be to screen both obese and non-obese individuals with BED for mutations in MC4R. A total of 57 women, aged 17-58 years, were recruited for the study; their body mass index (BMI) ranged from 20.00 to 53.00 Kg/m^2. The frequency of their binge eating was 3-21 episodes/week. DNA was extracted from peripheral lymphocytes and the coding region of the MC4R gene was amplified by polymerase chain reaction and sequenced. We observed one mutation (G523A) and two non-functional polymorphisms (V103I – I251L) of the MC4R. The missense mutation G523A, resulting in the substitution of alanine with threonine at codon 175, was detected in a 40-year-old woman who was heterozygotic for the mutation. The woman was overweight at the age of 37 (BMI = 29.00 Kg/m^2), when she developed BED, that led to a frank obesity (BMI at the observation time was 32.85 Kg/m^2). Since the missense mutation G253A has been previously shown to reduce the MC4R function, it is possible that it could represent a vulnerability factor for BED in this patient. These results, although preliminary, do not confirm the hypothesis that mutation variants of the MC4R are frequently associated with BED.

PO2.188.
PSYCHOPATHOLOGICAL ASPECTS AND FOOD CHOICE IN EATING DISORDERS

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Patients with eating disorders (ED) tend to reduce or increase food intake but they also present peculiar food choices which may worsen their nutritional pathology as well as interfere with the neurotransmitter (NT) secretions, resulting in some specific psychopathological aspects of the disease. Our study aimed to explore whether a specific alteration in food choice might be detected in ED and whether this aspect could suggest any pathological link with the subtypes of ED psychopathology. In 18 patients with anorexia nervosa (AN), 12 with bulimia nervosa (BN) and 10 with binge eating disorder (BED), we assessed the average amount of caloric consumption, the percent of macronutrients and food choices. Psychopathological aspects were evaluated through the Temperament and Character Inventory (TCI) and the Eating Disorder Inventory-2 (EDI-2). Respectively for AN, BN and BED patients, mean Kcal consumption (excluding binging) was 939±410, 2277±1864, 1435±436; carbohydrate consumption (%) was 66.48±8.7, 61.28±4.04, 61.87±2.45; fat consumption 13.76±5.68, 19.74±4.12, 17.85±1.99 and protein consumption 19.76±4.83, 18.99±2.42, 20.29±3.03. TCI investigation revealed significantly reduced novelty seeking and increased persistence in AN, whereas increased harm avoidance and reduced self-directedness were found in all the three subgroups. EDI-2 mean values resulted impaired in the cumulative sample and showed large differences between groups. The mean macronutrients and psychopathological aspects correlated as follows in the whole sample: carbohydrates correlated negatively with novelty seeking and positively with feeling inadequate; fats correlated positively with novelty seeking and bulimia; proteins correlated positively with reward dependence and negatively with insecurity, interpersonal distrust and feeling inadequate.

PO2.189.
ATTACHMENT STYLES AND ALEXITHYMIA IN EATING DISORDER SUBJECTS

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Insecure attachment styles and alexithymia have been reported in subjects with eating disorders, but the relationships with the individual disorders have been seldom investigated. This study was aimed to evaluate the attachment styles and alexithymia in subjects with eating disorders and to explore the relationships between these variables and major diagnostic subgroups. 95 outpatients (52 with bulimia nervosa, BN; 17 with anorexia nervosa, AN; 26 with binge eating disorder, BED), and 100 healthy controls were recruited. Attachment styles were investigated by means of the Bartholomew Scale (BS), the Attachment Style Questionnaire (ASQ) and the Parental Bonding Instrument. Alexithymia was investigated by means of the Toronto Alexithymia Scale -20 items (TAS-20). All patient subgroups, as compared to controls, showed a poorer perceived quality of parental care and a higher frequency of adult insecure attachment styles. In particular, AN and BED patients reported more frequently a preoccupied style, while BN patients a fearful one with respect to controls. Group differences on the ASQ indicated lower confidence in all patient subgroups and higher discomfort with closeness only in BN patients, in comparison with controls. Scores on TAS-20 demonstrated a greater difficulty in the identification and description of feelings in all patient subgroups, and a greater difficulty in the internally oriented thinking only in BED patients, with respect to controls. According to our results, BN patients showed the most insecure adult attachment style and subjects with BED the highest degree of alexithymia. These findings might have profound implications in planning psychotherapeutic intervention.

PO2.190.
ABNORMAL EATING BEHAVIOUR AND EATING DISORDER ATTITUDE IN A CROSS-PUBERTAL POPULATION

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In recent years some studies have been conducted on eating disorders in pre-pubertal population revealing an alarming diffusion of abnormal eating behaviours. Less information is available about the psychological and personality characteristics associated with these behaviours. According to some psychodynamic theories we were interested to evaluate the role of menarche and body transformation of puberty in the development of eating disorders. We conducted an epidemiological research on 1776 subjects, aged 11-13, attending middle school. We administered an ad-hoc socio-demographic schedule, the Eating Disorder Inventory 2 (EDI-2) and a symptom checklist for eating disorders according to DSM-IV criteria. The results confirmed a diffused abnormal eating behaviour. 29.0% of the sample is on diet, 38.1% conduct binge eating and the 5.7% had it twice a week during the last three months, 23.1% lose control during episodes and 4.9% of the sample use laxatives, diuretics or diet pills to lose weight. Comparing male (n=917) with female (n=859) subjects on each EDI-2 scale, we found significant differences on DT, B, BD, I, P, ID, IA scales and on body mass index. The post-pubertal female subsample (n=467) scored significant higher then pre-pubertal subsample (n=392) on DT, B, BD, ID scales, and the pre-pubertal scored significantly higher on the maturity fear scale. These data suggest that eating disorders may be diffused even in the pre-adolescent population, which appears to be concerned about body weight and shape.

PO2.191.
ANOREXIA NERVOSA TREATED BY ANTIREFLUX SURGERY: A CASE REPORT

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Anorexia nervosa is a chronic disorder that can cause esophageal sphincter failure and delayed gastric emptying. Even in the absence of esophageal motility problems, patients with anorexia nervosa have a high incidence of gastrointestinal manifestations, such as vomiting, flatulence and abdominal pain, which can also be observed in gastroesophageal reflux disease (GERD). On the other hand, some achalasia patients may show up with symptoms resembling anorexia nervosa. This overlap in symptomatology of anorexia nervosa and GERD may cause problems in differential diagnosis and treatment decisions. We report on a 25 year old woman, who had been forced to an unwanted marriage. One year later, after the occurrence of depressive symptoms, she started vomiting everyday, and lost weight until she was 31 kg. She was hospitalized for GERD, and an endoscopy

showed she had cardioesophageal sphincter failure and esophagitis. After medical GERD therapy did not work, she was hospitalized in a psychiatry clinic, where she received a diagnosis of anorexia nervosa, and took antidepressants and psychotherapy for three months, with no improvement in symptoms. After consultations with gastroenterologists and surgeons, she underwent a Nissen fundoplication for GERD, after which she started eating normally, with an improvement in her living conditions, and reached an acceptable weight. In conclusion, this patient improved dramatically, although there was no doubt on the diagnosis of anorexia nervosa. The prevalence of eating disorders in the GERD population, and their response to therapy, deserve further attention.

PO2.192. SUCCESSFUL TREATMENT OF ANOREXIA WITH A COMBINATION OF OLANZAPINE, FLUOXETINE AND MIRTAZAPINE AT HIGH DOSES

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Anorexia nervosa is one of the most difficult to treat psychiatric disorders, and (in contrast to bulimia) the role of pharmacotherapy is its treatment is limited to the management of comorbid or secondary disorders. We report the case of a 21 years old woman suffering from anorexia nervosa (restricting type). When admitted to our department she weighted 27 kg (height 160 cm). Her laboratory tests were normal. During the first two weeks of hospitalization she refused food and insisted to exercise regularly. Since the case was considered a life-threatening one, a nasogastric tube was placed for feeding purposes. Pharmaceutical treatment rose gradually during the next week and reached 20 mg/day of olanzapine, 60 mg/day of mirtazapine and 60 mg/day of fluoxetine. The tube was removed after one week. The patient started eating gradually increasing quantities of food. She remained in the hospital for a further period of 2.5 months and during this period gained 19 kg. No specific psychotherapeutic intervention was applied, so the improvement could be attributed mainly to medication. At release the patient not only was eating three fair meals daily but this was causing her minimal annoyance.

PO2.193. THERAPEUTIC IMPLICATIONS OF THE INDIVIDUAL, FAMILIAL AND CULTURAL CONTEXT OF EATING DISORDERS IN POLAND

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The aim of the research was to study, in the Polish cultural context, the links between family patterns, social-cultural patterns regarding self-image and perception of one's body in patients with eating disorders (ED). We used the Polish version of the Family Assessment Measure, the Family of Origin Scale, the Offer questionnaire and the Cultural Factors Questionnaire. Preliminary data show that perception of family relationships in ED groups is more negative and incoherent in comparison with the control group.

PO2.194. SELF-HELP GROUPS OF RELATIVES AND ASSOCIATIONS OF FAMILIES IN THE MANAGEMENT OF EATING DISORDERS

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Since 1996 we have been organizing psychoeducation groups for relatives of anorexic and bulimic young patients. These groups meet fortnightly for 6 months, led by a psychiatrist or psychologist of our team, with the aim of giving information and emotional support. Relatives participating in these groups expressed the wish to help other parents to get out of their isolation and to learn coping strategies. Therefore, they founded in Genoa an association called "Relatives against eating disorders", which collaborates with the professionals of our center, who helped them to create self-help groups and an informal consultation service for families and patients. In our presentation we describe the function and results of these self-help groups.

PO2.195. USE OF MINDFULNESS MEDITATION TECHNIQUES IN TREATMENT OF ANOREXIC FEMALE TEENAGERS

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Mindfulness training in eating disorders helps patients to find new values beyond body shape, based on interior research. Using Jon Kabat-Zinn's work as conceptual background, we report our experiences of psychotherapeutic groups for anorexic female teenagers (14 to 19 years old), in which verbal activities are accompanied by work on body (relaxation techniques, meditation, breath exercises). Body becomes by this approach a means for self-knowledge and improved self-regulation. For instance, this approach helps to identify physical sensations as hunger and to distinguish it from feelings of internal emptiness and anxiety.

PO2.196. ANOREXIA AND BULIMIA: EXPERIENTIAL GROUPS FOR THE PHYSICAL SELF INTEGRATION

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Self practice (SP) is a method developed during a biennial experience with anorexic and bulimic female patients. This paper is aimed at describing the crucial assumptions on which this approach to eating disorders is based. The fundamental assumptions are related to: the need for the patient to feel her active role in the therapeutic process, in order for her to be the first one to discover or to interpret what has been happening; the cohesion of the physical processes as precondition to the ego cohesion; "the suffering needed to feel alive" as critical problem in these patients and the relevance of the experience concerning "the pleasure to be there" (meant as narcissistic libido). Our experience has led us to conclude that what is missing in the patients suffering from narcissistic deficits is the ability to organise some aspects of their psychological structure through some physical, sensorial contact and interpersonal experiences. Intellectualism and idealization can be interpreted as defence mechanisms needed to fill some physical experiential gaps underlying a sound individuation. The denial of corporeity, through psycho-physical experiences sug-

gested by SP, progressively turns into the acceptance of one's borders and the ability to compensate narcissistic deficits.

PO2.197.
ANOREXIA NERVOSA TREATMENT WITH OLANZAPINE: AN OPEN LABEL TRIAL

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The goal of this study was to determine whether olanzapine is effective in producing weight gain and improving body image in patients with anorexia nervosa. Twenty patients with restricting anorexia nervosa without schizophrenia, schizoaffective disorder or bipolar disorder were enrolled in an open label study. Ten patients (Group A) were treated only with cognitive-behaviour therapy (CBT); ten patients (Group B) were treated with CBT and olanzapine. All the patients completed the six month study. Group A gained an average of two kilos; group B gained an average of six kilos ($p>0.001$). Group B was characterized by better body image and less anxiety after treatment.

PO2.198.
EFFECTS OF SERTRALINE PLUS COGNITIVE BEHAVIOURAL THERAPY IN BINGE EATING DISORDER

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14 female outpatients (age 22 to 60 years) with DSM-IV binge eating disorder, all belonging to the same cognitive behavioural therapy (CBT) group, were randomly assigned to receive sertraline or no medication in a 3 month flexible dose (50-150 mg/day) trial. At the end of the study period, sertraline treated patients showed a greater rate of reduction in the frequency of binges and in the body mass index and a greater improvement of mood, anxiety and social phobia. These data suggest that sertraline enhances the effects of a CBT group in binge eating disorder.

PO2.199.
PRESURGICAL PSYCHIATRIC ASSESSMENT IN OBESE PATIENTS CANDIDATE TO BARIATRIC SURGERY

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The study aims to describe the main psychiatric features of a group of obese patients undergoing bariatric surgery, referred for presurgical assessment. All consecutive candidates to bariatric surgery evaluated between March and December 2003 were included in the study. All patients were examined with a semi-structured psychiatric interview and three self-administered tests (Gormally's Binge Eating Disorder Scale, Moorehead-Ardelt's Quality of Life Scale and Sukenfield's Body Image Satisfaction Questionary). The study included 60 adult patients, 88% female, age range 17 to 62 years, mean body mass index 41 (range 36-50). In this series we found binge eating disorder in 30% of subjects. Other common psychiatric diagnoses were personality disorder, drug abuse, impulse-control disorder and affective disorder. Based on the results of psychiatric assessment, surgery was definitely not recommended in 14% of patients.

PO2.200.
RISK TEST FOR EATING DISORDERS: VALIDATION IN AN OBESE POPULATION

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Eating disorders are disabling, unpredictable, and difficult to treat. Treatment has to focus directly on factors such as hopelessness and depression in addition to standard procedures to ensure clients are able to engage in therapy. The present study was conducted in order to evaluate the psychometric properties of the Italian version of Risk Test (RT), a 14-item questionnaire assessing the risk for eating disorders. The questionnaire was administered to 240 subjects: obese (n=40), medical (n=46) and non-clinical samples (n=154). The temporal stability of the RT was investigated in a sample of 30 non-clinical subjects and in a sub-sample of 12 long-term cases. The Eating Disorders Inventory (EDI) was administered to all subjects and the body mass index (BMI) was calculated. The RT showed satisfactory psychometric properties. Inter-rater reliability was satisfactory. There was good internal consistency and stability over time. Concurrent validity with the EDI dimensions was good. Factor analysis showed that the distribution of RT scores can be accounted for by one factor able to explain 64% of total variance. The RT was well accepted by the patients and needed very little supervision by the interviewer. In non-psychiatric subjects, RT appears to be a good test to screening eating disorders in the obese population.

PO2.201.
HOSTILITY DIRECTION IN EATING DISORDERS: A WARTEGG TEST STUDY

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Assertiveness and direction of hostility have been studied in eating disorder patients with conflicting results: some studies did not show significant differences between anorexics and bulimics, while others found outward directed hostility in anorexic patients. Because of the interference of aggressiveness with therapeutic programs and of the influence of inward and outward hostility on psychopathological development, we studied hostility direction in anorexic and bulimic patients. We assessed 10 anorexic (age 22±6) and 10 bulimic (age 28±7) women by the Wartegg projective method. Clinical groups were compared with a control group of 18 healthy subjects (age 25±6). ANOVA showed a significant difference between the control group and clinical groups on formal quality ($p<0.05$) of table V, and on affective quality ($p<0.05$) and formal quality ($p<0.05$) of table VI. Post-hoc analyses showed for table III (affective quality) a lower score of the bulimic group vs. the anorexic group ($p<0.05$) and the control group ($p=0.07$). For table V, on formal quality, bulimic group had a lower score than the control group ($p<0.05$). For table VI, on affective quality and on formal quality, the anorexic group showed a lower score than the control group ($p<0.01$) and the bulimic group ($p<0.05$ and $p=0.08$). It seems that bulimic patients have few emotional and motivational resources, a lower level of future planning and a less adequate management of hostility control.

PO2.202.
EVOLUTION FROM OBSESSIVE-COMPULSIVE DISORDER TO ANOREXIA NERVOSA IN A MALE PATIENT

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We report the case of a 21 year old man, single. His mother is epileptic and had suffered from anxiety and depression episodes that needed treatment. His father has an obsessive personality disorder and dysthymia. His brother has a phobic personality. The patient developed at the age of 8 a somatization disorder, at the age of 9 a depressive disorder, at the age of 10 an obsessive-compulsive disorder, at the age of 17 a restrictive anorexia and finally at the age of 20 a reverse anorexia. From the beginning there were evident anxious and depressive symptoms. We suggest that some cases of male reverse anorexia and restrictive anorexia may be secondary to an affective disorder that determines problems with self-concept and subsequently with self-image. Treatment in these cases should be focused on the affective disorder.

PO2.203.
COMORBIDITY IN EATING DISORDERS

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This study was conducted at the Eating Disorders Center of the Department of Psychiatry of the University of Sassari. 80 patients affected by eating disorders according to the criteria of the DSM-IV-TR were evaluated. The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) was used, as well as several scales for the assessment of subclinical mood and personality disorders. The prevalence of comorbid conditions, and their impact on therapeutic choices and course and prognosis of the condition, are described.

PO2.204.
PREVALENCE OF ATTENTION-DEFICIT/ HYPERACTIVITY DISORDER IN SCHOOLBOYS IN MASHHAD, IRAN

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We assessed the prevalence of attention-deficit/hyperactivity disorder (ADHD) in Mashhad, the second biggest city in Iran, with more than two millions population. We listed all the schools in the city and chose 12 schools (24 classes, 714 students) by stratified cluster sampling. After that, 72 children were selected randomly for a preliminary study. Their parents and teachers filled the 10 items Conners' questionnaire for ADHD separately and a clinical interview based on DSM-IV criteria was also performed. Then data were analyzed using the cut-off line of 23 for total scores of parents and teachers. Then parents and teachers of selected 714 students of 24 classes filled the questionnaires. Students with the total scores higher than 23 were selected for interview according to DSM-IV criteria, from which 102 students were diagnosed as having ADHD. Students with the total scores lower than 23 who were suspect for ADHD according to teachers' reports were also interviewed and 7 students were diagnosed as having ADHD (false negative). 109 students out of 714 schoolboys were thus diagnosed as having ADHD (15.27%). The prevalence rates for subgroups were: attention deficit 4.62%; hyperactive impulsive 5.32%; combined type 5.32%. The sensitivity of Conners' questionnaire for the cut-off line of 23 was 93.6% and its specificity was 73.5%.

PO2.205.
THE INFLUENCE OF SYMPTOMS OF HYPERACTIVITY AND EMOTIONAL PROBLEMS ON INATTENTION SYMPTOMS

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The study aimed to investigate how much symptoms of hyperactivity and emotional problems in children can explain symptoms of inattention. We expect to find that boys' symptoms of hyperactivity will explain more of their inattention problems compared to girls' symptoms of hyperactivity. Further, we hypothesize that this gender difference will be less when it comes to the emotional symptoms and how much they influence the inattention problems. A parent and teacher questionnaire including DSM-IV defined attention-deficit/hyperactivity disorder (ADHD) symptoms and the Strengths and Difficulties Questionnaire (SDQ) were sent to 9430 7 to 9 year old Norwegian children. Reports from 6641 parents on the Inattention subscale were obtained from the sample. Simple and multiple linear regression analyses were computed to investigate how much of the variance in the Inattention variable can be explained by the hyperactivity and emotional symptoms. The hyperactivity symptoms alone can explain 44.8% of the variance in the boys' inattention symptoms and 36.2% in the girls' inattention symptoms. The emotional symptoms can explain 19.3% of the variance when it comes to the boys' inattention problems and 12.1% of the girls' symptoms of inattention. The hyperactivity and emotional symptoms together explain 49.3% of the boys' inattention symptoms, and 39.2% of the girls' inattention symptoms. In conclusion, in the parent reports both the symptoms of hyperactivity and emotional problems explain more of the boys' inattention problems than the girls' inattention problems, and this gender difference becomes larger when we consider the symptoms of hyperactivity and emotional problems together.

PO2.206.
ASSESSMENT OF HEALTH STATE UTILITIES FOR ATTENTION-DEFICIT/HYPERACTIVITY DISORDER IN CHILDREN USING PARENT-BASED STANDARD GAMBLE SCORES

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The purpose of this research was to use standard gamble (SG) utility valuation methodology to assess attention-deficit/hyperactivity disorder (ADHD) health states in a sample of children diagnosed with ADHD. The study was conducted in August 2003 in London, England. Parents of children diagnosed with ADHD completed the feeling thermometer (range 0-100) and SG utility interviews, in which they rated their child's current health and 14 hypothetical health states (e.g., untreated ADHD, short- and long-acting stimulant treatment, and atomoxetine treatment). Participants were 83 parents of children diagnosed with ADHD. Raw and adjusted SG ratings are presented. The mean parent raw and adjusted SG rating of their child's current health state was 0.72 and 0.91, respectively. Raw and adjusted SG ratings of hypothetical health states ranged from 0.63-0.90 and 0.88-0.96, respectively. Parents' responses to the hypothetical health states using the feeling thermometer were lower overall (26-87) when compared to the SG scores, with parents rating their own child's current health state at 57. Standard gamble ratings scores can be obtained for children who have been diagnosed with ADHD

by using their parents as proxies. Moreover, parents are able to distinguish and evaluate different hypothetical ADHD health states by assigning unique values to the scenarios presented to them.

PO2.207.
GENDER DIFFERENCES IN RESPONSE AND OCCURRENCE OF SIDE EFFECTS WITH PSYCHOSTIMULANT TREATMENT OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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This study examines gender differences in response and occurrence of side effects with psychostimulant treatment of attention-deficit/hyperactivity disorder (ADHD) in a population-based birth cohort. Subjects included children from the 1976-1982 Rochester, MN birth cohort (n=5718; males=2956, females=2762). We reviewed medical and school records of each subject, employing research criteria to identify ADHD incident cases (n=379; boys=284, girls=95). Data regarding episodes of psychostimulant treatment, including dose, dates, response, and occurrence of side effects were collected. There were 1069 episodes of psychostimulant treatment (867 for boys, 202 for girls), among 283 treated subjects with ADHD. The proportion of episodes with a favorable response was 73.1% and did not differ by gender (74.5% for boys vs. 66.8% for girls). Overall, 22.3% of patients experienced at least one side effect, with no difference between boys (23.6%) and girls (17.5%). In conclusion, the likelihood of a favorable response and occurrence of side effects with psychostimulant treatment of ADHD did not differ by gender. These results provide population-based evidence reinforcing the importance and benefit of medical treatment of ADHD for both boys and girls.

PO2.208.
THE IMPACT OF PSYCHOSTIMULANT TREATMENT ON SUBSTANCE ABUSE AMONG ATTENTION-DEFICIT/HYPERACTIVITY DISORDER CASES WITH CONDUCT DISORDER

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This study aims to report the impact of treatment on substance abuse in population-based attention-deficit/hyperactivity disorder (ADHD) cases with conduct disorder through long-term follow-up. ADHD cases (n=379) from 1976-1982 population-based birth cohort (n=5,718) were retrospectively followed from birth until last follow-up. Medical and school records were reviewed for documented substance abuse, conduct disorder, and psychostimulant treatment. Conduct disorder diagnosis was documented in the records and verified by expert review. Type of psychostimulant, dosage, start/stop dates were collected on treated ADHD cases (n=283). Among 379 ADHD cases, 32 (29 boys; 3 girls) had conduct disorder. There was a tendency for treatment to be protective. Among boys with ADHD and conduct disorder, 54% treated had substance abuse compared to 100% not treated (OR=0.11, 95% CI=0.01, 2.1). There was a lack of statistical power to compare abuse status between treated (n=2) and not treated (n=1) ADHD girls with conduct disorder. This large, longitudinal, population-based study demonstrates that treatment is associated with decrease in substance abuse among boys with ADHD and conduct disorder. While these results cannot demonstrate cause and effect, they suggest the potential for effectiveness of treatment.

PO2.209.
EFFICACY OF ATOMOXETINE IN PLACEBO-CONTROLLED STUDIES IN CHILDREN, ADOLESCENTS, AND ADULTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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Atomoxetine is a highly specific inhibitor of the norepinephrine transporter that has been developed as a nonstimulant treatment of attention-deficit/hyperactivity disorder (ADHD). Eight large, acute, randomized, double-blind, placebo-controlled studies (4 in children, 2 in children and adolescents, and 2 in adults) have been conducted involving atomoxetine in the treatment of ADHD. Three trials in children were conducted with once-daily dosing (6–8 weeks), while the other 5 studies employed twice-daily dosing, all on a weight-adjusted basis (8–9 weeks). Adults were dosed twice daily over 10 weeks with dose escalation within a fixed range. Protocol-specified primary outcome measures in 5 of the pediatric studies were parent-reported assessments corresponding to DSM-IV symptom criteria, and 1 involved teacher-reported assessments. Adult studies were self-reported. In all studies, atomoxetine was superior to placebo in reduction of mean symptom ratings for the primary outcome measure. The effect size for once-daily treatment was similar to that of twice-daily treatment. No serious safety concerns were observed and tolerability was good, as evidenced by discontinuation rates of less than 5% for adverse events in the pediatric studies. Atomoxetine appears to be safe and efficacious for the treatment of ADHD in children, adolescents, and adults.

PO2.210.
LONG-TERM SAFETY OF ATOMOXETINE IN CHILDREN AND ADOLESCENTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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Atomoxetine (ATMX) is a non-stimulant, noradrenergic reuptake inhibitor that has been approved in the United States for treatment of attention-deficit/hyperactivity disorder. This analysis examined the tolerability and safety of ATMX during treatment lasting up to at least 2 years. The long-term safety of ATMX was assessed using data from all clinical trials to date: 15 in children and adolescents, and 3 in adults. A total of 3262 children and adolescents and 471 adults have been exposed to ATMX in these studies, with over 1200 patients treated for at least 1 year and over 400 for at least 2 years. Discontinuations due to adverse events (AEs) were uncommon (4.1%). AEs more commonly associated with ATMX (gastrointestinal events, decreased appetite, somnolence) were predictable from pharmacology, occurred more frequently during initial treatment, and tended to resolve during ongoing treatment. Blood pressure during long-term (≥2 years) ATMX

treatment was stable. Controlling for age-appropriate increases, changes from baseline (end of acute treatment) were: systolic, +2.9 mmHg; diastolic, +0.3 mmHg. ATMX did not significantly affect QT interval. The initiation of treatment was associated with a modest decrease in growth velocity that normalized over time. ATMX was well tolerated during long-term use, with no evidence of unexpected risks or serious safety concerns.

PO2.211.
A REVIEW OF THE ABUSE LIABILITY OF ATOMOXETINE, A NON-STIMULANT PHARMACOTHERAPY FOR ADHD

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Atomoxetine was recently approved in the US as a treatment for attention-deficit/hyperactivity disorder (ADHD). Psychostimulants have been the standard pharmacotherapies for the treatment of ADHD, but are associated with abuse potential. Receptor binding, preclinical behavioral, and human laboratory studies of the abuse liability of atomoxetine have been completed and are summarized. Binding affinities of atomoxetine and its metabolites were determined for monoamine transporters and other neurotransmitter-related receptors, ion channels, and transporter binding sites. The potential stimulant effects of atomoxetine were evaluated preclinically in a mouse locomotor activity study. Drug discrimination studies in animals were reviewed, and self-administration studies using monkeys trained to discriminate cocaine or methamphetamine or self-administer cocaine were conducted. Additionally, a human laboratory study was conducted to examine the subjective, physiological, and psychomotor effects of atomoxetine, methylphenidate, and placebo. Atomoxetine is a potent inhibitor of the presynaptic norepinephrine transporter with minimal affinity for dopamine transporters or actions at GABA-A receptors. It did not stimulate locomotor activity in mice. In drug discrimination studies, it produced a profile similar to that of drugs without abuse liability. Atomoxetine, like desipramine and in contrast to methylphenidate and amphetamine, did not maintain self-administration in monkeys and was not preferred over food delivery up to doses that decreased response rates, consistent with limited reinforcing strength. Results from the human laboratory study suggested that atomoxetine was not perceived as pleasurable and did not have a significant potential for abuse. Data from receptor binding, preclinical behavioral, and human laboratory studies suggest that atomoxetine does not have abuse liability.

PO2.212.
EFFICACY OF TWICE-DAILY RITALIN AND ONCE-DAILY EQUASYM XL IN CHILDREN WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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The study aimed to compare the efficacy of Equasym XL (EXL), a once-daily formulation of d,l-methylphenidate (MPH), with Ritalin given twice-daily in children with attention-deficit/hyperactivity disorder (ADHD) and to compare the safety and tolerability of these formulations with placebo. 318 children aged 6 to 12 years on clinically effective, stable doses of twice daily Ritalin or equivalent were randomized into a double-blind, three-arm, parallel-group, multi-center study and received three weeks of either EXL (20, 40 or 60 mg once daily) or Ritalin (10, 20 or 30 mg twice daily) comparable to their pre-study MPH dosage or placebo. Patients attended a study site at the end of each treatment week. The primary outcome measure was the difference in the inattention/overactivity component of the teacher's IOWA Conners' Rating Scale on day 21. Safety was monitored by adverse events, laboratory parameters, vital signs, weight, physical exam and Side Effect Rating Scale. The lower 97.5% CI bound of the difference between MPH groups was greater than -1.5 at all scheduled visits, demonstrating that EXL treatment was non-inferior to Ritalin treatment. In addition, analysis of covariance indicated that both MPH treatment groups were statistically superior to placebo at all visits ($p<0.001$). All treatments were well tolerated, and the adverse event profiles for the active treatments were similar and consistent with known side effects of MPH.

PO2.213.
ZIPRASIDONE IN PEDIATRIC PATIENTS: EFFICACY AND TOLERABILITY

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The study aimed to determine ziprasidone's efficacy and tolerability in pediatric patients. Outpatient records for children <18 years started on ziprasidone were reviewed, inter alia, for axis I diagnoses, concomitant psychotropics, clinical course, treatment duration, and prospectively entered Clinical Global Impressions - Severity (CGI-S), Improvement (CGI-I), and Adverse Effects (CGI-AE) scores. Response was defined as CGI-I of 1 (much) or 2 (very much improved) at last visit and no AE requiring discontinuation. Efficacy data were available for 36 patients (mean age 13±3 years, treatment duration 8±7 months). Most common diagnoses were bipolar disorder (68.6%), attention-deficit/hyperactivity disorder (48.6%), depression and oppositional defiant/conduct disorder (25.7% each). Most common concomitant psychotropics were anticonvulsants, mood stabilizers, lithium, and antidepressants. Overall median CGI-I at endpoint was 2.5 (range 1-6), with 50% much/very much improved and 11% minimally/much worse. Responder rates were 44% (none worsening) in antipsychotic-naïve patients (n=9); 61% (17% worsening) in patients switched from another atypical for weight gain (n=18); and 33% (11% worsening) in those switched for nonresponse (n=9). There was no significant difference for age-adjusted Z-score and percentile for weight at start and endpoint ($p=0.342$), or between mean QTc at start and endpoint ($p=0.537$). No patient had QTc >440 msec. CGI-AE scores were none to slight in 91.4% of patients. In summary, ziprasidone showed efficacy and excellent tolerability in pediatric patients requiring antipsychotic therapy, especially those with inadequate response to or weight gain from another atypical agent.

PO2.214.
GROUP THERAPY WITH OUTDOOR ELEMENTS FOR ADOLESCENTS WITH SOCIAL DEFICITS

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Seven adolescents (age range 12-16 years) with a history of clinically relevant internalising disorders participated in a time-limited therapeutic project. The main instruments were 10 group therapy sessions and two weekends with outdoor therapy for the adolescent study members and five group sessions for their parents. At two times a diagnostic interview according to DSM-IV criteria was done and several items concerning to the sociability of the adolescents (e.g. number of good friends, frequency of meeting with peers, number of admissions to psychiatric services and number of days missing school) were assessed with one parent (father or mother) and the adolescent separately. A baseline assessment was made before starting therapy and the second evaluation was made one year later, i.e. 6 months after the end of the therapy group. At the first interview the seven adolescents had a total number of eighteen diagnoses according to DSM-IV. At the second assessment point the number of diagnoses diminished to two. From the social parameters only the number of days missing the school diminished significantly according to the Wilkoxon rank-test. Our setting of a time-limited group therapy with outdoor elements and the accompanying parent group was an effective treatment for adolescents with internalising disorders. This approach should be evaluated in further studies.

PO2.215.
CHILDREN'S PSYCHOLOGICAL RESPONSE TO PARENTAL COMMUNITY VIOLENCE VICTIMIZATION IN THE UNITED STATES

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This study examined gender and age differences in children's psychological response to parental victimization. Thirty children, 6 through 12 years of age, whose parents had been a victim of community violence (i.e., gunshot or stabbing) and a control group of 30 children matched on variables of race, age, gender, and neighborhood served as the sample for this study. Parents completed a demographic sheet and the Child Behavior Checklist (CBCL). Data was collected within 6 weeks of parental victimization. Analyses found children in the experimental group were experiencing symptoms in the borderline clinical range, while children in the comparison group fell below this range. In regard to gender and age specific differences, no significant difference in male and female youth's internalizing and externalizing behavior at age 6-8 in either the control or experimental groups was found. However, beginning at age nine there was a significant difference in behavior. Specifically, in the experimental group, males externalized more than females and females internalized more than males. In the control group, there was no significant difference in the internalizing and externalizing behavior of the male and female youth. Thus, the perceived trauma response may vary as a function of the child's gender and developmental level or age. These findings suggest that gender specific response related to trauma exposure may begin as early as age 9. Such knowledge has implications for practice as gender specific assessment and intervention approaches must be utilized at younger ages then previously presumed.

PO2.216.
ADULT ATTENTION-DEFICIT/HYPERACTIVITY DISORDER AND BORDERLINE PERSONALITY DISORDER

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While attention-deficit/hyperactivity disorder (ADHD) has always been considered as a childhood disorder, the existence of adult ADHD has been largely validated in many recent studies. The adult variant of the disorder seems to be characterized by less hyperactivity and relatively more inattention, presumably related to executive dysfunctions. Our hypothesis is that, beyond the well-known overlap with antisocial personality disorder and substance abuse, ADHD may evolve in borderline personality disorder (BPD). The aim of the present study was thus to detect, in a sample of borderline patients selected for a neuropsychological assessment of executive functions, childhood antecedents of ADHD. 70 subjects (mean age 37.25±4.73 years) with a BPD diagnosis according to DSM-IV criteria underwent a neuropsychological assessment involving the Wisconsin Card Sorting Test, the Stroop Colour Word and the Standard Progressive Matrices to assess executive functions. An accurate anamnestic psychiatric interview with both patients and relatives was conducted by an expert psychiatrist to collect antecedents of ADHD in childhood and psychiatric comorbidity. The results suggest that a subgroup of BPD subjects characterized by impairment in executive functions and more severe symptomatology are positive to anamnestic screening for ADHD in childhood. The symptomatology of adult ADHD may thus overlap with "dramatic" personality disorders characterized by impulsivity, affective instability and executive dysfunctioning, such as BPD. The detection of executive dysfunctions in BPD may have important implications for the treatment of personality disordered subjects.

PO2.217.
ADULTS' PERCEPTIONS OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER AND POSSIBLE EFFECTS ON PREVALENCE RATES IN BOYS AND GIRLS

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Within the domain of developmental psychopathology, increasing interest has emerged regarding parental perceptions about childhood disorders. This interest stems from the assumption that parental interpretations of and reactions to children's abnormal behaviour may mediate the outcome of this behaviour and influence treatment effectiveness. Within this framework, parents' and teachers' causal attributions about attention-deficit/hyperactivity disorder (ADHD) have been particularly studied. Nevertheless, the child's sex has rarely been taken into account and causal attributions were the only kind of cognitions included in these studies. This paper presents a theoretical model that encompasses several cognitions regarding ADHD, takes into account the child's sex and links these factors with referral attitudes, socialisation practices and sex differences in prevalence rates of ADHD. This integrative model consists of three stages. At the first stage, factors that might influence parental perceptions about ADHD in boys and girls are examined. At the second stage, possible interactions of these perceptions with differential parenting practices towards boys and girls are presented. At the third stage, the mediating role of differential parenting practices towards boys and girls for the

sex differences in prevalence rates of ADHD is explained. Preliminary research findings regarding the first stage of this model are reported. The aim of this model is to serve as a theoretical basis for future research regarding the role of adult cognitions in the development of childhood psychopathology and of sex differences in the prevalence rates of several childhood disorders.

PO2.218.
CONDUCT DISORDER: A REVIEW OF EVIDENCE-BASED TREATMENTS

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Conduct disorder is one of the most frequent reasons for referral of children and adolescents to psychiatric and mental health services. With a reported prevalence of 4% to 7% and a poor long-term prognosis, it is one of the most expensive disorders in terms of suffering and dysfunction of the person and cost to society. This paper will review the current literature, reporting that there is now a good evidence for the effectiveness of parent management training, multisystemic therapy, and cognitive problem-solving skills training. Limitations of well-investigated psychosocial treatments will also be discussed. Lastly, treatments and interventions that have not demonstrated effectiveness will be reviewed. The limited role of psychopharmacological treatments will also be examined.

PO2.219.
NEW APPROACH TO TREATMENT OF CHILDREN WITH ATTENTION DEFICIT DISORDER AND HYPERACTIVITY

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Attention deficit disorder and hyperactivity is a widespread disease which is challenging various specialists: pediatricians, psychiatrists, neuropathologists, clinical psychologists. We developed a new approach to the treatment of this condition based on the psychotherapeutic correction of the specific features of processing of sound, visual and kinetic stimuli observed in a sample of 50 children aged from 7 to 12 years, mostly male. The efficacy of the method is being tested by a medico-psycho-pedagogical supervision.

PO2.220.
FLUVOXAMINE IN CHILDREN AND ADOLESCENTS WITH AUTISTIC SYMPTOMS, MENTAL RETARDATION AND SELF-INJURIOUS BEHAVIOR

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We explored the efficacy and safety of fluvoxamine in children and adolescents with self-injurious behavior (SIB). Fourteen children and adolescents, 9 boys and 5 girls, with mental retardation and SIB, were treated with 200-300 mg of fluvoxamine daily for a period of 2 months. Ten cases fulfilled DSM-IV criteria for autism and four for atypical autism. Six cases exhibited self-restraint behavior. The evaluation was carried out weekly. Very good improvement occurred in 4 cases, good in 5 cases, mild in 2 and no improvement in 3 cases. The improvement of SIB was accompanied by a general improvement of behavior. No secondary or adverse reactions occurred. The best results were obtained in cases with self-restraint behavior: there were 4 with very good and one with good improvement. If risperidone is associated, the quality of improvement increases. This study is an open trial of a small sample. This fact limits the significance of our observations. They allow us, however, to suggest that: fluvoxamine can be used without risk and with good results for improvement of SIB, a disorder that has had no satisfactory therapeutic solution so far; the most significant improvement can be obtained in cases with self-restraint behavior, probably because they have a common mechanism with obsessive-compulsive disorder; the clinical response is not present in all cases and not in the same degree; efficacy, if any, begins in the second week, and increases progressively during the second till the fourth week of treatment.

PO2.221.
REGRESSION IN AUTISTIC DISORDER

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The age at onset of autistic symptoms has been discussed in the literature as a possible marker for a special subgroup. The purpose of this study is to analyse how often an early regression in language, sociability and play is reported in a clinical sample and how it is related to other abnormalities found in these children. The study included 63 children referred to a child psychiatry department between January 1998 and September 2003 and diagnosed with autistic disorder by DSM-IV and Autism Diagnostic Interview-Revised (ADI-R) criteria. These 63 children included 48 boys and 15 girls. Their ages at the time of the first visit ranged from 24 months to 15 years (mean 8 years). 8 patients (12%) had a history of regression and 21 patients (33%) had a history of epilepsy. Children with regressive symptoms had more frequently mental retardation and no language. They did not present more epileptic seizures or epileptiform EEG. Further studies are needed to clarify the pathophysiologic basis of autistic regression in order to devise more effective therapies.

PO2.222.
A PSYCHOMOTOR APPROACH TO SEVERE AUTISM: REPORT ON THREE COMPLETED CASES

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This work represents the follow-up of the treatment of five cases of severe autism associated with severe neurological and cognitive disorders. Three patients continued the rehabilitation programme for five years. One patient followed a control cycle for a few months and one patient did not continue the treatment. The therapeutic protocol included individual sessions which were carried out once or twice a week in a special rehabilitation swimming pool. The treatment included a psychotherapeutic supervision and was divided in three subsequent stages: search for reflex movement reactions associated to arousal or surprise; search for a simple relationship supported by pleasant and unpleasant stimuli; search for intentionality and imitative ability. It was possible to observe that the three patients who continued the treatment showed significant improvements mostly in the behavioural area.

PO2.223.
AUTISM AND MENTAL RETARDATION: THE USEFULNESS OF PSYCHODIAGNOSTIC EVALUATION

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When autism is part of a clinical picture of severe mental retardation, the phenotypic heterogeneity of the disorder is even more marked, leading to diagnostic assessments and therapeutic and rehabilitative interventions which are not always correct. In order to implement a management which is adequate to the characteristics of each individual, it is necessary to use a psychodiagnostic protocol including standardized instruments. We studied 13 adult subjects with a clinical diagnosis of autism and severe mental retardation. 11 were males and two females; the age range was between 18 and 50 years (mean 30.69). All subjects were assessed using a psychodiagnostic protocol including the following scales: Brunet-Lézine or Leiter-R, Vineland, Messier, Diagnostic Assessment for the Severely Handicapped-II (DASH-II) and Adolescent and Adult Psychoeducational Profile (AAPEP). The diagnosis of autism was confirmed in 10 cases. In two cases autistic traits were found. In 7 cases there was an associated mental disorder (mood or anxiety disorder, motor stereotypies) and in three cases a problem behaviour. Psychodiagnostic evaluation allows to identify mental disorders associated with autism and mental retardation and to implement a differential diagnosis between the latter and problem behaviours. Moreover, it allows to assess individual characteristics, thus leading to the implementation of personalized therapeutic and rehabilitative programs.

PO2.224.
RESIDENTIAL TREATMENT FOR AUTISTIC PATIENTS IN ADULTHOOD: PRELIMINARY RESULTS FROM AN ITALIAN FARM-COMMUNITY

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Residential programs for individuals with developmental disabilities have been in existence for almost two centuries, but peculiar programs for autism are relatively recent. As a result, the first residential treatment programs designed specifically for adults with autism were developed in the 1970s. These community-based treatment programs for individuals with autism have been developed in urban, suburban, and rural settings. Most programs emphasize special education and behavioural techniques to optimise the residents' development of new skills and their ability to function independently in the community. The programs may vary in the use of specific teaching strategies, the vocational curriculum, family involvement, size and staff training procedures. The research on the effectiveness of residential treatment models for individuals with autism is limited. In 1975, following the experience of Sommerset Court in England, we implemented a new residential model for autistic patients, the farm-community, with a program of activities which could be encompassed by a farming life-style in a rural environment. In 2002, joining with the Autism Laboratory of the University of Pavia, we started the first Italian farm-community. This program attempts to address the needs of autistic people for growth in every area of life, using the rural, extended family-community as the model. Everything is done by residents with the staff, and these activities constitute the program and the means whereby skills for daily living are developed. The preliminary results of a 12-month follow-up are presented.

PO2.225.
PSYCHOSOCIAL AND TEMPERAMENTAL FACTORS ASSOCIATED WITH SCHOOL REFUSAL. A STUDY FROM A DEVELOPING COUNTRY

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School represents an entirely new world for the young child where he is suddenly expected to acquire complex activities according to specific rules. Most children attend school voluntarily. Some children find this experience very distressing resulting in prolonged absences from school. Various factors are implicated in school refusal, such as characteristics of the child, family and school. This study attempts to look into these factors in an urban setting in a developing country. All consecutive children registered from July to December 2002 at the Child Guidance Clinic at the Institute of Child Health, Madras Medical College and Research Institute, presenting with the chief complaint of school refusal, were the cases. Controls were age, sex and socioeconomic status matched children attending school regularly. Malhotra's Temperament Assessment Schedule to assess temperament and Parent Interview Schedule to assess psychosocial factors and a semi-structured interview schedule to assess sociodemographic factors were administered. Statistical analysis was done using SPSS-10. Mean age of the sample was 10.3 years, with male/female ratio being 2:1. Of the nine temperamental dimensions, cases and controls differed significantly on the dimension of intensity. The cases and controls differed significantly on many of the psychosocial factors like chronic interpersonal stress related to school.

PO2.226.
SCHOOL REFUSAL AND AGGRESSIVE BEHAVIOUR

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76 aggressive pupils of primary school who refused school underwent a multidisciplinary examination. The work was conducted by clinical, psychological and neurophysiologic methods. Special attention was paid to personal and social factors. An organic cerebral pathology was found in 64.5% of cases, social and pedagogical delay with psychic deprivation in 53.9%, personal peculiarities of character in 44.7%, somatic weakness and school difficulties in 27.6%. As a rule, these factors were combined. The first negative evaluation of the child by a teacher was important for the appearance of crisis reactions. 37.8% of pupils lived in a rejecting atmosphere; an indifferent attitude by teachers was observed in 26.6% of cases; 35.6% of children had been abused.

PO2.227.
SUICIDAL ATTEMPTS IN A PEDIATRIC POPULATION IN CONCEPCION, CHILE

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We describe the biodemographic characteristics of all the children that were admitted for a suicidal attempt to the Pediatric Unit of Concepcion General Hospital between October 1995 and September 2002, and the characteristics of their attempts. During this period, 103 children were admitted; their mean age was 12.9 years (range 6-15), 85.4% were female, 42.7% lived with both parents, 54.4% reported some kind of domestic violence, and 58.3% had at least a relative with a psychiatric disorder. Most of the suicide attempts took place in the chil-

dren's home (76.7%). They were in October (beginning of Spring) in 13% and in December (end of the school year) in 14% of the cases. Most of them were without previous planning (55.1%), and after a precipitant situation (85.5%). Medicament overdose was the most commonly used method and intensive care unit was required only in 17.5% of the cases. The study of children who attempt suicide is of the outmost importance in order to design early intervention and prevention programs.

PO2.228.
PSYCHODERMATOLOGY IN CHILDREN: A STUDY AT PENDELIS HOSPITAL IN GREECE

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Previous research has shown that there is a close relationship between some dermatological symptoms and psychological problems. Personality factors (such as anxiety, anger, depressive mood) and stressful life events that occur in children's life (parent's divorce, death, illness, etc.) can cause psychosomatic symptoms and especially psychodermatological problems such as neurodermatitis, trichotillomania, onychomania, alopecia areata, etc. The aim of this study is to examine the validiy of this hypothesis. Psychological factors were evaluated by personality and projective tests such as Achenbach for parents, Beck for children, patte-noire and family drawing tests. Stressful life events were evaluated during the interview with the parents and the child and through a specific questionnaire designed for this purpose. The study involves 30 children whose psychological profiles are presented. We found that half of the children present personality factors such as anxiety, depression and aggressiveness. We also found that almost all the children had experienced a very stressful life event before the emergence of the dermatological symptom.

PO2.229.
ZIPRASIDONE'S "BRIGHTENING" EFFECT IN MENTAL RETARDATION

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The study aimed to evaluate ziprasidone's effects on mood and behavior in mentally retarded inpatients with histories of assault, self-injury, or property destruction. This retrospective chart review comprised 82 mentally retarded adults given ziprasidone because of maladaptive behaviors or significant metabolic disturbances (≥7% weight gain, increased lipid or glucose levels) associated with other atypical antipsychotics. The age range was 17–68 years. 48 (58.5%) patients had severe-to-profound deficits, and 33 (40.2%) had concomitant seizure disorders. Duration of ziprasidone therapy was 1–32 months (mean 18.6 months); total daily dosing was 20–280 mg (mean 104.6 mg). Besides improving maladaptive and compulsive behaviors, as well as metabolic parameters, ziprasidone induced a "brightening" of mood and affect in 29 (35.4%) patients. Brightening was expressed as greater social engagement, expressiveness, and friendly demeanor. Some patients (n=14) whose behaviors improved experienced agitation, which generally responded to dosage increases or beta-blockade. Ziprasidone safely controls maladaptive behaviors in mentally retarded adults and, importantly, improves mood and social engagement. "Brightening" may reflect improvements in primary presenting symptoms, an effect on prosocial behaviors, or a mild antidepressant effect from serotonin and norepinephrine reuptake inhibition.

PO2.230.
NON-PSYCHOTIC FORMS OF RESIDUAL-ORGANIC PSYCHOSYNDROME IN CHILDREN

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In the present research, we attempt to identify neuropsychological syndromes in children with residual encephalopathy. 80 children aged from 6 to 12 years (57 males and 23 females) underwent a psychopathological, neurophysiological, neurological and neuropsychological evaluation. We identified an asthenic-hyperdynamic variant, with restlessness, unpredictability of affect, motor reactions, maladaptation to social environment. Another group of children, with fatigue, passivity in behavior, inertia in social environment and cognitive and intellectual problems, sometimes with somato-vegetative impairments, was defined as asthenic-hypodynamic variant. The underlying cerebral pathologies are described.

PO2.231.
NEURO-MENTAL PATHOLOGY IN CHILDREN IN THE SOUTH URAL AREA

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The result of a number of accidents (since 1957) in the South Ural area has been the programme well known as East Urals Radioactive Trace (EURT). Now it is possible to estimate the risk of distant manifestation of chronic radioactive effects on the children and adolescents of this region. This work deals with neuro-mental pathology (NMP) among the children in primary schools of the area. Pediatricians, neuropathologists, psychologists, defectologists and psychiatrists took part in this investigation. The results we received show that the spread of NMP among the children's contingent of EURT is 4 times higher than in official reports. We discovered that 66.8% of 132 children had various learning difficulties linked with school problems. In 45% of cases an organic psychosyndrome was identified. A group of cases with moderate brain damage, paroxysms and changes in the electroencephalogram was revealed. These disorders were considered as being on the border with epilepsy. Further multidisciplinary investigations are necessary to clear up the outcome of these states.

PO2.232.
PERSONALITY TRAITS AND CRIMINAL BEHAVIOUR: AN EMPIRICAL STUDY ON 63 JUVENILE OFFENDERS

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The aim of the study is the identification of personality traits which can describe the psychopathologic features of juvenile offenders. The research was conducted in a juvenile penitentiary in Italy. We assessed the recurrence of personality disorders (PD) in a sample of 63 individuals aged between 15 and 20 using the Structured Clinical Interview for the DSM-III-R Axis II (SCID-II). The diagnostic criteria underwent principal component analysis (PCA) in order to identify factors which could better describe the psychopathologic elements of the subjects. From the PCA 3 factors emerged related to borderline personality disorders, 5 to narcissistic personality disorders and 3 to paranoid

personality disorders. The most frequent personality traits which better describe the psychopathologic features of the individuals are: impulsive aggressiveness, lack of empathy, grandiose self-image, antisocial behaviours and suspiciousness. Notably the most recurring factors seem to describe individuals characterized by that pathologic condition defined malign narcissism by Kernberg. These individuals display an antisocial behaviour, ego-syntonic sadism, impulsive aggressiveness and paranoid orientation and nevertheless can keep a sense of loyalty and a realistic view in the relationships. It is desirable that further investigations focus on the individuation of dimensional criteria effective in describing the psychopathology and useful in planning possible rehabilitative and therapeutic interventions for these individuals characterized by a great clinical and diagnostic complexity.

PO2.233.
PSYCHOPATHOLOGICAL FEATURES AND FREQUENCY OF PERSONALITY DISORDERS IN A SAMPLE OF IMPRISONED MINORS

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In Italy, in the last 10 years, an increase in adolescents' antisocial behaviours and a change in the typology of crimes committed by adolescents has been found. The need to evaluate the psychopathological aspects of adolescent criminals derives from that. Our study aims to evaluate the frequency of personality disorders (PD) in imprisoned minors and to detect specific psychopathological elements characterizing the sample. It was conducted on 63 prisoners, with an average age of 18 years, who received an average sentence of 597 days. The psychopathological evaluation was carried out by administering the Structured Clinical Interview for the DSM-III-R Axis II (SCID-II) and the State-Trait Anger Expression Inventory (STAXI). Moreover, data were collected on the typology and the modality of the criminal action, on subject's socio-cultural level and on the sentences. The most frequently diagnosed personality disorders were paranoid (51%), antisocial (46%), borderline (43%) and narcissistic (36.5%). A strong comorbidity was present among the various PD. No significant correlations were found between the specific diagnoses and the score on STAXI scales and the typology of committed crimes. The high frequency found for more serious PD seems to show a role of axis II psychopathology in the genesis of adolescents' criminal behaviours. The lack of correlation between personality diagnoses, typology of crimes and styles of anger management seems to reflect the inefficiency of DSM criteria for PD. This study shows the need for a clinical management of the imprisonment period and the organization of rehabilitative modalities which take into account the psychopathological characteristics of these subjects.

PO2.234.
PSYCHIATRIC CHANGES IN PATIENTS WITH HYPERTHYROIDISM

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The aim of our study was to evaluate the psychiatric status in patients with hyperthyroidism. We examined 126 patients with hyperthyroidism in stable remission by using a semistructured diagnostic interview, the Minnesota Multiphasic Personality Inventory (MMPI) and the Hamilton Scales for Depression (HAMD) and Anxiety (HAMA). The mean T4 levels were 113.12±9.8 nmol/L, the mean TSH levels were 1.99±0.8 mU/L. 86% patients had anxiety, and 28% met DSM-IV-TR criteria for partial or complete panic disorder with or without agoraphobia. The most frequent symptoms were shortness of breath (64%), trembling or shaking (38%), sweating (44%), fear of doing something uncontrolled (24%), excessive guilt (12%), and fatigue or loss of energy (86%). Depression with HAMD score more than 17 was found in 42% of patients. The MMPI showed an elevation on Ha, D, and Pt scales. Psychotic decompensation was present in 6% of patients.

PO2.235.
5-YEAR OUTCOME OF PHYSICIANS WITH SUBSTANCE USE DISORDERS

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Substance use disorders in physicians are a significant problem. To understand whether treatment for addiction works, we reviewed 5-year data on all State of Florida physicians that were identified and referred to the Impaired Practitioners Program for the State of Florida (PRN) by the Board of Medicine in 1995-1996. All were treated for addictions at facilities throughout Florida and the US. Demographic information, drug history, psychiatric evaluation, and outcome measures were gathered by chart review. 5-year outcomes were assessed by facilitator reports, physician/psychiatrist evaluations, Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) attendance, return to work and quantitative result of regular supervised urine testing. The sample consisted of 68 physicians (59 males, 9 females), ages 25-63 (mean 40.2±7.0). 32.4% of the sample had a history of intravenous drug use, 11.8% had used crack and 7.4% had used both. Complete data for 5 years after inpatient treatment was analyzed and successful treatment was defined by negative urine testing, positive facilitator assessments, positive psychiatric assessment, 12-step meeting attendance and full return to work. Coercion and voluntary treatment were equally effective. Even among physicians who used crack, injected drugs, or both, more than 88% had negative drug tests, positive physician assessment and returned to work. Prognosis is not dependent on location of treatment, type of drug treatment, particular drug of abuse or route of administration. Factors such as age of first use, duration of use, age of addiction, pre-addiction level of functioning, psychosocial skills, job coercion, drug monitoring, motivation, mandatory aftercare or co-morbid disease may have greater prognostic significance.

PO2.236.
A PILOT DRUG USE PREVENTION PROGRAM FOR HIGH SCHOOL STUDENTS

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The Counseling Center for Combating Drug Abuse of Ioannina has planned and implemented a pilot drug prevention program called "Black – White, the Book of Life" for high school students. The program was carried out during the school year 2001–2002 and the students came from the third grade of high school of the prefecture of Ioannina. The program was implemented by two specialists from the Counseling Center, who met the students of each class and worked with them in a group setting using cognitive, experiential and behavioural techniques. The meetings were incorporated in the annual

school curriculum and applied to all the students of each class. The main directions of the program were the following: a) the reinforcement of individual and social skills, so that the children would be able to develop a positive self-image, to improve communication and to find the most functional process to cope with problems and difficulties; b) the active students' participation in creative activities with collective mind in order to help them develop positive attitudes in their lives; c) the development of students' responsibility and capability in order to be able to make their own independent and assertive decisions and express personal and collective opinions in the adults' world. The evaluation of the program showed that the vast majority of the students who attended the program considered it to be interesting both with regard to its content and its procedure. The program helped them to develop personal and social skills very helpful in shaping their own attitude regarding drug use.

PO2.237.
A STABLE MEANINGFUL BELIEF IS REQUIRED FOR ADDICTION RECOVERY

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In order for addictive behavior to cease, the individuals' subjective belief must be that addictive behavior will result in negative consequences. For stable recovery, this integrated meaningful mental state must not be changed by other mental inputs or environmental factors. I propose that the recently conceptualized dynamic core model of brain function, hypothesized by Edelman and Tononi, allows an explanation of the addicts' varying perceptions of being-in-the-world. This model suggests that reasons for action are based on beliefs or meaningful relationships similar to Jaspers' phenomenology. In the addict, maladaptive actions are suggested to be a consequence of pathology at the level of the dynamic core, which itself is dependent on structure, development, learning, and past history or memory (sedimentation). It is proposed that a dynamic core defect explains the addicts' apparent intermittent belief that continued addictive behavior or action would not produce negative results. The reason for the volitional dysfunctional action associated with addiction is because of maladaptive value-based lack of access to various memories or beliefs at the level of the dynamic core. Successful addiction treatment and recovery must necessarily address the mental process that results in the lack of formation and access to the beliefs, propositions or meaningful mental states representing the concept that repeated addictive behavior will result in negative consequences. This requires that this dispositional state or belief, that addictive action will result in negative consequences, be continually present, accessible and stable.

PO2.238.
CO-OCCURRENCE OF ANXIETY DISORDERS AND ALCOHOLISM

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This study aimed to investigate the co-morbidity of alcoholism (dependence and abuse) among subjects diagnosed with anxiety disorders. The study was based on the screening for anxiety and depression in a population sample, followed by diagnostic work-up with the computerized version of the Composite International Diagnostic Interview (CIDI). Of 2649 individuals who completed the CIDI, 1234 (47%) were diagnosed with one or more anxiety disorders; 221 with alcohol abuse (F10.1) and 383 with alcohol dependence (F10.2). Of 496 subjects diagnosed with alcoholism, one-third ($p<0.001$) had also major depression (single episode) as comorbid disorder. Sub-classification of anxiety disorders showed that social phobia (23.4%, $p<0.0001$) was the single most frequent anxiety disorder among subjects with alcoholism, while 20.2% had generalized anxiety disorder ($p<0.0001$). Subjects with alcoholism had a mean age of onset of 24.9 years; this was usually preceded by the onset of an anxiety disorder. Co-morbid alcoholism was found in 16% of females with anxiety ($p<0.001$) and 39% of the males ($p<0.0001$). The frequency of alcoholism did not increase with a higher number of anxiety disorders. In conclusion, the presence of anxiety disorders increases significantly the prevalence of alcoholism, which, especially in men, is much higher than expected on the basis of the prevalence studies of alcoholism in the Icelandic population. The prevalence of alcoholism is still higher when there is a co-occurrence of depression and anxiety disorders.

PO2.239.
RETROSPECTIVE SURVEY OF MAGNETIC RESONANCE IMAGING IN ALCOHOL DEPENDENCE

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Alcohol dependence is associated with cerebral damage via both direct and indirect mechanisms, detectable using magnetic resonance imaging (MRI). However, consensus guidelines have not been drawn up for the clinical indications for MRI, nor has the impact of MRI findings on clinical management been assessed. We conducted a retrospective review to draw up clinical guidelines for neuroimaging in alcohol dependence. A retrospective audit was carried out of clinical MRI requests and their radiological findings in patients referred from a specialised addiction outpatient clinic and an 18-bed inpatient unit conducting medically assisted alcohol withdrawal. Following initial review of reported clinical indications and MRI findings, a retrospective criterion-based focussed review of both clinical indications and MRI findings was conducted. Over the period covering 1998-2002, a total of 71 MRI investigations were conducted. Of the total sample (average age 46.9±10.8), the main clinical indication identified was of sustained cognitive impairment (69.4%), comprising 'memory' deficits (43.1% both 'short' and 'long' term) and/or executive deficits (40.2%). The retrospective review indicated substantial under-reporting of cognitive deficits on the MRI request forms (e.g. only 36.4% reported sustained cognitive impairment). MRI findings were 'abnormal' in 74.3%, the most common finding being global cortical atrophy (58.3%). Clinically, diagnosis changed in 66.2% to organic cerebral impairment. However, further studies are required to address the stability of this change in diagnosis with abstinence. Management was affected in 60.6% of cases, largely accounted for by further investigation comprising neuropsychological assessment and occupational therapy, and enhanced follow-up.

PO2.240.
HPA AXIS ACTIVITY AND PHARMACOLOGICAL ANTI-CRAVING TREATMENT IN ALCOHOL ADDICTION

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O'Malley and colleagues recently published data supporting an association between craving for alcohol and the activity of the hypothalamo-

pituitary-adrenocortical (HPA) axis in alcohol-dependent subjects treated with naltrexone. Pharmacotherapy with naltrexone was accompanied by elevated plasma concentrations of cortisol, which correlated negatively with the level of alcohol craving. For discussion of this nexus we would like to add additional data on cortisol plasma levels during placebo-controlled treatment with naltrexone and acamprosate. At baseline, two weeks after onset of withdrawal, plasma cortisol was elevated in the total sample. In the placebo group, cortisol normalized by week 12, as reported earlier by studies on HPA axis activation during early abstinence. However, in patients treated with both naltrexone and combined medication, plasma cortisol remained elevated until termination of treatment. In subjects treated with acamprosate a trend towards elevated cortisol was also detectable. Additionally, baseline concentration of both cortisol and adrenocorticotropin hormone (ACTH) predicted early relapse to renewed drinking. It might be speculated whether the efficacy of pharmacological anti-craving is related - at least in part - to the ability to activate the HPA axis.

PO2.241.
SCREENING OF ALCOHOL CONSUMPTION AND BRIEF INTERVENTION AMONG DRUG USERS IN TREATMENT

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The aims of this research is double: a) screening of alcohol consumption among drug users in treatment measured with AUDIT (Alcohol Use Disorders Identification Test), a standardized questionnaire developed by the World Health Organization; b) evaluation of the effectiveness of brief intervention for hazardous and harmful drinking among drug users with a randomised controlled trial. The screening was carried out in 215 adult outpatients from the drug addiction unit of the Department of Psychiatry, University Hospitals of Geneva. The questionnaire was administered as an interview by different professionals (psychiatrists, nurses, psychologists and social workers) between November 2003 and June 2004. Patients with an AUDIT score of 7 or more were randomised in two groups: a) brief intervention (BI) during the regular program of treatment, applied by professionals trained by a workshop; b) only regular program (C). Monitoring with AUDIT was used to evaluate scores after 3 and 6 months in the two groups. The prevalence of alcohol problems among drug users in treatment is higher (39%). Three months later, the AUDIT score decreased significantly in the BI and C groups, mainly in hazardous drinking.

PO2.242.
GENDER, CULTURE AND PATTERNS OF ALCOHOL USE IN BRAZIL. THE GENACIS STUDY

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This is a preliminary analysis of the Brazilian data of the GENACIS (Gender, Alcohol International Study), a multinational study aimed at comparing patterns of alcohol use/abuse between men and women. Results from the first 525 interview showed that men, younger and single, drink more, while abstinence is more frequent in women (76.4% vs. 40.7%). Heavier drinkers (at least 6 drinks per day, one drink=12 g ethanol), were mostly married/living-together with people who also drank heavily; they found it easier to talk about feelings, and found sexual activities more pleasurable when drinking ($p<0.05$). Stratifying those who drink at least 6 drinks per day by gender, most men were less than 35 years old, drank at meals and work, on weekdays before 5 pm, suffered more consequences, had more help to quit drinking, were smokers; most women felt lonely, had been criticized for drinking, and reported having female friends who influenced them into drinking. Logistic regression analysis for drinking showed that a possible protection factor was not drinking at parties and not having a partner who drinks too much. Men were 8.7 times more at risk of drinking than women.

PO2.243.
HIGH RISK ALCOHOL USE IN BRAZILIAN COLLEGE STUDENTS: 12 MONTH PRELIMINARY DATA FROM A PREVENTION STUDY

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A prevention program, using motivational interviewing and harm reduction approach (Brief Alcohol Screening and Brief Intervention for College Students, BASICS), aimed at reducing quantity and frequency of alcohol use and related problems, began in 2001. Screening for alcohol abuse/problems identified 25.1% students of whom 326 were submitted to BASICS intervention (BI) and 53 to minimal intervention. Several instruments and questionnaires were used to measure drinking frequency, quantity/peak consumption, drinking consequences/problems, alcohol abuse and family alcohol abuse. In the BI group, a significant reduction after 12 months occurred for: alcohol dependence scale score ($p<0.001$); number of week days drinking ($p<0.001$); number of drinks in the week ($p<0.001$); number of drinks in a week ($p=0.048$); peak alcohol use ($p<0.001$). Comparing school grades before and after BI, 53.4% said they had improved ($p=0.001$). After 12 months, comparing BI subjects and controls, peak ingestion was significantly lower in the former ($p<0.001$), although car accidents remained higher than non-high-risk alcohol using population. The main conclusion is that BI is efficient compared to minimal intervention.

PO2.244.
CARBOHYDRATE-DEFICIENT TRANSFERRIN AS A MARKER OF ALCOHOL DEPENDENCE

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Biochemical markers can provide an objective evidence of heavy alcohol drinking. This study investigated the usefulness of carbohydrate-deficient transferrin (CDT), a relatively new marker of alcohol consumption. We consecutively enrolled 81 subjects aged between 28 and 69 years: 44 alcohol-dependent individuals and 37 age-matched social drinkers. Relative values (%) of CDT were determined in serum with turbidimetric immunoassay and compared with conventional markers of alcohol consumption, gamma-glutamyltransferase (GGT) and mean corpuscular volume (MCV). Positive results of %CDT (≥2.6%), GGT (>50 IU/L), and MCV (>98 fL) were observed in 43/44 (97.7%), 35/44 (79.5%), and 24/44 (54.5%) patients, respectively. The areas under the receiver operating characteristic (ROC) curves (95% confidence interval) for %CDT, GGT, and MCV were 0.995 (0.946-1.000), 0.894 (0.805-0.951), and 0.768 (0.661-0.855), respec-

tively. Discrimination between alcohol-dependent individuals and social drinkers, as measured by the areas under the ROC curves, was significantly better for %CDT than for GGT and MCV (p=0.006 and p=0.0001, respectively). Thus, CDT seems to be the most reliable laboratory marker for chronic alcohol consumption, and it may provide a useful contribution to the objective detection of alcohol-dependent individuals.

PO2.245.
FUNCTIONAL POLYMORPHISMS OF THE ALCOHOL-METABOLISM GENES AND ASSOCIATIONS WITH THE RISK OF ALCOHOLISM IN THE KOREAN POPULATION

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Alcoholism is a multifactorial, polygenic disorder involving complex gene-gene and gene-environment interactions. Alcohol metabolism could significantly be influenced by genetic polymorphisms in alcohol-metabolism genes, which are believed to affect drinking behavior and development of alcoholism. In order to identify the association between the polymorphisms of genes encoding alcohol metabolizing enzymes and alcoholism, the sixteen genetic polymorphisms in alcohol dehydrogenase 2 (ADH2), alcohol dehydrogenase 3 (ADH3) and aldehyde dehydrogenase 2 (ALDH2) were studied in 106 male Korean alcoholics and 116 non-alcoholic controls. Five common haplotypes (Freq. >0.05) were constructed by single neuclotide polymorphisms (SNPs) in ADH2 and ADH3, which were on chromosome 4q22, 15.5kb apart each other. By statistical analysis, strong associations were found between ADH2, ADH3 and ALDH3 polymorphisms (SNPs and haplotypes) and alcoholism, as anticipated (p=0.00000007-0.05). Further statistical attempts to analyze the genetic effects of two linked ADH genes were performed. The magnitude of risk of alcoholism and significance of associations were likely decreased along with the distances from ADH2-R48H, which caused amino acid change from arginine to histidine. In conclusion, the genetic association of ADH3 polymorphisms could be suggested as tracking effects of nearby ADH2-R48H. The information derived from this study could be valuable to estimate the risk of alcoholism and facilitate another investigation in other ethnic groups.

PO2.246.
TREATMENT OF INTRAVENOUS BUPRENORPHINE DEPENDENCE: A RANDOMIZED CLINICAL TRIAL

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The study aimed to characterize intravenous buprenorphine-dependent patients with respect to socio-demographic and other background features, and to assess the effect of a 40 mg/day oral dose of methadone in the maintenance treatment of intravenous buprenorphine dependence in comparison with a 4 mg/day sublingual dose of buprenorphine over a 12-week treatment period. As a secondary objective, the results were determined concurrently for subjects treated with a 0.4 mg/day oral dose of clonidine. One hundred and eight intravenous buprenorphine-dependent patients who met the DSM-IV criteria for opioid dependence and were seeking treatment were randomly allocated to three groups, receiving respectively 40 mg oral methadone tablet, or 4 mg sublingual buprenorphine tablet, or 0.4 mg oral clonidine tablet, and were treated in an outpatient clinic in the year 2002. The mean age was 29.4 years (range 19-46). The majority (76.8%) was between 20 and 34 years of age. The educational level of most of them (82.4%) was between 6 and 12 years of study. The majority (86.1%) had a history of opium or heroin dependency before they were introduced to intravenous buprenorphine. The main source of buprenorphine for misusers was street sale (93.5%). The mean duration of buprenorphine dependence was 1.8 years and the mean dose per day was 4.6 ampoules (1 ampoule contains 0.3 mg of buprenorphine in 1 ml). Overall, 55 (50.9%) of the patients completed the 12-week study. Completion rates by groups were 83.3% for the methadone group, 58.3% for the buprenorphine group and 11.1% for the clonidine group (p=0.0001). Retention in the methadone group was significantly better than the buprenorphine group (p=0.020) and the clonidine group (p=0.0001). Retention in the buprenorphine group was significantly better than the clonidine group (p=0.0001). The results support the efficacy and safety of oral methadone and sublingual buprenorphine tablets for injection buprenorphine-dependent patients.

PO2.247.
EFFECTS OF ADDITIONAL DOSES OF BUPRENORPHINE IN OPIOID DEPENDENT SUBJECTS ON BUPRENORPHINE MAINTENANCE

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Buprenorphine maintenance is an effective treatment for opioid dependence and is used in many countries. The subjects maintained on this drug often abuse it. Effects of additional doses of buprenorphine, on and above maintenance dose, on subjective experiences and psychomotor performance were assessed in 19 male subjects who were maintained on buprenorphine 4 mg sublingually daily for at least 1 month. An additional dose of buprenorphine 2 mg sublingually was given at 2 hourly interval up to a maximum of 10 mg. Subjective effects and psychomotor performance were assessed 2 hours after each dose. If a subject became drowsy or was unable to participate in assessments, the experiment was terminated. Instruments used were Digit Symbol Substitution Test, Digit Span, Delayed Recall and Trail Making for psychomotor performance, and Morphine Benzedrine Group Scale, Pentobarbital Chlorpromazine Alcohol Group Scale, Visual Analogue Scale and Modified Single Dose Opiate Questionnaire for subjective effects of the drug. No subject consumed substances other than prescribed medication as confirmed by urine examination. Performance of subjects on Digit Symbol Substitution Test and Trail Making Test improved consistently with each assessment. Digit Span Test and Delayed Recall were not significantly affected. Subjective effects, dysphoria and sleepiness increased and euphoria and drug liking decreased with additional doses of buprenorphine, which was maximum at the highest cumulative dose. Improvement in psychomotor performance stands out in contrast to most of the earlier studies. This improvement in psychomotor function may be the effect of buprenorphine itself, inadequate buprenorphine maintenance dose, learning, or a combination of these.

PO2.248.
INHALANT USE AMONG CHILDREN AND ADOLESCENTS: PSYCHOSOCIAL AND ELECTROPHYSIOLOGICAL CORRELATES

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The number of children and adolescents using inhalants has increased in Georgia in recent years. The aim of this study was to explore the psychosocial and electrophysiological correlates of inhalant use among children and adolescents in Tbilisi. 62 subjects with age from 10 to 15 were studied; among them 44 were inhalant users. The personal and family history, drug use motivations, personality, cognitive characteristics and EEG were investigated. The important contribution of several factors was shown in the development of solvent abuse and dependence: high level of anxiety, extreme economic deprivation and homelessness; antisocial behavior (begging, prostitution, theft); association with inhalant-using peers; parental antisocial behavior, drug and alcohol use. The frequency and duration of inhalant use was highly correlated with cognitive, behavioral, personality and EEG changes.

PO2.249.
TREATMENT OF CIGARETTE SMOKING BY CLONIDINE, NICOTINE GUM AND NALTREXONE

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The study aimed to test the efficacy and safety of clonidine, nicotine gum, and naltrexone, in the treatment of cigarette smoking. It was a randomized trial. We recruited 171 subjects who met DSM-IV criteria for nicotine dependence and smoked 10 cigarettes or more each day. The interventions consisted of twelve weeks of nicotine gum, clonidine or naltrexone. The nicotine gum dose was 2 mg every 1 to 2 hours for the first 6 weeks, 2 mg every 2 to 4 hours for the next 3 weeks, and 2 mg every 4 to 8 hours for the remaining 3 weeks. The clonidine dose was 0.4 mg and the naltrexone dose was 50 mg per day. Continuous abstinent rates were recorded weekly up to 12 weeks from the quit date. The mean age of the nicotine-dependent patients was 37.7±10.1 years (range 17 to 64). The mean duration of smoking was 12.4 years and the mean number of smoked cigarettes per day was 19.9. The abstinence rates by treatment groups were 43.9% for the nicotine gum group, 24.6% for the clonidine group and 7.0% for the naltrexone group (p=0.0001). Abstinence rate in the nicotine gum group was significantly better than in the clonidine group (p=0.03) and the naltrexone group (p=0.0001). Abstinence rate in the clonidine group was significantly better than the naltrexone group (p=0.01). These results support the efficacy and safety of nicotine gum and clonidine for smoking relapse prevention for Iranian nicotine-dependent patients, but call into question the utility of naltrexone treatment for smoking relapse prevention.

PO2.250.
TREATMENT SUCCESS RATE AMONG OPIOID DEPENDENTS IN SHIRAZ, IRAN

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The goal of this study was to assess the characteristics and treatment success rate (outcome) among Iranian opioid addicts. The data were gathered from 437 opioid addicts (using DSM-IV criteria) seeking treatment and referred to the Shiraz Self-Identified Addict Center affiliated to the Fars Welfare Organisation in 1998. Their mean age was 35.6 years, and 72.8% were married. Of these subjects 34.1% listed secondary school, 25.9% primary school, and 23.6% high school as their level of education. Of these addicts 26.1% were unemployed, 24.5% workers and 22.4% drivers. About 49.4% reported opium, 31.8% heroin, 12.4% cooked dross and 6.4% reported other opioids as the substance currently used. Of the 437 addicts, the majority (54%) did not complete detoxification phase, 35% had experienced abstinence at least for 3 months and 11% relapsed before 3 months of abstinence being completed. The relation was statistically significant between outcome and type and dose of used opioid. During the last years, some demographic characteristics of the Iranian addicts have changed. Cultural attitudes toward drug use are quite likely to affect types and amount of use and also outcome of treatment. These findings can be considered when planning preventive and therapeutic programs.

PO2.251.
CONSULTATION PROGRAMS: A STRATEGY OF PRIMARY PREVENTION OF DRUG ABUSE FOCUSING ON FAMILY RELATIONSHIPS

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The Counseling Centre for Combating Drug Abuse of Ioannina is currently applying consultation programs for high school students within the scope of primary prevention programs. The aim of these programs is to help students to cope with their psychosocial problems as they occur. One of the most frequent and important problems for which students express request for help regards family relationships. The students seeking help come not only from families with problems in their structure but in their majority from families which appear to be united. But these "united" families actually have serious problems in communication (negative criticism, blames, lack of praise, double messages), in relationships (difficult and distant relations regarding the father, lack of affection and competition regarding the mother), in aspects of control (strictness, which regards more the girls, inconsistency), as well as problems with alcoholism in parents. The aim of our intervention is to support the child and reinforce his/her skills in order to be able to cope with family problems. We expect that through the personal change some improvement be achieved in the family environment. The evaluation shows that regarding family problems the students who apply to the programs, in their vast majority, are provided considerable help. These students are also receiving important help regarding other psychosocial problems, such as anxiety, difficulties in peer-relationships and academy failure.

PO2.252.
A MODIFICATION OF THE RAPID OPIATE DETOXIFICATION METHOD

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The paper describes a modification of the rapid opiate detoxification. A total of 45 patients, aged 18-45, addicted from one to 10 years, were treated. They were all heroin addicts. Premedication included administering clonidine and anxiolytics, while naltrexone was used to precipitate the abstinence syndrome. Modification consisted in applying tramadol at the appearance of the first signs of abstinence syndrome. Tramadol significantly reduced the severity and duration of the precipitated abstinence syndrome. Nausea, vomiting, restlessness as well as a confused and delirious state were manifest, lasting an average of

four hours. Symptomatic therapy was used to treat these symptoms: anxiolytics (lorazepam, midazolam), nonsteroidal antirheumatics, metoclopramide, dicyclomine, clonidine and phenergane. Subsequently, the patients were practically rid of the symptoms, apart from weakness and slight leg pain. The next dose of naltrexone (second day of detoxification) did not lead to precipitation of the abstinence syndrome. The patients were practically detoxified and ready for discharge. They experienced nearly full amnesia of the detoxification period. The detoxification process was 100 percent successful.

PO2.253.
PSYCHIATRIC COMORBIDITY IN CHILDREN WITH SUBSTANCE ABUSE

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We studied 97 children with various types of substance abuse. The prevalence of attention-deficit/hyperactivity disorder (ADHD) was 12.2% (higher than the usually reported prevalence of 3-9%). ADHD was the third most frequent psychiatric comorbid condition, after conduct disorder and mental retardation. 43% of the children had suffered from emotional deprivation, 18.6 from physical abuse. 15.2% of the children reported they hated their family environment; 49.4% of the children had a negative attitude to their tutor.

PO2.254.
PARALLELS AND DIFFERENCES IN THE TREATMENT OF ALCOHOLISM BETWEEN ITALY AND GERMANY: CLINICAL, SOCIAL AND INTERCULTURAL ASPECTS OF QUALITY ASSURANCE

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Italy is a traditionally family oriented, catholic country with a Mediterranean lifestyle of drinking every day a moderate dose of wine. For alcoholic patients, the latency before getting to treatment is long and when the patient gets into treatment his physical conditions are usually very bad. The working situation deteriorates later. In Germany, it is socially tolerated to drink mainly beer in public situations, even getting drunk. However, manifest addiction is socially not tolerated at all: an addicted patient will lose much quicker his work and family. The latency to get into treatment is shorter, and physical aspects are less dramatic. The consequences of these facts on therapy and development of addiction services are discussed.

PO2.255.
LAY PREFERENCES CONCERNING TREATMENT OF ALCOHOL DEPENDENCE IN SÃO PAULO, BRAZIL

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This study aimed to evaluate community preferences concerning the treatment of alcohol dependence. A household survey was carried out with a representative sample of residents of São Paulo city, aged 18-65 years. A vignette depicting a person suffering from alcohol dependence was presented to 500 respondents. They were given a list of ten sources of help and a list of seventeen intervention options and asked to rate them as helpful or harmful. Next, they were asked to select a first choice of help and the intervention option they considered the most helpful. The sources of help most often rated as helpful were self-help groups (96%), counselor/psychologist (95%) and close family (87%). Medical professionals were considered less often helpful. When asked to select the first choice of help, the public chose self-help groups (31%), close family (29%) and a counselor/psychologist (12%). The interventions most often rated as helpful were counseling (96%), "to keep the mind busy" (96%) and to improve eating habits (94%). Medical treatments like taking medicines and hospitalization were considered more harmful than helpful. When asked to select the intervention considered the most helpful, the public chose counseling (36%), to practice physical exercises (15%) and "to keep the mind busy" (14%). In conclusion, lay support systems and interventions were more often recommended than professional ones to treat alcohol dependence in São Paulo, Brazil.

PO2.256.
THE THERAPEUTIC ROLE OF THE COMMUNITY IN ALCOHOLISM

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The role of community support is considered extremely important for the help of the alcoholic patient in primary, secondary and especially tertiary prevention. We studied 860 persons who came to our hospital in the years 2000-2002 (580 men and 280 women). 25% of the men and 5% of the women had alcohol-related problems. 40% of all patients had good social support (supporting family and non-drinking friends). 70% of patients in the group with good social support and 20% of those in the group with poor social support had a 2-year abstinence after treatment. The need for various interventions for secondary preventions (centres with trained personnel and with liaison with other health services; special groups in the community) and tertiary prevention (interventions in families, support group for families, organizations of patients) of alcoholism is emphasized.

PO2.257.
PREVALENCE OF PSYCHOLOGICAL TRAUMA AND POST-TRAUMATIC STRESS DISORDER IN A METHADONE MAINTENANCE CLINIC

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The association between psychological trauma, post-traumatic stress disorder (PTSD) and substance use disorders (SUD) has been well documented across different community samples and treatment-seeking populations. The presence of this PTSD-SUD comorbidity may hinder treatment outcomes. Different pathways may account for this dual diagnosis. The most plausible one is the self-medication hypothesis. This was a cross-sectional study. A self-report questionnaire was used to measure the prevalence of trauma and PTSD amongst a population of 102 opiate dependent people receiving opiate substitution in a methadone clinic placed in South London. Point prevalence of PTSD was 54.9%. Women with PTSD were seven times more likely to inject than the rest of female subjects. Women appeared to be a particularly vulnerable group for sex-related traumas and higher severity and frequency of PTSD symptoms. This study showed that PTSD is a frequent comorbidity among methadone users. It also evidenced that PTSD is associated with drug taking behaviour. Due to its high frequency, PTSD should be assessed routinely in methadone users. Finally, this study gives some support for the self-medication hypothesis.

PO2.258.
COMORBIDITY OF PSYCHOSIS AND SUBSTANCE MISUSE IN THE IRISH PRISON POPULATION

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The study aimed to estimate the prevalence of comorbid psychotic illness and substance misuse in the Irish prison population. A survey of Irish prisons was conducted in three phases: phase 1 sampled 15% of the sentenced population in 16 centres in the jurisdiction (n=438); phase 2 sampled a cross section of the remand population in 6 centres (n=235); phase 3 (in progress) is an incident survey of remand and sentenced prisoners in Dublin seen within 48 hours of committal (n=408 at time of writing). The Schedule for Affective Disorder and Schizophrenia - Lifetime Version (SADS-L) was used to generate ICD-10 diagnoses of mental disorder. The severity of dependence questionnaire and individual substance use histories were used to quantify substance use disorders. The lifetime prevalence of psychosis was high across the entire sample: phase one 4.5%, phase two 11.1%, phase three 6.4%. For those with a lifetime diagnosis of psychosis (n=72), the rates of comorbid lifetime substance misuse was high (79.2%). Rates of substance misuse were higher in inmates with psychosis in phase 1 (90% vs. 84%) and phase 3 (90% vs. 84%) than those with no history of psychosis. The reverse was true for phase 2 psychotic inmates (77% vs. 82%). High rates of comorbidity raise issues over diagnosis of psychosis in prisons. The lower rate in the remand population may represent a different pathway to psychiatric care for these individuals.

PO2.259.
TOBACCO SMOKING: A PREVALENCE STUDY IN ELDERLY PEOPLE IN THE COMMUNITY

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The study aimed to evaluate the prevalence of smoking in elderly people living in urban areas of Rio Grande do Sul, Brazil. In a cross-sectional design, a representative sample of 6963 subjects, aged 60 years and over, was examined. All subjects were personally interviewed. A questionnaire administered during home visits inquired about current tobacco use and sociodemographic characteristics. The prevalence of tobacco use was 28.9% among men and 13.5% among women. Several variables were strongly related to tobacco use: less educated men, non-white, lower income and divorced or widowed. Non-whites and non-evangelic were 2.1 fold more likely to be a smoker than the other subjects (95% CI 1.2-3.7). In conclusion, the use of tobacco in the studied population is more frequent in men than in women in a proportion of 2:1. The findings presented here indicate the potential of some sociodemographic variables to increase the risk of tobacco use.

PO2.260.
TREATMENT OF HEROIN DEPENDENCE

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We tested the efficacy of naltrexone, methadone and buprenorphine over a treatment period of 12 weeks. Subjects were randomized to receive the three drugs in a comparative study. We recruited 93 heroin-dependent males who met the DSM-IV criteria for heroin dependence and were seeking treatment. Subjects received methadone (31 patients), or buprenorphine (31 patients), or naltrexone (31 patients) in 2001 and 2002. There was no significant difference in mean age in the three groups. The majority (58%) was between 25 and 34 years of age. The educational level of most of them (68.8%) was between 6 and 12 years of study. The mean dose of heroin use per day was 1.9 g, and the mean duration of current heroin use was 2.8 years. Days retained in treatment were measured. Completion rates were 93.5% for the methadone group, 67.7% for the buprenorphine group, and 41.9% for the naltrexone group (p=0.0001). Retention in the 60 mg methadone group was significantly better than in the 6 mg buprenorphine group (p=0.01) and in the 50 mg naltrexone group (p=0.0001). In the buprenorphine group, it was significantly better than in the naltrexone group (p=0.04).

PO2.261.
PLASMA DOPAMINE LEVELS IN HEROIN ADDICTS

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Dopamine (DA) is commonly considered the most important neurotransmitter involved in reward systems, whose role in heroin abuse has been repeatedly reported. The aim of this study was to compare plasma DA levels between heroin addicts and healthy controls. We included 30 male heroin abusers (who reported illicit heroin use for more than 3 years) and 30 male students of the Faculty of Medicine without a history of drug abuse. All subjects were in good health from the physical viewpoint. Plasma DA was determined by high-performance liquid chromatography with electrochemical detection (HPLC-ECD). Plasma DA levels were 110.5±10.4 pg/ml among heroin addicts and 30.2±4.6 pg/ml among controls, a highly significant difference.

PO2.262.
ANTIBODIES TO BRAIN-SPECIFIC S-100 PROTEIN IN PATIENTS WITH ALCOHOLISM TREATED WITH PROPROTEN

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The aim of the investigation was to study the influence of proproten, a preparation containing antibodies to brain-specific S-100 protein in ultralow doses, on the dynamics of natural antibodies to S-100 protein in patients receiving therapy for post-abstinent disorders. 55 patients with alcoholism were examined. Patients were divided into two groups: the first (n=30) received traditional therapy, the second (n=25) received monotherapy with proproten. Therapy of post-abstinent state was conducted after stopping the acute manifestations of the withdrawal syndrome. Antibodies to brain-specific S-100 protein in blood serum were assessed before and after the therapy by immunoenzymatic analysis. Before the beginning of the therapy, the level of natural antibodies to S-100 was 1.28±0.09 conventional units. We observed an increase to 1.68±0.20 conventional units ($p<0.05$) during treatment with proproten, which is a good prognostic sign. Traditional therapy did not exert a significant influence on the level of the natural antibodies to S-100 protein. Thus, the use of proproten in the therapy of post-abstinent disorders was associated with an increase of the level of natural antibodies to S-100 protein in blood serum.

PO2.263.
INFLUENCE OF ANAR ON HOMEOSTATIC SYSTEMS OF PATIENTS WITH OPIOID ABUSE IN THE PROCESS OF THERAPY

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The investigation of new effective and safe medicines for treatment of patients with drug abuse is currently topical. We studied the effects of anar, a preparation containing antibodies to morphine in ultralow doses, on indices of the immune, neuromediator and hormonal systems in patients with opioid abuse. Therapy with anar was conducted by patients with opioid abuse after stopping the acute manifestations of the withdrawal syndrome. Patients were divided into those with a fast reduction of post-abstinent disorders (up to 10 days) (19 persons) and those with a protracted reduction (9 persons). Immunobiological tests were performed at the beginning and at the end of the therapy. We found a decrease of lymphocytes carrying receptors for serotonin and an increase of the number of cytotoxic killer/suppressors in patients with a fast reduction of post-abstinent disorders in the process of the therapy. The dynamics of cortisol concentration was different: a decrease of serum cortisol levels was observed in the group with fast reduction of post-abstinent disorders and an increase in the group with protracted reduction. In conclusion, the use of anar in the therapy of opioid abuse exerts a positive impact on indices of basic homeostatic systems of the organism.

PO3.
OLD AGE, CONSULTATION-LIAISON AND FORENSIC PSYCHIATRY; PSYCHIATRIC SERVICES; PSYCHOTHERAPIES

PO3.1.
NEUROPSYCHOLOGICAL MEASURES TO DISTINGUISH MILD COGNITIVE IMPAIRMENT FROM NORMAL AGING

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Mild cognitive impairment (MCI), a transitional state between normal aging and early dementia, is becoming increasingly recognized as a risk factor for Alzheimer's disease (AD). This study aimed to describe the baseline characteristics of patients with MCI and normal controls recruited for participation in a longitudinal study evaluating a functional MRI index as a preclinical marker for AD. 50 patients with amnestic MCI and 46 cognitively normal elderly controls were evaluated. All subjects were ≥ 65 years old, had a normal neurological examination, and a Mini-Mental State Examination (MMSE) score ≥ 24. MCI subjects had a Clinical Dementia Rating (CDR) of 0.5, and controls had a CDR of 0. No significant differences in reading level, constructional praxis, or executive function (Trails A, Trails B) were noted between MCI subjects and controls. Normal controls performed slightly but significantly better than MCI subjects on Symbol Digit Modalities ($p=0.028$), Digit Span Backwards ($p=0.002$), and Boston Naming ($p=0.009$). MCI subjects performed significant worse than controls on all tests of learning and recall. The Rey Auditory Verbal Learning Test (RAVLT) was particularly sensitive to differences in memory performance, with MCI subjects performing worse on total learning ($p<0.0001$), learning over trials ($p<0.0001$), immediate recall ($p<0.0001$), 20-minute delayed recall ($p<0.0001$), and percentage of forgetting ($p<0.0001$). In conclusion, subjects with MCI had a predominant memory impairment with relative sparing of other cognitive domains. The RAVLT is a useful neuropsychological test for distinguishing between MCI subjects and normal controls.

PO3.2.
NORMAL GLUTAMATE LEVELS IN THE HIPPOCAMPUS OF SUBJECTS WITH MILD COGNITIVE IMPAIRMENT

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An important advance has been made with the identification of mild cognitive impairment (MCI) as a probable link between normal aging and Alzheimer's disease (AD). New techniques with low power 0.5T magnetic resonance spectroscopy (H-MRS) can measure glutamate (GLX). Early identification of a person with MCI through a biological marker would permit early diagnosis and therapeutic intervention. The purpose of this investigation was to assess the brain metabolites in both hippocampi of patients with MCI using a modified (0.5T) H-MRS technique. We measured absolute concentrations and ratios to creatine of N-acetyl aspartate (NAA/Cr), myoinositol (MI/Cr), glutamate (GLX/Cr) and choline (Cho/Cr) in the hippocampi of 6 MCI patients and 5 controls. Creatinine was used as an internal standard. The NAA concentrations were significantly lower in the left hippocampus in MCI patients compared to control subjects ($p=0.01$). Myoinositol concentrations were significantly higher in right hippocampus ($p=0.02$) in MCI patients compared to control subjects. The ratios MI/NAA were significantly higher in right and left hippocampus of MCI patients compared to controls ($p=0.01$ and $p=0.03$, respectively). There was no significant difference in GLX concentrations in the hippocampus of MCI patients compared to control subjects. None of the measured metabolites concentrations correlated to cognitive status. These findings suggest that during the pathologic progression of MCI there is an increase of MI and decrease of NAA. The GLX changes reported in AD were not present in MCI patients. This suggests that GLX abnormalities are a later event in the physiopathology of AD.

PO3.3.
1H-MAGNETIC RESONANCE SPECTROSCOPY AS A NOVEL TOOL IN DIFFERENTIAL DIAGNOSIS OF DEMENTIAS. RATIONALE AND FEASIBILITY IN DEMENTIA WITH LEWY BODIES

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The aim of this study was to examine the feasibility and utility of 1H-magnetic resonance spectroscopy (1H-MRS) in the differential diagnosis of dementias. 1H-MRS examination was performed using a 1.5 T-scanner in T1-weighted images in three orthogonal planes with the single-voxel technique using the STEAM sequence (TR 2000 ms, TE 20 ms) in dementia with Lewy bodies (DLB) and Alzheimer's disease (AD) patients and control subjects. Voxel (8 cm^3) was positioned in the temporal and occipital lobe and centrum semiovale. 20 subjects were examined. MRS scan acquiring was unsuccessful because of movement artifacts in three DLB patients. Measurements were suc-

cessful in all centrum semiovale and occipital regions in AD and control subjects. Acquiring proton spectra from temporal lobes was unsuccessful due to the voxel localization problems connected with brain atrophy in this region. In conclusion, in DLB patients 1H-MRS examination is feasible but there are difficulties in scanning patients due to tremor and uncooperativeness. In DLB and AD subjects there are difficulties in acquiring proton spectra from temporal lobes in the later stages of the illness due to uncooperativeness and the degree of brain atrophy. 1H-MRS is feasible in DLB patients early in the course of dementia.

PO3.4.
POSSIBLE ROLE OF SEROTONIN TRANSPORTER GENE IN ALZHEIMER'S DISEASE AND OTHER DEMENTIAS: A PILOT STUDY

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Alzheimer's disease (AD) is a major cause of disability in the elderly. Genetics could play an important role in AD and in other dementias. In addition to mutations in amyloid precursor, presenilin-1, presenilin-2 and apolipoprotein E, also serotonergic system seems to be implicated in AD and other dementias. The brain serotonin transporter (SERT), besides being the principal site of action of selective serotonin reuptake inhibitors (SSRI), could to be involved in neurodegenerative mental diseases. Several studies tried to validate an association between the 44-bp insertion/deletion (long/short) polymorphism within the promoter of SERT gene (SERTPR) and AD, independently from apolipoprotein E genotype, but the result was not univocal. Therefore, we performed a pilot study to test the association between SERT polymorphism and AD or vascular dementia. We compared a sample of 34 patients with dementia (female/male 24/10; age 66.56±4.83), 14 with AD and 20 with vascular dementia, to 64 healthy controls, matched for sex and age (female/male 31/23; age 78.33±8.03). No significant difference between the SERTPR polymorphism distributions was found, comparing demented patients and healthy controls, even analysing the two diagnostic subgroups separately. We detected a higher frequency of the short/short genotype among elderly patients and controls ($F=32.40$; $df=2$; $p<0.0000000001$). Studies in different populations underlined that the short variant may represent a risk factor for late onset AD, so we tested this hypothesis in demented people older than 70. The small numbers did not allow us to detect any statistical differences.

PO3.5.
IS THE SEROTONIN TRANSPORTER GENE A PREDICTOR FOR LONGEVITY?

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The serotonergic system plays a significant role in many physiological functions and in a number of neuropsychiatric disorders, also associated with old age. Nevertheless, the role of serotonergic dysfunction in relation to old age is not clear. Among genes involved in this neurotransmitter pathway, serotonin transporter (SERT) is the major determinant of serotonin (5HT) inactivation following release at synapses; it is also the site of action of selective serotonin reuptake inhibitors (SSRIs). Previous studies about age-related level of presynaptic SERT are controversial even if, recently, a significant decline in brainstem density has been shown. In the present research, we investigated a possible association between a SERT polymorphism (a 44-bp insertion/deletion causing long/short alleles within the promoter of the SERT gene) and old age. In fact, the short allele seems to be related to age-dependent level of SERT gene and protein. The sample consisted of 2408 subjects affected by major depression (n=809), bipolar disorder (n=826), schizophrenia (n=258), obsessive-compulsive disorder (n=19), dementia (n=14), otherwise specified psychoses (n=43) and control subjects (n=439). We analyzed SERTPR polymorphism independently from diagnosis, but in relation to old age. We found out that the s/s genotype was more frequent among elderly, particularly in subjects older than 70 ($p=0.00846$) or 75 ($p=0.00234$). Though our sample was not specifically recruited for this aim, these results are intriguing, since they may suggest a relationship between the SERTPR short variant and longevity.

PO3.6.
SUPERIOR EFFECTS OF RISPERIDONE VERSUS MELPERONE ON A BROAD SPECTRUM OF BEHAVIOURAL, PSYCHOLOGICAL AND OTHER SYMPTOMS IN DEMENTIA

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This study compared the effects of risperidone and melperone on behavioral and psychological symptoms (BPSD) in patients with dementia. It was an open-label prospective multicenter study. 302 outpatients with dementia requiring antipsychotic therapy were treated with either risperidone or melperone (2:1 ratio) over 28 days. BPSD were assessed at days 1, 15, 22 and 28. Patients and caregivers rated weekly dizziness, daytime sleep, falls and abnormal gait. 194 patients with Alzheimer, vascular or mixed dementia were treated with risperidone and 108 with melperone. There were no differences in demographics, vital signs, diagnoses, comorbidity, comedication, severity of cognitive impairment, BPSD and other symptoms. At baseline, only delusions were reported more frequently in the risperidone group ($p=0.006$). Mean daily doses of risperidone and melperone at endpoint were 1.3±0.7 mg and 60.7±29.1 mg, respectively. Mistrust ($p=0.003$), delusions ($p<0.001$) and hallucinations ($p=0.007$) improved significantly more with risperidone than with melperone. Improvement of dizziness ($p=0.008$), abnormal gait ($p=0.046$) and daytime sleep ($p=0.037$) was significantly more pronounced with risperidone compared to melperone. Daytime somnolence was significantly lower in risperidone treated patients ($p<0.001$ in patients with at least mild to moderate daytime somnolence at baseline). Adverse events were more frequent with melperone (14.8% versus 7.2%, $p=0.055$). There were three falls associated with fractures in the melperone group and no in the risperidone group. Extrapyramidal symptoms did not differ between the two groups. In conclusion, in patients with dementia risperidone led to a significantly better improvement of BPSD and other symptoms compared to melperone and was better tolerated.

PO3.7.
EPIDEMIOLOGY OF LATE-LIFE MENTAL DISORDERS IN COMMUNITY SUBJECTS: THE ROLE OF SOCIAL AND DEMOGRAPHIC FACTORS

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The aim of this study was to assess the prevalence of mental distress in the elderly living in the community and the role of socio-demographic factors. In a cross sectional design, a representative sample of 7000 subjects aged at least 60 years was examined. All subjects were personally interviewed. A validated reduced version of the Short Psychiatric Evaluation Schedule, among other questionnaires, was used to detect mental distress. Adjusted prevalence estimates were calculated according to the coefficients obtained in the validity study. The estimated prevalence of mental distress was 18%. A logistic regression indicated that women, non-white, less educated, unmarried, living in the rural areas were significantly more likely to have mental distress. Odds ratio ranged from 1.3 (95% CI 1.1-1.4) for ethnicity (non-Caucasians) to 1.9 (95% CI 1.7-2.1) for education (less educated). Unexpectedly, low income and higher age had no relation to psychiatric morbidity. The data indicate the potential for gender, ethnicity, marital status, education and rural areas to substantially increase the risk of mental morbidity in older subjects living in the community.

PO3.8.
LAY BELIEFS ABOUT THE CAUSES AND PROGNOSIS OF DEMENTIA

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The aim of this study was to assess the public's beliefs about the causes and prognosis of dementia. A representative city sample of individuals aged 18 to 65 years was interviewed in Sao Paulo, Brazil. A vignette depicting a case of dementia was presented to 500 respondents, who were asked to rate a 18-item list of causal agents and to choose the most important item related to the cause of the disorder and to evaluate its prognosis. When the 18 items were proposed, the five leading causes, according to the respondents, were 'drug abuse' (93%); 'head injury' (90%); 'isolation' (89%); 'disorder of the brain' (89%); 'important life event' (89%). The two most important causes of dementia were thought to be 'isolation' (29%) and 'drug abuse' (19%). 94.6% of the public considered that dementia had partial or total remission when properly treated. The beliefs of general public about the causes and prognosis of dementia differ from those accepted by psychiatric experts. This discrepancy may lead to a lack of willingness to search help from mental health professionals.

PO3.9.
PARANOIA AND GERIATRIC PSYCHIATRY

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Estimates of the incidence and prevalence of delusional disorder in the contemporary literature support the clinical impression that this condition is less common than mood disorders or schizophrenia. However, it is not rare. Psychiatrists who work in the field of psychogeriatrics may be more likely to encounter patients with delusional disorder. In our department of psychogeriatrics, in the last 4 years, we have diagnosed 15 cases of delusional disorder. All these patients were over 65 years; 14 of them were male. All hospitalizations were compulsory. In most cases, cognitive impairment co-occurred. After many years of dysfunctional marital and family relationships, the new situation of cognitive impairment and the inability to take care of themselves produced intolerance by their wives, who insisted for hospitalization. Our conclusion was that hospitalization of patients with delusional disorder in old age is related to cognitive impairment more than clinical phenomenology. Patients were treated with risperidone, at the average dose of 2 mg/day. Although the clinical picture improved in most cases, there was an impressive resistance by the family to accept the patient at home.

PO3.10.
MANAGEMENT OF AGITATION IN ELDERLY PATIENTS

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Agitation encompasses a range of behaviors, from verbally nonaggressive outbursts to physical assaults. Agitation is commonly associated with dementia, but, often, what appears to be agitated behavior may be the patient's way of expressing needs he cannot communicate verbally. Agitation may generate feelings of frustration, fear and helplessness in both the patients and caregivers. In addressing agitation in the elderly, it is first of all essential to carry out a careful diagnostic evaluation for medical conditions, psychiatric illness, and social or environmental disturbances that can underlie behavioral disturbances. The treatment of behavioral symptoms is complex and difficult. Both non-pharmacological and pharmacological intervention may be required. The goals of the treatment are: improving the quality of life, reducing the stress and suffering as well as increasing the comfort and safety of patients and caregivers.

PO3.11.
EXCESSIVE DAYTIME SOMNOLENCE AND HYPNOTIC USE IN THE ELDERLY

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A group of 148 elderly residents of a continued-care institution was interviewed by means of a structured questionnaire and the Epworth Sleepiness Scale (ESS), from December 11, 2000 to February 2, 2001. Excessive day-time somnolence (EDS) (ESS ≥ 11) was present in 24% of the sample. EDS was not associated with age, time spent in the residence, gender and education. EDS was also not associated with hypnotic therapeutic use and alternative habits to sleep better. Married people showed a higher frequency of EDS ($p<0.01$). Decreased levels of daily activity were more frequent in people with EDS ($p=0.05$).

PO3.12.
THE USE OF PHYSICAL RESTRAINTS IN ELDERLY MEDICALLY ILL INPATIENTS: NURSES' AND PATIENTS' PERCEPTIONS

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The use of physical restraints in the care of elderly inpatients has long been a routine nursing practice. This has raised many questions but which nurses have been reluctant to address because of the legal and ethical issues involved. Unlike in psychiatry, the use of restraints in medical wards has been shown to increase the older the patient is. In the 1980s, the view on the use of restraints shifted. What was once

considered an effective tool, was now viewed as ineffective, harmful and an assault on the patient's dignity. Currently chemical restraints should always take precedence over physical restraints. Objectives of this study were to explore the perception on the use of physical restraints in elderly medical inpatients, among nurses and the patients themselves. Results revealed the commonest reasons given by nurses for restraints were to prevent falls (74%) and altered mental states (44%). The commonest alternative measures to physical restraints given were companions (51%) and environmental manipulation (46%). However, only 2% mentioned sedation. Results revealed that significantly more nurses who were below 35 years and had less than 10 years experience rated physical restraints as a "very important" protective and preventive tool, as compared to other nurses. From the patients' perspective, negative feelings such as anger, sadness, being afraid and worry were reported. Only 55% indicated that they had been informed on the reason for restraint. It is suggested that proper guidelines be implemented and continuous education to nurses on restraints be made a norm.

PO3.13.
PSYCHIATRY OF THE ELDERLY: THE EXPERIENCE OF A NEW SPECIALISTIC SERVICE

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The need to make community psychiatric services more accessible to the elderly population brought us to establish in 1999 a geriatric psychiatric service including links between general practitioners, the mental health department and specialists in geriatrics. The activity of the service in the semesters of the years 2000, 2001 and 2002 was compared with that in the first semester of 1999. The number of outpatients seen at the service increased from 84 in the first semester of 1999 to 294 in the second semester of 2002. During the same period, the percentage of patients over 65 referred to the service for the first visit decreased from 6% to 1.2%. The number of elderly patients on long-term care at the department of mental health decreased during the same period from 14 to 2. A comparison of the diagnoses of the 364 outpatients seen at the geriatric psychiatric service with those of the 2140 outpatients seen at the mental health department shows a very different distribution of the various mental disorders.

PO3.14.
OVERT AGGRESSION IN GERIATRIC INPATIENTS

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The study aimed to assess the prevalence of aggressive behaviour in hospitalised geriatric patients. The patients who participated in the study came from two different geriatric units, one for acute and the other for long-term hospitalization. The sample included 159 patients (19 men and 140 women). 48% of patients had a diagnosis of dementia, 64% another psychiatric diagnosis, and 88% had an organic disorder. 23% of the patients showed aggressive behaviour (Modified Overt Aggression Scale > 0). 28% of the patients manifested auto-aggressive and 80% hetero-aggressive behaviour. Aggressiveness manifested itself in verbal form in 64%, towards objects in 16%, towards people in 68% of cases.

PO3.15.
SUPPORTIVE ASSISTANCE AND ASSISTANCE FROM FAMILY MEMBERS: EVALUATION AMONG PATIENTS WITH ALZHEIMER'S DISEASE ADMITTED TO A DAY CENTER

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We investigated the burden on caregivers and the cost of resource utilization among patients with Alzheimer's disease admitted to a day center. 21 patients with Alzheimer's disease, assessed by the National Institute of Neurological and Communicative Disorders and Stroke/ Alzheimer's Disease and Related Disorders Association (NINCDS-ADRDA) criteria, took part in the study. During 8 months they were assessed using the Mini Mental State Examination (MMSE), Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). Day center attendance was found to be associated with an improvement in the clinical picture and a reduction in the family caregiving hours.

PO3.16.
INCIDENCE OF DEMENTIA IN THE PROVINCE OF BRINDISI, ITALY

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The aim of the study was to appraise the incidence of dementia in the population of an Italian province (Brindisi, in the South of Italy) in the period 1998-2000. The study has been conducted on the basis of the new diagnoses made at the various facilities of the relevant local health unit, using DSM-IV criteria. The incidence of dementia in the population over 65 years has been of 0.65% in 1998, of 0.75% in 1999 and of 0.79% in 2000.

PO3.17.
ARE THE PATIENT PREFERENCES FOR COMMUNICATION RELATED WITH PERSONALITY VARIABLES? A MULTICENTRIC STUDY IN CANCER PATIENTS

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This study assessed the preferences for communication in a Spanish sample of cancer patients, and evaluated the relationship between preferences for communication and socio-demographic, tumor related and personality variables. A sample of 71 Spanish cancer patients completed a set of questionnaires: the Spanish adapted version of the Measure of Patient´s Preferences for Communication, which includes three variables - content (what and how much information is given), facilitation (setting and context variables) and support (emotional support during the interaction), the Extraversion and Neuroticism scales from the short form of the Eysenck Personality Questionnaire-

Revised (EPQ-RS), the Quality of Life Questionnaire (QLQ-3.0) and the Hospital Anxiety and Depression Scale. EPQ extraversion factor shows a significant correlation with higher needs for information (p=0.001) and emotional support (p=0.014) in the doctor-patient communication setting. Women show higher scores in content variables (p=0.001), support variables (p=0.004) and facilitation variables (p<0.001) than men. Younger patients show higher scores in content variables (p=0.013) than older patients. Patients with a recurrence of the disease show a higher interest in facilitation variables than first diagnosis patients (p=0.008). Quality of life and emotional distress do not show a correlation with preferences for communication. In conclusion, personality, age, gender and cancer recurrence diagnosis are very important variables to take into account when studies on doctor-cancer patients communication are made.

PO3.18.
HIGHER EMOTIONAL DISTRESS IN MEMBERS OF DYSFUNCTIONAL BREAST CANCER FAMILIES

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The purpose of the study was to explore the relationship between family functioning and emotional distress, such as depression and anxiety, in breast cancer patients and their family members. Subjects consisted of 49 female ambulatory breast cancer patients after mastectomy and 71 family members including 35 spouses. Documented informed consent for the study was obtained from each patient. Perceived family functioning was measured using the Family Relationships Index (FRI), a 12-item self-report questionnaire that assesses cohesion, expressiveness and conflict. As a cut-off point to distinguish dysfunctional/functional families, a cohesion score of 3/4 and/or a total FRI score of 9/10 were used. Depression was measured by the Zung Self-Rating Depression Scale (SDS), and anxiety measured by the Zung Self-Rating Anxiety Scale (SAS). Members of dysfunctional families (n=88) had a significantly higher SDS score than those of functional families (n=32) (p=0.002). Notably, patients of dysfunctional families (n=31) reported significantly higher SDS score than those of functional families (n=18) (p=0.017). There was no significant difference in SAS score. Our data suggest that worse family functioning might relate to higher level of perceived depression, although the level was in the subthreshold range. Therefore, it seems to be useful to consider family functioning as a screening variable when assessing subclinical depression in families of breast cancer patients, especially in patients themselves.

PO3.19.
PSYCHOLOGICAL AND PSYCHIATRIC ASPECTS OF UNRELATED BONE MARROW DONORS

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The transplant of bone marrow from unrelated donors is a therapeutic practice for the treatment of haemato-oncological pathologies. The Italian Bone Marrow Donor Registry (IBMDR) includes a "state of depression" as one of the possible complications experienced by donors after donation. We evaluated 114 potential unrelated donors (64 males, 50 females), who reached the final stages of selection, by means of a clinical interview and two self-administered tests: the Revised Symptom Check List-90 (SCL-90) and the Minnesota Multiphasic Personality Inventory (MMPI-2). Re-evaluation is to be carried out 3 and 12 months after the eventual transplant. In the pre-donation interview, apart from the psychic condition of the candidate, we assessed his/her personal and family psychiatric and psychopharmacological history, motivation, expectations, level of information about and awareness of the operation, and level of social support. At the moment of the interview, 4 candidates were suffering from psychic disturbances that counterindicated the donation, 22% had a positive psychiatric history, 16% received psychotropic drugs and 14% had a positive oncologic history. From the MMPI-2 data, we outlined a personological profile of the candidate donors, which, even though remaining within the norm, distinguishes this group from the control group.

PO3.20.
THE QUALITY OF LIFE IN BONE MARROW TRANSPLANT PATIENTS: CORRELATION WITH CLINICAL AND PSYCHOLOGICAL VARIABLES

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This study evaluates the quality of life of patients awaiting bone marrow transplant and any correlations occurring between clinical and psychological variables. 100 patients with neoplastic hemopathy were evaluated at the Bone Marrow Transplant Centre at Milan's Ospedale Maggiore, drawing up a clinical and case history at first interview (T0) and at 12 months (T1) and administering the Reaction to Illness Scale (RIS), to determine the quality of life, the Beck Depression Inventory, the State Trait Anxiety Inventory and the Minnesota Multiphasic Personality Inventory. At T0, it emerged from the RIS that: in 43% of cases, illness and treatments had no impact on the self; in 54% there was no impact on the self image; 60% had adjusted to illness; 88% showed no rejection of the illness, and 53% had an optimistic attitude towards life. At T1 it became evident that: relapses have a significant effect on life quality; length of illness is correlated with the impact of disease and of treatments on the self and with rejection of the illness, whereas a good adjustment correlates with a positive course of the illness. These results suggest that, in the pre-transplant phase, there is a good adjustment to the illness, resulting in a good quality of life. Numerous relapses, a lengthy illness and a negative course worsen the psychopathological picture.

PO3.21.
DEPRESSION PREDICTS SURVIVAL AFTER STEM-CELL TRANSPLANTATION FOR MALIGNANT DISEASES

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The association of depression and increased mortality in various medical conditions is well documented. However, depression is not well studied in the setting of stem-cell transplantation (SCT). We

examined the association between depression and survival after SCT. In a prospective inpatient study, 220 patients aged 16 to 65 years received SCT for hematologic cancer. Patients underwent a psychiatric assessment at hospital admission and weekly during hospitalization until discharge or death, yielding a total of 1062 psychiatric interviews performed. Major and minor depression were diagnosed according to DSM-IV. Stratified Cox proportional hazard models were used to assess the independent effect of major and minor depression on 1,3 and 5-year survival, adjusting for confounding clinical factors. The overall mortality was 30.9% at 1 year, 46.4% at 3 years, and 53.2% at 5 years. After adjusting for other prognostic factors, patients with major depression had an approximately two-fold greater risk of dying than nondepressed patients at 1 year (hazard ratio, 2.19; p=0.028) and at 3 years (hazard ratio, 1.91; p=0.026). Major depression did not significantly increase the 5-year mortality. Minor depression had no effect on any mortality outcome. Thus, major depression is linked to a significantly reduced chance of 1 and 3-year survival among cancer patients after SCT. These results highlight the importance of adequate diagnosis and treatment of depression. Further research is needed to determine if treatment of depression can decrease mortality.

PO3.22.
PSYCHIATRIC MORBIDITY AND ITS IMPACT ON LENGTH OF STAY IN HOSPITAL AMONG HEMATOLOGIC CANCER PATIENTS RECEIVING STEM-CELL TRANSPLANTATION

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This study aims to determine the prevalence of psychiatric disorders during hospitalization for hematopoietic stem-cell transplantation (SCT) and to estimate their impact on length of stay in hospital (LOS). In a prospective inpatient study, 220 patients aged 16 to 65 years received SCT for hematologic cancer. Patients underwent a psychiatric assessment at hospital admission and weekly during hospitalization until discharge or death, yielding a total of 1062 psychiatric interviews performed. Diagnosis was made according to the DSM-IV. Univariate and multivariate linear regression analyses were used to identify variables associated with LOS. The overall prevalence of psychiatric disorders was 44.1%; an adjustment disorder was diagnosed in 22.7% of patients, a mood disorder in 14.1%, an anxiety disorder in 8.2%, and delirium in 7.3%. After adjusting for admission and in-hospital risk factors, diagnosis of any mood, anxiety, or adjustment disorder (p=0.022), chronic myelogenous leukemia (p=0.003), Karnofsky performance score < 90 at admission (p=0.025), and higher regimen-related toxicity (p<0.001) were associated with longer LOS, while acute lymphoblastic leukaemia (p=0.009), non-Hodkin's lymphoma (p=0.04), use of peripheral blood stem cells (p<0.001) and second year of study (p<0.001) were associated with a shorter LOS. These data indicate a high psychiatric morbidity, and its association with longer LOS, underscoring the need for early recognition and effective treatment.

PO3.23.
IMPROVEMENT OF DEPRESSION AND ANXIETY THROUGH A GROUP PSYCHOTHERAPY PROGRAM FOR HIV-INFECTED PATIENTS IN A PUBLIC MENTAL HEALTH SETTING

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This study aimed to assess the long-lasting efficacy of a structured time-limited cognitive-behavioral group psychotherapy program in improving depression and anxiety in HIV-infected patients referred to a consultation-liaison psychiatry unit. Repeated measures ANOVA was used to analyse changes on the Beck Depression Inventory (BDI) and the state subscale of the State/Trait Anxiety Inventory (STAI) administered to 39 participants at four time points: T1 (one month before therapy), T2 (first session), T3 (last session) and T4 (three months after therapy). The therapy consisted of 16 weekly two-hour sessions following a structured cognitive-behavioral group psychotherapy program. During the intervention time (between T2 and T3), an improvement was observed in depression (p=0.0001) and anxiety (p=0.001), which persisted after the 3-month follow-up period (between T3 and T4). No changes were observed during baseline (between T1 and T2). Patients with higher levels of anxiety at baseline showed greater improvement in STAI scores (p=0.001). Transmission of HIV through intravenous drug use was associated with less improvement on the BDI (p=0.003). Programs of this kind may also help to modify patients' behaviour, their knowledge of the infection and their attitudes towards it. This, in turn, would help to reduce the transmission of the infection and the progression of the epidemic.

PO3.24.
EFFECTS OF HIV SEROSTATUS NOTIFICATION ON IMMUNOLOGICAL AND PSYCHOLOGICAL VARIABLES

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This multi-centric study evaluated the effect of HIV serostatus notification on cellular and humoral immune response and psychological variables. 81 inmates were tested for HIV serostatus. Their response to lymphoblastic stimulation with phytohemagglutinin (PHA), CD4/CD8 and white blood cell count were checked at baseline and on the first, fourth and eighth week following disclosure. Mood, anxiety, perceived distress and personality parameters were assessed at the same time. The scores for anxiety (State and Trait Anxiety Inventory), depression (Beck Depression Inventory) and AIDS locus of control as well as the acute lymphoblastic and cellular immune response were increased at baseline and declined when the results were "good news" (HIV-). Two different adjustment patterns were observed in seropositives.

PO3.25.
CONTINUING RISK BEHAVIOURS IN HIV POSITIVE DRUG USERS

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Two major health and social concerns in Malaysia are the spread of the human immunodeficiency virus (HIV) and drug abuse. They are closely related, as the main modality of HIV spread in Malaysia is high risk injecting behaviour among intravenous drug users (IVDUs). The purpose of this study was to assess the rate of high risk behaviours among IVDUs and to determine if there is any difference in these behaviours in those aware of their positive HIV status as compared to those aware of their negative status or those whose status is unknown. 162 IVDUs were interviewed regarding high risk injecting and sexual practices. Results showed that 73.3% of IVDUs that were aware of their HIV positive status were still practicing high risk behaviours, as compared to 34.5% in the rest. In conclusion, the practice of high risk behaviours is rampant among IVDUs and knowledge of a positive HIV status does not appear to affect these behaviours. More stringent interventions and programs need to be implemented to curb the spread of HIV in our country.

PO3.26.
PSYCHIATRIC EFFECTS OF CONVENTIONAL INTERFERON VERSUS PEGILATED INTERFERON IN CHRONIC HEPATITIS PATIENTS AFTER TWO AND SIX MONTHS OF THERAPY

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Interferon treatment of hepatitis is often hampered by neuropsychiatric side effects that can lead to therapy discontinuation. These effects have been extensively studied with conventional interferon. More recently new interferons have been developed with a biochemical process called pegilation (conjugation to a molecule of polietilenglicole). This allows better bio-availability and less toxicity. Few data are available about psychiatric effects of pegilated interferons. The aim of our study is to identify the presence of symptoms of depression and/or anxiety in patients with chronic hepatitis under IFN treatment comparing two types of therapy. Twenty-six patients treated with conventional interferon and 20 patients treated with pegilated interferon were evaluated by means of interviewer-administered (17-item Hamilton Scales for Depression and Anxiety) and self-report psychometric (Beck Depression Inventory) scales at baseline and after two and six months of treatment. Samples were homogeneous for age, sex and baseline scores on psychometric scales. Both patients under conventional interferon and pegilated interferon exhibited a significant raise in all psychometric scales after 2 and 6 months: no significant differences have been found comparing the two samples (ANOVA for repeated measures). Our data confirm the presence of psychiatric effects (both depressive and anxiety symptoms) during interferon therapy. These effects seem to be given with the same intensity also by pegilated interferon.

PO3.27.
EFFECTIVENESS OF PEROSPIRONE IN THE TREATMENT OF PSYCHOGENIC VOMITING: A PRELIMINARY PILOT STUDY

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Psychogenic vomiting is difficult to treat. To date, D2-antagonists, antidepressants, antipsychotics and other agents have been used, but there is no unconditionally effective agent without significant side effects. Perospirone is a new atypical antipsychotic agent developed in Japan that became available in 2001. Its primary mode of action is antagonism of both 5-HT2A and dopamine D2 receptors, with few side effects such as extrapyramidal symptoms (EPS). From the perspective of its pharmacological profile, perospirone might be a promising candidate drug in the treatment of psychogenic vomiting. We report four consecutive patients with psychogenic vomiting treated with perospirone. All four patients showed significant improvement when evaluated with the Clinical Global Impression scale (CGI-S). There were no adverse reactions such as EPS. The limitations of this study include the small sample size and lack of comparison with other agents. However, perospirone may be a promising candidate drug to treat psychogenic vomiting.

PO3.28.
PSYCHIATRIC DISORDERS FOLLOWING HEAD TRAUMAS: EVALUATION ONE YEAR LATER

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The aim of this study was to explore the nature of mental disorders following head traumas. 76 subjects who had received a psychiatric diagnosis one year after a head trauma were subjected to neuropsychiatric examination and to structured psychiatric interview based on the criteria of the DSM-IV (SCID-IV), and to evaluation with the Brief Psychiatric Rating Scale (BPRS), the Wechsler Adult Intelligence Scale (WAIS), and the Disability Scale (DISS). The group was subdivided into two subgroups based on evidence of a demonstrable brain lesion. Post-traumatic stress disorder (PTSD) (31%) was the most frequent diagnosis, followed by modification of personality due to a medical general condition (26%); anxiety disorders (5%) and psychotic disorders (1%). Subjects without brain injury showed lower BPRS scores than those with brain injury. The results of this study confirm that head traumas may be associated with psychiatric disorders, especially with PTSD. There is a clear difficulty to formulate a diagnosis for those clinical phenotypes (like the post-concussion disorder) not included in a nosographic system.

PO3.29.
ARTERIAL HYPERTENSION: A MULTIDIMENSIONAL APPROACH

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This study proposes a reflection on the interaction of the multiple psychological, social, biological and cultural aspects of arterial hypertension within a theoretical context, with examples illustrating treat-

ment programs executed at UNICAMP, Campinas and PAM, Teresopolis. An analysis of the various factors and peculiarities of arterial hypertension indicates the need for planning and executing treatment through the collaboration of professionals from different areas of knowledge, so that intervention takes place in relation to the multiple facets of this disease. This study also shows the need for including the family in an educational program aiming to change concepts and daily habits, because the family nucleus is a generator of the biopsychodynamics of hypertension. In view of the multifactorial nature of this disease, an approach that includes these aspects is a model to be absorbed into professional practices that are dedicated to the well-being of the patient.

PO3.30.
PSYCHOLOGICAL SUPPORT FOR PATIENTS WITH CHRONIC OBSTRUCTIVE LUNG DISEASES

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The purpose of this study was to evaluate the efficacy of the psychological support provided to patients with chronic obstructive lung diseases at the Lung Rehabilitation Ambulatory Center at UNICAMP. Twelve patients were interviewed and their affective and emotional condition was assessed. The patients were provided with psychological support once a week for 18 months. This group support helped the patients elaborate their fantasies and provided them with realistic expectations in relation to the disease. During therapy, there was a marked reduction in the anguish and anxiety caused by the disease. The therapeutic support also helped these individuals to face their losses and to adapt to a new way of life. Clinically, the group had a lower incidence of infections and, consequently, a lower number of hospitalizations. These findings indicate that psychological support helped the elaboration of the patients' internal contents and also helped them improve the quality of their physical and mental life.

PO3.31.
SCREENING FOR DEPRESSION AND ALEXITHYMIA IN A SAMPLE OF HEMODIALYZED PATIENTS: PRELIMINARY RESULTS

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Several studies have investigated the relationship between dialysis and depression, but the reported incidence of depression varies widely, in part because of the different criteria used to diagnose depression. Alexithymia has been relatively less studied. Our purpose was to screen depression in a sample of dyalized patients and evaluate whether alexithymic features were related to more severe depressive symptoms and disability. We evaluated 40 hemodialyzed patients (age range: 35-68 years) by the Beck Depression Inventory (BDI), the Hamilton Depression Rating Scale (HAM-D), the Toronto Alexithymia Scale (TAS-20) and the Sheehan Disability Scale (SDS). 17 patients (42.5%) scored ≥ 11 on the BDI and fifteen of these 17 patients (88.2%) received a clinical diagnosis of depression. Eleven patients (25.7%) were alexithymic (score ≥ 61 on TAS-20) and alexithymics showed higher scores on BDI, HAM-D and SDS than non-alexithymics.

PO3.32.
MENTAL DISORDERS IN LIQUIDATORS OF THE CONSEQUENCES OF CHERNOBYL ACCIDENT

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This paper focuses on mental health problems among participants in the liquidation of the consequences of the Chernobyl accident. Impact of a low dose of radiations leads to disturbances in the immune system as well as to functional and morphological alterations in the central nervous system. In addition, liquidators in Chernobyl had experiences which are typical for the victims of traumatising events such as military actions or catastrophes. These experiences led to the decompensation of already present mental disturbances, determining their clinical manifestation or worsening their course. Moreover, a significant contribution was made by the quality of social adjustment. We conducted a clinical-psychopathological, experimental-psychological examination of 575 liquidators. A variety of disorders with an organic basis were observed, from simple asthenic reactions up to the various manifestations of the psychoorganic syndrome. Mental disorders in these patients had a protracted, chronic course and were resistant to therapy. Practically all patients had multiple accompanying somatic diseases and diverse immunological disorders.

PO3.33.
MENTAL DISORDERS IN CHILDREN AND ADOLESCENTS PRENATALLY IRRADIATED AS A RESULT OF THE CHERNOBYL ACCIDENT

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Mental health in children and adolescents exposed to acute prenatal irradiation as a result of the Chernobyl accident has been assessed. The frequency of mental disorders and personality disorders due to brain injury or dysfunction, F06, F07; disorders of psychological development, F80–F89; paroxysmal states (headache syndromes, G44; migraine, G43; epileptiform syndromes, G40); somatoform autonomous dysfunction, F45.3; behavioral and emotional disorders of childhood, F90–F99 were increased among these children. The diagnosis of the mental disorders according to multiaxial classification systems is more appropriate. The recommended treatment and rehabilitation will be optimizing psychosocial adaptation and mental as well as physical development of the children.

PO3.34.
THE USE OF ALPHA-2 AGONISTS AS SEDATIVE AND THE REDUCTION OF POSTOPERATIVE DELIRIUM IN CARDIAC SURGERY PATIENTS

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As many as 80% of cardiac surgery patients experience postoperative delirium, a condition which leads to increased morbidity and mortality as well as a prolonged hospital stay. There are compelling clinical and financial reasons to reduce the incidence of postoperative delirium. Dexmedetomidine, a selective alpha-2 adrenergic receptor agonist, may be an excellent alternative to the use of conventional sedatives for lowering the incidence of delirium. In a prospective randomized trial, ninety patients undergoing elective cardiac surgery were randomly assigned to one of three postoperative sedation protocols: dexmedetomidine (loading dose 0.4 µg/kg, infusion 0.2-0.7 µg/kg/hr),

propofol (25-50 µg/kg/min), or fentanyl and midazolam (50-150 µg/hr and 0.5-2 mg/hr respectively). All participants underwent neuropsychiatric testing prior to surgery and received standardized general anesthesia. Patients were monitored for the development of postoperative delirium and neurocognitive deficits. The incidence of delirium for patients on dexmedetomidine was 3%, for those on propofol 50%, and for patients receiving fentanyl and midazolam 50%. Although not statistically significant, there was a trend toward shorter intensive care unit and total hospital stays for patients who received dexmedetomidine. This may be attributed to the specific and unique pharmacological profile of dexmedetomidine, including its norepinephrine specificity, lack of anticholinergic potential, promotion of a physiologic sleep-wake cycle, and neuroprotective effects.

PO3.35. EXPERIENCE ON TREATMENT OF DELIRIUM TREMENS

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We report on our experience with 100 patients hospitalized in 2002 and 2003 who presented delirium tremens. 56 of these patients were admitted after three or more days since the beginning of delirium tremens, whereas in the others delirium tremens developed the day before, or during the first days after hospitalization. We used in all patients an infusion therapy consisting of haemodesum or 5% solution of glucose (200-400 ml) together with thiamine up to 100 mg during the day, diazepam 10 mg and phenobarbital up to 0.4 g. Diazepam was injected intravenously at the dose of 10 mg and intramuscularly up to 50 mg per day, and haloperidol 10 mg and dimedrolum 1-2 mg/die intramuscularly. In 51 cases magnesium sulfate 25% was injected by 5 ml intramuscularly. The average duration of delirium tremens was 3 days. A lethal outcome occurred in one case. In one case the transition of delirium into Korsakov's psychosis and Wernicke's encephalopathy was noted.

PO3.36. EMOTIONAL STATE AMONG PATIENTS SUFFERING FROM ACNE VULGARIS

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Given the psychological importance of skin in the perception of body image, emotional reactions to skin disease are natural, predictable, and even appropriate. It is not surprising, therefore, that secondary or reactive psychological and psychiatric problems, including depression, are sometimes encountered. The aim of our study was to determine and compare the levels of depression and anxiety between patients suffering from acne vulgaris and control subjects from the general population. The experimental group showed significantly higher scores for depression and anxiety on Hamilton scales, and neuroticism on the Eysenck Personality Inventory. Levels of anxiety and depression were four times higher than those reported in general population. In acne vulgaris, emotional distress, including depression, anxiety, frustration, can exacerbate the skin disease, and the worsened skin condition then exacerbate the emotional state. A vicious circle is created.

PO3.37. STRESSFUL LIFE EVENTS AND PERSONALITY DISORDERS AS POTENTIAL TRIGGERS OF PEMPHIGUS

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The onset and course of pemphigus depend on a variable interaction between predisposing and inducing factors. Genetic predisposition is known to be associated with human leukocyte antigens (DR4,14 and DQ1,3). The genetic background alone is not by itself sufficient to initiate the autoimmune response; the intervention of inducing or triggering factors seems to be crucial to set off the full-blown disease. Numerous and heterogeneous factors able to induce pemphigus in genetically predisposed subjects are: drugs (thiols, phenols, cytokines), physical agents (burns, UV and ionizing rays), viruses (herpesviridae, myxoviridae), malignancies (cancers, lymphomas), pregnancy and hormones (progesterone), contact allergens (pesticides), diet factors (allyl compounds, tanninus), emotional stress. It has been claimed that intensive and prolonged emotional stress should be avoided by pemphigus patients. The aim of the study is to investigate this hypothesis. We explored stressful life events and personality disorders in 15 (6 men and 9 women) consecutive subjects with pemphigus. Baseline information was collected on demographic characteristics, family history, presence of psychopathology, psychoaffective impact of stressful life events occurring to them within one year prior to onset of their pemphigus and the presence of Axis I and II diagnosis. In our study the group of patients with pemphigus was matched with a control group for age and sex. All pemphigus patients having a negative anamnesis for psychiatric pathologies had experienced a stressful life event during the year preceding the onset of pemphigus; 80% of these events were negative and 46.7% were very traumatic. In the control group the frequency of traumatic events was 13% ($p<0.05$). In 60% of pemphigus patients there was almost one personality disorder; there was a high prevalence of obsessive-compulsive personality disorder (33.3% vs. 0%) and borderline personality disorder (26% vs. 0%) ($p<0.05$). The results suggest that psychological stresses and personality disorders play a major role in triggering pemphigus.

PO3.38. MEDICALLY UNEXPLAINED SYMPTOMS AS A FORM OF PRESENTING COMMON MENTAL DISORDERS: A STUDY WITHIN PRIMARY CARE UNITS IN BRAZIL

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Around 56% of the patients attending primary care in Brazil have common mental disorders (CMD), presenting somatic complaints that remain undiagnosed, being considered unexplained somatic symptoms. This study aimed to determine the types of complaints associated with existing CMD and to establish how unexplained somatic symptoms relate to CMD. The study was conducted among 253 patients with new complaints attending five family health program (FHP) units in the Municipality of Petrópolis, during one month, between August and December 2002. The prevalence of CMD was evaluated through the General Health Questionnaire (GHQ-12), with a cut-off point of 2/3, and the complaints presented during consultation were analyzed according to type of symptoms (justified somatic, unexplained somatic and psychological symptoms), and

their association with CMD, their attribution patterns, and types of CMD presentation (somatic or psychological). It was found that unexplained somatic symptoms were the ones most strongly and stably associated with CMD (OR=2.32, 95% CI 1.10-4.86). On the other hand, they did not represent genuine somatization since they were highly associated with psychological complaints (OR=6.07, 95% CI 2.96-12.42). There was one patient with somatic presentation for each one with a psychological one, but 90% of these patients recognized an emotional origin for their somatic symptoms. While unexplained somatic symptoms are the most common forms of CMD presentation in the FHP units, they may represent a cultural pattern rather than true somatization.

PO3.39.
INTERACTIVE VOICE RESPONSE AS A THERAPEUTIC TOOL TO REDUCE CHRONIC PAIN AND DECREASE MEDICATION USE

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The study aimed to test whether interactive voice response (IVR) can be used to prevent relapse into pain behavior. After completing 11 weeks of group cognitive behavioral therapy (CBT), ten subjects with chronic pain participated in four months of therapeutic IVR (TIVR); a comparison group of eight subjects received standard care only. The TIVR is a computerized telephone system designed to reinforce pain coping skills learned in group CBT and provide messages for relaxation, sleep induction, and emotional support that can be accessed by patients on demand. Within subjects analysis (ANOVA) showed maximum positive change for nearly all outcome measures at the post TIVR point. Statistically significant improvements included Short-Form 36 (SF-36) Mental Health Composite Score ($p<0.0004$), McGill Pain Questionnaire (MPQ) Pain ($p<0.01$), Cognitive Strategies Questionnaire (CSQ) Catastrophizing ($p<0.0006$), Treatment Outcome Pain Survey (TOPS) Total Pain Experience ($p<0.03$) and Perceived Family/Social Disability ($p<0.02$). Between subjects analysis (ANCOVA) revealed significant inter-group differences in: TOPS Total Pain Experience ($p<0.01$), TOPS Perceived Social Disability ($p<0.002$), SF-36 Mental Composite ($p<0.05$). Random effects linear regression analyses demonstrated significant reductions in: highest pain level ($p<0.0001$), highest stress level ($p<0.0001$), frequency of catastrophizing ($p<0.0001$), and a 25% reduction in pain medication ($p<0.0002$). A randomized controlled trial has replicated these results. In comparison to controls, TIVR subjects showed improvements in: MPQ Typical Pain ($p<0.008$), TOPS Total Pain Experience ($p<0.003$), CSQ Catastrophizing ($p<0.002$), CSQ Ability to Control Pain ($p<0.007$) and SF-36 Physical Composite Score ($p<0.01$). Results suggest that TIVR after CBT can improve coping skills adherence, decrease relapse into pain behavior, and reduce medication use.

PO3.40.
ALEXITHYMIA AND CHRONIC PELVIC PAIN

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In this work, we examined the level of alexithymia in women with and without pain. A total of 160 women were studied in two groups (n=80 each). One group consisted of patients with chronic pelvic pain treated in the gynecological ambulatory unit at the Center for Integrated Assistance to Women' s Health. The other group consisted of individuals without pain. The Toronto alexithymia scale (TAS-20) was used to investigate the presence of alexithymia in both groups of women. The psychosocial aspects were evaluated using a semi-structured clinical interview with eight women chosen randomly from each group. The TAS-20 results for each group were then averaged in order to compare the two groups and to examine the relationship among the three factors evaluated by the TAS-20. The data obtained in the clinical interview were treated qualitatively using the content analysis technique and possible correlations were investigated. The levels of alexithymia were significantly higher in the group with pelvic pain than in women without such pain.

PO3.41.
THE CHARACTERISTICS OF PAIN DISORDER RESPONSIVE TO ANTIDEPRESSANTS

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In primary care, physical symptoms such as pain are the principal presenting symptoms, and research evidence suggests that compounds that inhibit the reuptake of both serotonin and norepinephrine are likely to produce the greatest relief from depression and chronic pain. Open trials with drugs of the new selective serotonin and norepinephrine reuptake inhibitor class of antidepressants (SNRIs), such as venlafaxine, milnacipran and duloxetine, suggest that these compounds may be effective in relieving pain both associated with and independent of depression. We report the characteristics of patients with a long history of pain not sensitive to opioids whose pain was reduced by antidepressant drugs including SNRIs.

PO3.42.
MUNCHAUSEN BY PROXY: A CASE, CHART SERIES, AND LITERATURE REVIEW OF OLDER VICTIMS

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Munchausen by proxy (MBP) is a term used to describe a form of abuse in which a parent or guardian produces or falsifies medical symptoms in the victim in order to derive psychological gratification from the role of caretaker. In response to increased awareness on the part of pediatric professionals, who are often the first to suspect illness falsification, more hospitals are beginning to implement interdisciplinary committees to appropriately diagnose MBP cases to prevent further harm to the child and offer psychiatric treatment to the perpetrators of such cases. Most reported cases of MBP involve young child victims who are often unaware of the deception or are less able to report it, and the perpetrator is most commonly a trusted parent. In some cases the child becomes involved in colluding with the perpetrator after years of abuse have passed undetected by health professionals. Intervention may then be actively resisted by both the perpetrator and the older child victim. When the older child discovers the deception, he or she may be coerced to perpetuate the fiction as a dysfunctional means by which to maintain the relationship with the perpetrator, as in our case of a 14-year-old boy whose mother fabricated a diagnosis of congenital immune deficiency and recurrent complaints of sinusitis and chronic pain, resulting in over 35 surgeries and hundreds of unnecessary invasive procedures. This case describes an older child victim colluding with the perpetrator and highlights the importance of early detection and intervention by health professionals.

PO3.43.
DIFFERENTIAL DIAGNOSIS OF MUNCHAUSEN'S SYNDROME: A CASE REPORT

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We report on a case posing a problem of differential diagnosis among various diagnostic categories, including Munchausen's syndrome and paranoid personality disorder. A woman in her fifties had presented for twenty years hypochondriacal complaints. She had undergone periodic checks-up to confirm her fears, trying, successfully sometimes, to manipulate doctors, in order to obtain medical or even surgical treatments. She had had many operations through a few years, whose usefulness was often questionable. At the same time, she had been accusing her husband that he was poisoning her, and repeatedly requested clinical ascertainments to support her conviction. The behavioural and psychopathological elements emerging from this case will be discussed.

PO3.44.
QUALITY OF LIFE AMONG ADOLESCENTS WITH FACIAL SCARRING FOLLOWING BURN INJURY

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Reconstructive surgery efforts for children with facial burn injury focuses on improving function and appearance in order to enhance quality of life. Previous research on children with craniofacial conditions has concentrated on provider-driven measures rather than assessing the patient's view of the impact on their life. Physical appearance is an important concern for adolescents, especially those with scars from burn injury. This study presents findings on depressive symptoms among adolescents with facial disfigurement from burn injury. The Youth Quality of Life Instrument – Research Version (YQOL-R) and other scales were administered to 66 adolescent burn survivors with significant facial scarring in order to assess their quality of life. The adolescent participants ranged in age from 11 to 17½ years and were more than two years post burn injury. Adolescents with significant psychiatric illness unrelated to their burn injury were excluded from the study. The questionnaire provided important information regarding the adolescent's view of themselves and overall competence with respect to their facial condition. The YQOL-R provided useful insight in assessing the relative impact of acquired craniofacial conditions from burn injury in adolescents. Further study is needed to test the comparability of the YQOL-R for adolescents with acquired craniofacial conditions from burn injury and those with congenital craniofacial conditions for whom it was developed. The YQOL-R may provide useful information to adolescent burn survivors, their parents and surgeons in determining the indication for and impact of surgical interventions for craniofacial conditions.

PO3.45.
PATTERNS OF REACTION TO THE DIAGNOSIS OF CANCER

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On the basis of detailed assessment of patients at the Oncology Research Institute, we observed four variants of reaction to the diagnosis of cancer: a) the anosognostic variant (I have nothing, physicians made a mistake about me); b) the anxious variant (looking for mystic justifications of the disease, not believing in physicians, searching for the help of healers); c) the congruent-constructive variant (actively participating in rehabilitative processes, properly perceiving treatment, finding ways of social adaptation); d) the depressive variant (withdrawal, phobias and fears). In the first three variants, an active psychotherapeutic intervention is conducted; in the fourth, we use treatment with antidepressants. The severity of the reaction is not related to the severity of the disease, but to the subject's personality.

PO3.46.
INFLUENCE OF LOCALISATION OF BRAIN IMPAIRMENT ON THE INNER PICTURE OF THE ILLNESS IN POST-STROKE PATIENTS

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The study aimed to study the influence of localisation of brain impairment on the development of the inner picture of the illness (IPI). We assessed the IPI in 96 post-stroke patients. One group consisted of patients with depressive disorders, the other of patients without depression. In 50% of patients, the localisation of the brain impairment could be verified by magnetic resonance tomography. In patients with right hemisphere impairment, neurasthenic and paranoic types predominate. In 40% of patients with depressive disorders, the euphoric type of IPI is observed, which is likely to be associated with anosognosia. In patients with impairment of the left hemisphere without depression, ergopathic and sensitive types of IPI predominate. Only in this latter localisation, the hypochondriacal type of IPI was noticed.

PO3.47.
FRONTAL EPILEPSY WITH SCHIZOPHRENIC AND MANIC APPEARANCE

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Frontal epilepsy is often not diagnosed correctly. Patients are hospitalized due to behavioural disturbances and are often misdiagnosed as schizophrenic or bipolar. We report on a sample of epileptic patients admitted to our clinic with a diagnosis of paranoid schizophrenia or bipolar disorder. The reason for their admission was the inability to adjust to the environment, due to their "wrong and dangerous behavior". The diagnostic error was often reinforced by an electroencephalogram without pathological features. We provide a list of criteria for the differential diagnosis between frontal epilepsy and primary psychosis.

PO3.48.
RISK FACTORS FOR THE DEVELOPMENT OF PSYCHIATRIC DISORDERS IN THE MENOPAUSE

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The study aimed to examine the psychiatric disorders that are observed in women during the menopause. We studied 84 women (mean age 48.7 years) that had been hospitalized for various reasons in other departments and had been referred to the consultation-liaison psychiatric department in the years 2000-2002. 52 of them were married, 17 divorced, 9 not married and 5 widows. 68 were mothers. They were evaluated by the Hamilton Scales for Depression and Anx-

iety and by a semistructured psychiatric interview. 65 (77.4%) of the women had hot flashes. In 27 (32.1%) we found anxiety or somatoform disorders, and in 9 (10.7%) depression. The information collected by the semistructured interview suggests that the development of psychiatric disorders during menopause is related to premorbid personality traits, the previous history of psychiatric disorders, the burden of somatic diseases and problems with adaptation to the new circumstances.

PO3.49.
PSYCHOSOCIAL CHARACTERISTICS OF WOMEN ASKING FOR VOLUNTARY ABORTION

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The aim of this study was to examine psychosocial characteristics of women asking for voluntary abortion. We studied 36 women with a mean age of 24.6 years who came to the gynecological department of our hospital asking for voluntary abortion. Their sociocultural background was explored by an ad-hoc inventory. They also received a semi-structured psychiatric interview and were administered the Hamilton Scales for Depression and Anxiety. 24 (66.6%) of these women were young and non-married. 23 (63.8%) of them came without their partner. In 3 cases (8.3%) there were medical reasons for the abortion. 9 (25%) women considered their pregnancy accidental and unwanted. 15 (41.6%) of the women manifested afterwards anxiety or depressive symptoms and feelings of guilty and self-reproach. The family planning and the services that are developing in this direction are very helpful, in particular in families with young parents and low income. Adolescents must have free access to information about contraception. The decision about an abortion must be weighed very well, in order to minimize the possibility of psychiatric symptomatolgy in the woman.

PO3.50.
LIFE EVENTS, PERSONALITY PROFILES AND PSYCHIATRIC DISORDERS AMONG PATIENTS SUFFERING FROM INFLAMMATORY BOWEL DISEASE

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Patients with inflammatory bowel disease (IBD), independent of metabolic abnormalities, tend to have significant psychological impairment and disturbed social functioning. The aim of our study was to determine differences in frequency of depressive and anxious disorders, personality profiles, life events between subjects suffering from IBD and control subjects from the general population. The assessments were made during remission periods of IBD patients using the Hamilton scales for depression and anxiety, the Minnesota Multiphasic Personality Inventory, the Eysenck Personality Inventory, and the Paykel Life Events Inventory. The IBD group showed moderately elevated levels of depression, anxiety, hypochondriasis and hysteria, and of neuroticism on the Eysenck Inventory, but the differences were not significant. There was no correlation between the frequency of stressful life events in the 6 months prior to interview and the severity of IBD. Although IBD is not a functional disorder, there are certainly psychological sequelae in living with this chronic debilitating disease.

PO3.51.
SUICIDE RISK FACTORS AND VULNERABILITY IN MAJOR PSYCHIATRIC DISORDERS

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The impact of suicide risk factors (SRF) on suicide vulnerability is unclear. The Fuzzy Adaptive Learning Control Network (FALCON) was trained with 552 computerized suicide risk scales (CSRS-III) comprised of 21 SRF and validated with 60 CSRS-III. Medically serious suicide attempts were used as target variable. Impacts were expressed by variance of change in outputs of the trained neural network to all inputs. Its average for each variable reflected the direction of influence. Results demonstrated that methods of the last suicide attempt are the most significant variables. In major depressive disorder (MDD) and schizoaffective disorder (schA), as opposed to bipolar disorder (BD), gender (males>females and females>males, respectively) is rated second. Age has major impact in schizophrenia (SCH), intermediate impact in BD and obsessive-compulsive disorder (OBS), and low impact in personality disorders (PD). Hallucinations are significant among drug abused PD, even more than in SCH and schA. However, paranoid delusions are significant in SCH and schA, but absence of delusions is significant in PD and in OBS. The Global Assessment of Functioning (GAF) score is of great significance in OBS, MDD, schA and "others". All kinds of stress have intermediate to low impact in SCH, MDD and "other" patients, and absence of stress has intermediate impact in all other diagnostic groups. Separation from therapist is insignificant in all diagnostic groups. Different variables have different impacts in different diagnostic groups.

PO3.52.
THE SODIUM CHANNEL, VOLTAGE GATED, TYPE VIII, ALPHA POLYPEPTIDE GENE: A RELATIONSHIP TO SUICIDE ATTEMPT

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Family and twin studies show that genetic variation influences suicidal behavior, but do not indicate specific genes. We screened 250 genetic markers using the transmission disequilibrium test (TDT). Preliminary analysis of 79 triplets (suicide attempters and their parents) indicated (p=0.008) that genetic variation in the SCN8A (sodium channel, voltage gated, type VIII, alpha polypeptide) gene comigrates with suicide attempt. Subsequent TDT analysis in an another sample (190 triplets) confirmed that genetic variation in this gene comigrated with suicide attempt (p=0.005). Our data suggest that genetic variation in the SCN8A gene contributes to risk for suicide attempt, possibly through altered neural conduction.

PO3.53.
THE SUICIDAL ATTEMPT IN JAPAN

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Recently the rate of attempted suicides is increasing enormously in Japan. The number of committed suicides according to the Japanese

police survey of 2003 was 32,143. However, our current psychosocial and biological knowledge about suicidal behavior is still limited. Community cohort studies and meta-analyses of randomized trials have shown a relation between low serum cholesterol concentrations and risk of death by violence (homicide, suicide, accident). The aim of this study was to investigate the characteristics of patients who were admitted to the emergency room of the Tokyo Medical University Hospital and the relationship between suicidal behavior and cholesterol. In 2004, we interviewed 82 patients who attempted suicide (mean age: 35.7±14.3 years). The most common diagnosis by DSM-IV was borderline personality disorder (47.5%), followed by schizophrenia (18.3%) and depression (13.4%). The most common method of suicide was ingestion of drugs (59.7%), the second jumping (17.1%) and the third stabbing and cutting (13.5%). Furthermore we will discuss the relationship between serum cholesterol level and suicidal acts and the current views of suicidal attempts in the emergency room of the Tokyo Medical University Hospital from 1999 to 2004.

PO3.54.
FACTORS ASSOCIATED WITH RISK FOR SUICIDAL DEATH IN KOREAN ADULTS

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Recently, the rate of suicidal death has increased in Korea adults. However, few studies have examined the risk factors for suicide. This study investigated the risk factors for suicidal death in Korean adults. The study was based on the cause of death statistics between 1999 and 2001 in Korea, as published by the Korea National Statistical Office. Cases were persons who died from suicide and controls were persons who died from a natural cause between 20 and 64 years of age. We examined the risk for suicide according to age, sex, occupation, marital status, education, area of residency, and social class. Multiple logistic regression analysis was used to examine the associations between risk factors and suicidal death in males and females. The frequency and odds ratio of suicide among males were higher in young than elderly, students than managers, divorced than cohabitant, resident in country than metropolitan areas, social class III and IV than I and II. In females, the frequency and odds ratio of suicide were higher in young than elderly, and in divorced, resident in country areas, social class III and IV. In multiple logistic regression, suicidal death is associated with social class, marital status, and area of residence in male and is associated with social class, divorced and widowed, and area of residence in females.

PO3.55.
ELDERLY SUICIDE PREVENTION PROGRAMS IN HONG KONG

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Elderly suicide is a serious problem in Hong Kong. The suicide rate of people aged 65 or above is about 30 per 100,000 and is 2 to 3 times higher than in the general population. This paper will describe the elderly suicide prevention programs in Hong Kong. In particular, there are two major programs. A 3-year pilot project on elderly suicide prevention consists of three components: 1) a life-clinic based in one region of Hong Kong that provides urgent consultations for suicidal elderly; 2) an Asian-Pacific Regional Conference on Elderly Suicide Prevention; and 3) a series of territory-wide community education programs on healthy ageing and promoting mental health. Another major program is a territory-wide elderly suicide prevention program using a 2-tier model. The first tier consists of hot-line services, front-line workers, voluntary services and general practitioners. If elderly with suicide risk are detected, they will be referred to the second tier, which are fast-track psychiatric clinics, and the elderly will by visited by community psychiatric nurses. A multidisciplinary team will participate in the care of the elderly. Training for general practitioners is also a major part of the program.

PO3.56.
SUICIDE ATTEMPT WITH DRUGS: ANALYSIS OF CLINICAL AND EPIDEMIOLOGICAL VARIABLES

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The aim of this study was to assess the demographic and clinical characteristics of the patients treated at the Anti-Poison Center of Niguarda Hospital in Milan for attempted suicide by self-poisoning. 201 subjects, aged 18 years or more, treated for attempted suicide in 1999 and 2000, were included in the study. Females were overrepresented (64%). 33% of subjects presented a previous suicide attempt. 25% met criteria for psychoactive substance use disorder, 25% for mood disorder, 15% for personality disorder and 9% for schizophrenia. 25% of subjects were suffering from severe organic disease. Only 34% did not meet criteria for any psychiatric disorder. The drugs most frequently involved in self-poisoning suicide attempts were benzodiazepines and antipsychotics.

PO3.57.
PSYCHODYNAMIC PSYCHOTHERAPY IN PATIENTS WITH SELF-DESTRUCTIVE BEHAVIOR

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This study examines the effectiveness of a psychodynamic psychotherapy for patients with self-destructive behavior (accidents, injuries, excessive expenses of money, engagement in quarrels) and personality disorder. The psychotherapeutic method used for the treatment of these patients is Transference-Focused Psychotherapy (TFP), which emphasizes the direct interpretation of a negative transference. The study included 20 patients who had a borderline personality organization according to Kernberg. None of them suffered from major depression and all of them had completed a two-year therapy. One year after the treatment, none of these patients showed self-destructive behavior.

PO3.58.
SUICIDE ATTEMPTS AND PERSONALITY DISORDERS

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The aim of this study was to examine suicide attempts in relation to concomitant personality disorders. We studied 58 individuals, 36 females and 22 males, with mean age of 46 years, brought to the emer-

gency department of our hospital in the biennium 2000-2002, after a suicide attempt. All of them had had a psychiatric examination on the same day or afterwards (depending of their condition) and were followed up. The examination included a semi-structured psychiatric interview and the Minnesota Multiphasic Personality Inventory (MMPI). The majority of subjects who had attempted suicide by ingesting small amounts of drugs were young women with features of narcissistic or dependent personality. More violent attempts were committed by males with antisocial personality disorder. Alcohol and substance abuse was prevalent, far more in males. In some serious attempters we found compulsive personality features. The relation between suicide attempts and personality disorders is obvious. The differences in the seriousness of the attempt are closely related to the type of personality disorder, sex, age and social support system.

PO3.59. DIFFERENT CLINICAL APPROACHES TO SUICIDE PREVENTION BASED UPON PERSONALITY STRUCTURE

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In a private clinic, 22 patients who had made a suicide attempt in the last month underwent a multifaced examination, consisting of a neuropsychiatric evaluation including a multiaxial diagnosis following the DSM-IV; a psychological evaluation including two projective tests (Rorschach and Object Relation Technique), and a clinical interview focused on the pathway to suicide. Three different groups emerged: A) depressive patients (n=6) usually suffering from a long-standing severe life difficulty and consequent hopelessness; B) patients with severe personality disorders (n=8) reacting in an extreme way to life events and with a history of previous suicide attempts; C) patients with comorbidity of Axis I disorders and a deeply disturbed personality structure (n=8) in whom hopelessness was expressed as a negative life-balance, and previous suicide attempts were frequent, but not so common as in group B. The strategy for preventing suicide attempts in the three groups should be different. Patients, therapist and relatives need to realize that in group C early and appropriate drug intervention must be accepted, in group B an active support must be provided both by the therapist and the social network, every time that the patient steps into impulsivity and despair, while in group A the intervention should be focused on the negative loop of thinking.

PO3.60. ASSOCIATION BETWEEN ATTEMPTED SUICIDE AND PSYCHOLOGICAL OR SEXUAL ABUSE

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Using a case-control methodology, we examined a sample of 644 people, with 68% of women and 32% of men, with ages between 10 and 70 years, that were admitted to the Emergency Hospital of Belo Horizonte, Minas Gerais State, Brazil. The sample was divided in two groups: those who were admitted for a suicide attempt and those admitted for any reason, except suicide attempt (control group). A history of psychological violence was found in 79% of suicide attempters and in 48% of controls. A history of sexual abuse was detected in 33% of suicide attempters vs. 13% of controls. Both differences are statistically significant. The most significant correlation was that between a suicide attempt at any age and sexual abuse during the childhood or adolescence.

PO3.61. ADOLESCENT SELF-MUTILATORY BEHAVIOR: AN UPDATE

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Self-mutilatory behavior (SMB) is defined as a direct and deliberate destruction or alteration of body tissues without conscious suicidal intent. The most frequent type of SMB in adolescents is "cutting/slashing". The prevalence of this behaviour in the general population is reported to be 4%, but it is much higher in clinic and inpatient populations. Adolescence is the most commonly reported age of onset. The association with major psychiatric diagnoses is frequent. SMB cuts across all cultural and socio-economic levels. However, more females engage in this behaviour than males. We will discuss a number of theories, including the contagion theory, the psychodynamic explanation, the neurobiologic postulates and the role of serotonin. Then we will discuss current treatments, with special attention to selective serotonin reuptake inhibitors.

PO3.62. INVESTIGATION OF MEDICAL STUDENTS' OPINIONS ON EUTHANASIA IN ATHENS

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A study was carried out to investigate medical students' attitudes towards euthanasia (EUT) and physician-assisted suicide (PAS) in the Athens University Medical School. We used a 26 items questionnaire, collecting data about demographics, personal experience with terminally ill patients, and opinions on whether EUT and PAS should be permitted. A consecutive series of final year medical students participated in the study. 251 students completed the questionnaire (55% male). Students were subdivided in two main categories, according to whether they believed that EUT or PAS are not acceptable or should be permitted under circumstances. Initial univariate analysis showed that students who answered that EUT and PAS should be permitted under circumstances were more likely to answer "yes" to the question "Do you believe that there should be procedural safeguards regarding the legalization of EUT or PAS?" ($p<0.0001$ and $p<0.0001$ respectively), "no" to the question "Do you believe that legalization of EUT or PAS could be hazardous in everyday medical practice?" ($p<0.0001$ and $p<0.0001$) and "no" to the question "Do you believe that a request for PAS from a terminally ill patient is prima-facie evidence of a mental disorder?" ($p<0.0001$ and $p<0.0009$). This strong association remained unaltered for EUT in a multivariate logistic regression. These data suggest the need for special education of medical students on the possible relationship between the request for PAS and the existence of a treatable mental disorder (usually depression) motivating patients' interest in PAS.

PO3.63.
LACK OF PSYCHOLOGICAL SPACE IS ASSOCIATED WITH A POSITIVE VIEW ON SECLUSION

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It is likely that a lack of psychological space, having no privacy or not being able to get sufficient rest, may be more important in triggering aggression than a lack of physical space. We wanted to investigate the association between the availability of one- or more-person rooms and patients' opinions on seclusion. Data were prospectively collected from March 1999 to October 2000 from a consecutive sample of 78 secluded patients of 18 years or over. They were hospitalised on a 20-beds closed ward of a Dutch psychiatric centre providing acute short-term psychiatric care. Patients were interviewed shortly after finishing seclusion and were asked to rate nine possible views of seclusion. Fifty-four patients (69%) provided informed consent. Most of these patients were suffering form psychotic disorders (67%). For all patients we found an average score of 3.1 on positive items and 2.4 on negative items. This significant difference (p=0.001) of 0.7 means that patients have more positive than negative feelings on seclusion. Patients staying on a more-persons room had a significantly more positive view on seclusion compared to patients on a one-person room. In conclusion, staying on a more-persons room was associated with positive feelings on seclusion, whereas patients from one-person rooms were more negative. It is worrying that a lack of psychological space may make seclusion more 'acceptable' to patients.

PO3.64.
OUTPATIENT COMMITMENT LAW IN NEW YORK

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The Assisted Outpatient Treatment (AOT) program implements a law that was passed in the State of New York to address dangerousness and repeated hospitalizations among certain psychiatric patients who were non-adherent to their outpatient treatment. "Kendra's Law" was passed in 1999 to legally compel individuals to their outpatient treatment under risk of involuntary removal from the community if non-compliance and clinical deterioration occur under such a court order. The law compels AOT programs to investigate, develop and monitor treatment plans for individuals meeting eligibility criteria, petition the court for orders and renewals of orders, and provide testimony during hearings. Clients' stability and compliance with treatment plans specified by the court order are monitored closely. Providing the least restrictive combination of services that will ensure safety in the community maximizes clients' stability and compliance. Voluntary agreements to be monitored by AOT, outside of the purview of the courts, are offered to some clients. Clients have free legal representation throughout these procedures to ensure maximal protection of their civil rights. The authors present the framework of these programs, the clinical experience under the new law, some legal challenges that have occurred and how patients are affected by this strong approach. This developing model of care and its impact on clients with various diagnostic profiles will be explored. The ability of this law to ensure that clients suffering from more disabling forms of mental illness have access to a safe and supportive existence in communities will also be examined.

PO3.65.
PSYCHIATRIC MORBIDITY IN THE IRISH PRISON POPULATION: AN INCIDENT SURVEY AND ITS IMPLICATIONS IN ILLNESS MANAGEMENT IN THE REMANDED AND SENTENCED POPULATION

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This study aimed to ascertain the prevalence of mental illness and substance misuse among men committed into the Irish prison service within forty-eight hours of committal. The research ethics committee granted approval, and informed written consent was given by all participants. We interviewed prisoners in the main remand and sentenced prisons in Dublin within forty-eight hours of their committal. Those who refused to be interviewed did not cause any detectable bias. We used the Schedule for Affective Disorders and Schizophrenia – Lifetime Version (SADS-L), and a semi-structured standardised interview for further demographic and personal details. At the moment we have interviewed approximately 450 persons, and these early results are calculated from 357 cases. They suggest that lifetime prevalence rates of psychosis (8.1%) and major depression (10.1%) are high. We have noted a difference in severe mental illness (SMI) between the sentenced and remand committals, the latter having higher rates of psychosis (9.5% vs 3.5%). 2.6% of the remand committals were felt to require urgent psychiatric admission at the time of interview, compared with none of the sentenced committals. Of the remand committals 36% had a past history of substance abuse, and 32.2% had a history of substance dependence. The remand committals will form a more transient population than the sentenced. Many of them, depending on court disposals, are soon to return to the community. In a certain proportion of cases they are fit to plead, but are still significantly psychiatrically unwell. The greater prevalence of SMI in remand committals, as well as high rates of substance and alcohol morbidity, homelessness, unemployment, and recidivism delineates a need for close liaison between the forensic, local community, and homeless psychiatric services, and adequate resources to meet this need. This, of course, is a lesser problem in sentenced committals, where there is usually more time to treat illness (dependent on sentence length) and substance morbidity, if health services are adequately resourced. There is also more time for patients to obtain advice and supports to stabilise their future social circumstances via the prison probation and welfare services.

PO3.66.
PSYCHIATRIC MORBIDITY IN THE IRISH PRISON POPULATION: REMANDED MEN

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We aimed to determine the prevalence of mental illness and substance misuse among remanded prisoners. We interviewed 127 of the 400 prisoners from Cloverhill Prison, using a random stratified sampling method. We also interviewed 103 of the 123 prisoners on remand in the other centres. The Schedule for Schizophrenia and Affective Disorders, Lifetime Version (SADS-L) was administered to detect lifetime and 6-month prevalence of major mental illness. Diagnosis was made according to ICD-10 research diagnostic criteria. The six-month prevalence of psychosis was 7.6% (95% CI 5.7-10.2) and the lifetime prevalence was 12.4% (95% CI 9.9-15.5). 83.5% of the psychotic prisoners had a lifetime history of drug or alcohol problems

(95% CI 72.9-90.6). This did not differ significantly from the non-psychotic group (73.7%, 95% CI 69.7-77.2). The high levels of morbidity detected indicate a substantial unmet need for mental health services and for addiction treatment services.

PO3.67. PSYCHIATRIC MORBIDITY IN IRISH WOMEN PRISONERS

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The study aimed to estimate the prevalence of psychiatric morbidity, substance abuse problems and related health and social problems among women prisoners in the Irish prison population. Female prisoners represent approximately 3% of the Irish prison population. In June 2001 there were a total of 93 female prisoners in custody in Ireland. We interviewed 98 female prisoners (21 remanded and 77 sentenced). The Schedule for Schizophrenia and Affective Disorders, Lifetime Version (SADS-L) was used to measure prevalence of major mental illness. Substance misuse was measured using the SADS for alcohol and the Severity of Dependence Scale for other intoxicants. The twelve-month prevalence of psychosis (ICD-10 F11.5-F34) was 3.1%, for major depression 27.6% and for anxiety disorders 15.3%. The twelve-month prevalence of deliberate self-harm was 12.7%. Deliberate self-harm was found to be significantly associated with a history of substance misuse problems. The prevalence of harmful use or dependency on alcohol or drugs (ICD-10 Research Diagnostic Criteria) in the year prior to committal was 62.5%. Self reported rates of infection with hepatitis C and human immunodeficiency virus (HIV) were 35.4% and 8.2% respectively. Rates of intravenous drug use and infectious disease were higher in these female prisoners than in their Irish male counterparts. We also found evidence of a cycle of deprivation and institutionalisation.

PO3.68. DELIBERATE SELF-HARM IN THE IRISH MALE PRISON POPULATION

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The study aimed to estimate the prevalence of deliberate self-harm (DSH) amongst Irish male prisoners and to identify associated risk factors and co-morbidity levels. We interviewed 438 sentenced prisoners, 235 remand prisoners and 288 new prison committals. The Schedule for Schizophrenia and Affective Disorders, Lifetime Version (SADS-L) was used to detect lifetime and 6-month prevalence of major mental illness. Substance misuse was measured using the SADS for alcohol and the Severity of Dependence Scale for other intoxicants. DSH details were documented as part of a semi-structured standardised interview. 26.4% (n=254) of the total sample (n=961) had a previous history of DSH. The lifetime prevalence of DSH was 28.3% (n=124) for sentenced prisoners, 31.6% (n=74) for remand and 19.7% (n=56) for new committals. The 6-month prevalence of DSH was 1.8% (n=8) for sentenced prisoners, 7.3% (n=16) for remand and 3.6% (n=10) for new committals. Lifetime history of DSH was significantly associated with a lifetime history of psychosis ($p<0.001$), major depression ($p<0.001$) and substance abuse problems ($p<0.001$).

PO3.69. FACTORS ASSOCIATED WITH AGGRESSIVE BEHAVIOUR IN AN ACUTE PSYCHIATRIC UNIT: A 9-MONTH PROSPECTIVE STUDY

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A number of reasons have been suggested for an apparent increase in the rate of violent incidents in hospitals: changes in mental health policies where risk and dangerousness are emphasised as criteria for hospitalisation, the hospital milieu and structure, overcrowding and lack of experienced staff. This prospective study aimed to examine the characteristics of aggressive behaviour among adult psychiatric inpatients. For nine months, all incidents of verbal and physical aggressive behaviour exhibited by patients admitted to two adult acute wards were documented and assessed. Of the 535 patients admitted during the study period, eighty (15%) were involved in a total of 124 aggressive incidents. Of the 80, 44 (55%) had a history of previous violence and 54 (68%) had a history of substance abuse. About two-thirds of the violent events occurred in the first week of the patient's admission. The majority of patients exhibited only one incident. There were significant differences between violent and non-violent patients in terms of gender and ethnicity. Most violent patients had an ICD-10 diagnosis of schizophrenia (27%), bipolar affective disorder (28%) or substance abuse (30%). 52% of the events occurred in the evening and in most cases were directed towards the staff. Patients who exhibited aggressive behaviour had a significantly longer median length of stay, but there was no association between number of previous admissions and aggression rates. This study shows that inpatient aggressive behaviour is frequent. Although no single, dominant cause for aggressive behaviour was identified, we believe that illness acuity and degree of psychopathology are significant factors. Ward environment and staff-patient interactions require further examination. Certain diagnoses, history of previous violence, male gender irrespective of age and non-European ethnicity appear to be associated with increased rates of violence. There is a need for suitable resources and staff training to effectively identify, minimise and manage serious threats or actual violence.

PO3.70. RISK FACTORS IN THE CRIMINALIZATION OF THE MENTAL PATIENT

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There is a high proportion of people with mental disorders in the Spanish penitentiary system. It is estimated that 25% of patients with severe mental disorder will be arrested for crimes related with the disorder during their lifetime and that 10% of the prison population are mental patients. A group of psychiatrists and physicians of penitentiary institutions met in Seville, Spain in February 2003 and identified five important points at which the patient comes in contact with different professionals and could be accessible to processes of evaluation, education and attention. These could be crosslinks wherein decisions could be adopted with important implications on the future of the patients. They are: police arrest; judicial disposition and trial; preventive imprisonment and compliance of sentence; return to the community; community support services. We present a study of a

group of patients with severe mental disorders (F20-F29, F31 and F6, according to ICD-10) who have been involved in judicial processes and are currently receiving treatment from various mental health groups in districts of the Andaluz Health Service, with the purpose of determining whether, during their arrest, trial and jail confinement, their mental disorder had been taken into account, and if they had received special attention in the elaboration of psychiatric assessment and administration of specialized treatment.

PO3.71.
ASSESSMENT OF THE CAUSES OF VIOLENCE IN FAMILIES IN TEHRAN

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Domestic violence is considered as one of the most prevalent problems in families around the world, and often goes unreported. This phenomenon includes both violence against the child and the spouse. In general, the result of most of the studies done in this area indicate that the underlying causes of this phenomenon include socio-cultural, family, and personal factors. In other words, these studies have identified the causes of domestic violence at three different levels of the society, that are macrolevel (socio-cultural), mesolevel (family relationship) and microlevel (individual) factors, the interaction of which leads to the occurrence of family violence. Given the importance of domestic violence and its impact on the family (physical and psychological), the present study attempted to identify the main factors which cause the occurrence of domestic violence in families in Tehran. The results showed that, in the event of domestic violence, men are more likely to resort to physical methods whereas women resort to psychological methods. Also, our results showed that factors such as witnessing parental arguments and physical fights during childhood (in both men and women), or being the victim of domestic violence, were determining factors in predicting whether the individuals, in order to resolve their disagreements with their spouses later on, would resort to violence or not. In summary, our results indicated that, in order to explain domestic violence, one needs to take into account the interplay of all factors in the three aforementioned levels, which is an indication of the complexity of this undesirable phenomenon.

PO3.72.
THE INDEX OFFENCE - A GAME OF CHINESE WHISPERS?

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Patients in secure psychiatric units are often detained in hospital for long periods. Over time memories of the circumstances surrounding admissions fade and facts become distorted, especially when information is passed from one party to another. We carried out a survey to determine how well health professionals involved in the care of patients in a medium secure unit recalled details of index offences. Detailed information about the index offences was obtained for inpatients at a medium secure unit. Mental health professionals involved in the management of these inpatients were asked about several different aspects of the index offences of these patients. Responses were evaluated against the facts of each case, rated for depth of detail and accuracy of recall. Recall of the details of index offences was generally poor. There was a wide variation in the marks achieved by different members of staff. The index offences of some patients were better known than others but this was not related to either length of admission or recency of admission. Performance on different questions varied. In conclusion, the overall recall of the details of index offences was poor. Many of the interviewees commented "I should know this" and were surprised at the difficulty they experienced talking about their patients. We expect that similar results will be found in other clinical settings. The outcome of this survey has important implications for the care of these patients and the safety of both staff and public, as decisions about care are regularly taken on a multidisciplinary basis with the presumption that everyone involved is aware of nature and severity of the index offence.

PO3.73.
PROTECTIVE AND VULNERABILITY FACTORS TO DANGEROUS BEHAVIORS IN ADOLESCENTS

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To collect data on the frequency of protective and vulnerability factors in a group of adolescents in the community is important to guide the development of interventions aimed to prevent dangerous behaviors. We carried out, in the city of Basin (Ecuador), a descriptive epidemiological study, selecting randomly from a population of 1500 youths, students of two secondary schools, 100 subjects of the mean age of 15 years. We used the questionnaire for protective factors and vulnerability developed by the Canadian Association of Law Teachers. Three categories were explored: resilience/emotional, capacity of citizenship and social structures. Protective factors were not represented with a high frequency in the sample: 49% of the subjects was found to have an adequate self-esteem, 18% had adequate communication abilities and 20% had abilities to handle routine conflicts. Vulnerability factors were much more frequent, with 43% of the youths having feelings of despair, 48% conflicts in sexuality, 58% contacts with drug abusers and 50% a condition of poverty.

PO3.74.
THE VICTIMS OF THE STALKER: PSYCHOLOGICAL DAMAGE

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This study describes several aspects of the psychological damage of the victims of stalkers: the feeling to have suffered a physic-emotional violence; the feeling of loss of control of one's life; the feeling of social isolation; the feeling of being unable to change the situation; the feelings of guilt; the somatization of anxiety; the abuse of substances. These elements allow, from a clinical viewpoint, to identify the needs of the victim and to delineate the therapeutic plan and, from a forensic viewpoint, to evaluate objectively the damage suffered by the victims.

PO3.75.
THERAPEUTIC ERRORS IN THE RELATIONSHIP BETWEEN THE PSYCHIATRIST AND THE STALKER

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This study describes some errors committed in clinical practice in the management of stalkers: the therapists blinded by the complex of the "savior"; the abused therapists; the therapists who do not know how to manage the irrealistic demands of the patients; the therapists manipulated by the stalker; the therapists who are not aware of the syndrome of the "false victimization". Knowledge of the dynamics between the therapist and the stalker can avoid several harmful con-

sequences, including the exacerbation of the situation or the therapist becoming himself a victim of the stalker.

PO3.76. SUBTHRESHOLD SYMPTOMATOLOGY OF MOOD DISORDERS SPECTRUM IN A SAMPLE OF ANTISOCIAL SUBJECTS

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The spectrum model identifies and recognizes the partial, atypical and mild clinical features of a full-blown disorder; all this often neglected symptomatology, when enduring, may be distressing and may influence treatment selection and response. The aim of the present study has been to evaluate spectrum symptomatology referred to panic agoraphobic, mood, social anxiety, obsessive-compulsive and eating disorders spectrum symptoms in a sample of subjects with antisocial personality disorder. From a total sample of 129 male subjects convicted in the prison of Messina, 24 subjects with antisocial personality disorder (subgroup A) and 21 nonclinical subjects without axis I and II disorders (subgroup B) were selected. Both groups were assessed with the General 5-Spectrum Measure (GSM-V), which evaluates the lifetime presence of spectrum symptomatology. In the subgroup A, we found a high frequency of social anxiety symptoms (33.3%), followed by panic agoraphobic symptoms (25%), obsessive-compulsive (16.7%) and eating symptoms (4.2%), while mood spectrum symptoms resulted absent. No significant differences were evidenced between the two subgroups in spectrum symptoms except for mood symptoms. The most interesting finding is the complete absence of mood spectrum symptoms in antisocials. This seems relevant to the recent hypothesis of an inverse relationship between psychopathy and depression, as the two conditions would represent mutually exclusive constructs.

PO3.77. OLANZAPINE VS. HALOPERIDOL FOR THE MANAGEMENT OF AGGRESSIVE BEHAVIOR IN A FORENSIC PSYCHIATRIC HOSPITAL

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We tested the impact of clozapine vs. haloperidol on measures of aggressiveness in a sample of 60 subjects admitted to the forensic psychiatric hospitals of Aversa, Naples, and Barcellona, Italy. The patients were randomly assigned either to clozapine (30 mg/day) or to haloperidol (12 mg/day). The Dress-Durkee Hostility Inventory and the Aggressive Questionnaire were administered before and after treatment. On both scales, there was a statistically significant superiority of olanzapine in reducing the total scores.

PO3.78. DEVELOPMENT OF AN INTEGRATED CARE PATHWAY FOR THE ASSESSMENT OF MENTALLY DISORDERED OFFENDERS

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The Grampian forensic psychiatry service provides assessment and treatment for mentally disordered offenders and other individuals with complex mental health and social needs. Patients are admitted from the criminal courts, prison service and Scotland's maximum secure facility. The aim of introducing the integrated care pathway (ICP) was to provide an agreed structure to the assessment process that members of staff could use. This aims to identify needs for patients ongoing care and to inform psychiatric recommendations to the court. The project involved all disciplines working within the service. A consensus agreement by each discipline involved in the care pathway was achieved for the individual elements of the multidisciplinary assessment process and the design and layout of the ICP document. A first draft was circulated outside the core project team for wider comment and training provided on the use of the document. Finally, a time plan was agreed for implementation of the pathway. The document was completed and implemented and is now used by all multi-disciplinary staff within the clinical team. The process of setting up an ICP can be lengthy and time consuming, as all members of the team have to be involved. However, once established, the staff can be confident that their patients follow an agreed evidence based protocol of care.

PO3.79. PSYCHIATRY AND RISK OF AGGRESSION: RESULTS OF A SURVEY

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A questionnaire aimed to identify any aggression suffered from the patients was distributed to the staff of mental health services of the town of Genoa during April 2003. The majority of reported assaults were slight injuries suffered by nursing staff and they mostly occurred in a ward. Patients with schizophrenia, affective disorders and personality disorders (especially borderline personality disorder) were most frequently involved. The authors examined possible risk factors for an episode of violence, including variables concerning the patient and variables related to the therapist, particularly countertransference. The implications of the data for prevention of this occupational hazard are discussed.

PO3.80. ANALYSIS OF 1019 CASES OF SEXUAL ABUSE

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A questionnaire aimed to assess the prevalence of sex abuse and its characteristics in the general population was distributed in the city of Genoa through the Italian Association for Demographic Education (AIED) during a period of 42 months. Of 1019 respondents, 588 reported they had experienced some kind of sexual abuse. The abuse occurred in 42.2% of cases before the age of 10. The most frequent kind of abuse was by kisses and/or caresses (38.3%). Abusers were mostly acquaintances of the victims (38.8). 46.9% of the subjects reported the occurrence of dissociative symptoms at the time of assault. The presence of these symptoms was not correlated to the call for help. Women and children were the most frequent victims of abuse. Only 156 respondents asked for help. 35.7% of the abused subjects declared they do not want to ask for help for that kind of experiences. These data show how widespread is the phenomenon of sexual abuse and how significant are its emotional consequences.

PO3.81.
SUBSTANCE USE AMONG JUVENILE DELINQUENTS AT SEKOLAH TUNAS BAKTI, KUALA LUMPUR

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Using an ad-hoc questionnaire, we surveyed 61 out of 103 inmates from an approved school in Kuala Lumpur, selected by random sampling. The questionnaire included questions on tobacco, alcohol and drug use and on the crimes they had committed before being sent to the school. We found that about 95% of the inmates used tobacco, with a mean age of first usage at 12 years old. Cannabis (61%) was next to tobacco in the list. Alcohol contributed to about 54% and solvents to about 31% of the sample. Amphetamines and heroin usage is now on the rise, both contributing to about 16%. Of the crimes committed, vehicle theft formed the majority (36%), followed by house breaking (24.6%), and stealing (19.7%). Adolescent drug use and delinquency should not be taken lightly, as these behaviors may persist into adulthood. Intervention at this early stage may decrease the likelihood of aggression due to substance abuse and of delinquent behavior in later years.

PO3.82.
PROSPECTIVE EXAMINATION OF THE COURSE AND STABILITY OF PERSONALITY DISORDERS IN DIFFERENT ETHNIC GROUPS

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This study aimed to examine and compare the course and stability of schizotypal (STPD), borderline (BPD), avoidant (AVPD) and obsessive-compulsive (OCPD) personality disorders (PDs) among three ethnic groups over two years of prospective multi-wave follow-up. The Collaborative Longitudinal Personality Disorder Study (CLPS) is a National Institute of Mental Health (NIMH)-funded prospective naturalistic study of personality disorders and major depressive disorder being conducted at four institutions (Brown, Columbia, Harvard, and Yale Universities) in the United States. Seven hundred and thirty-three participants who met criteria for one or more of the four PDs or for major depressive disorder (MDD) without any PD were recruited from multiple clinical settings. The current report is based on 680 participants for whom follow-up data were available; of these, 108 are African-American, 94 are Hispanic-American, and 478 are Caucasian. Criteria were rated and diagnoses established by experienced research clinicians using the Diagnostic Interview for Personality Disorders-IV (DIPD-IV). Follow-up assessments, conducted at 6, 12, and 24 months following the baseline assessment, included monthly ratings of all criteria for the four study PDs (DIPD-FAV). Inter-rater, test-retest, and longitudinal reliabilities were good for the diagnostic assessments. Lifetable survival analyses, with Kaplan-Meier methods, were used to compare the rates of "remission" from the four PD groups across the three ethnic groups. Overall, PD "remission" rates ranged from roughly 25% to 40% for a clinically significant and stringent definition of improvement (12 consecutive months with two or fewer PD criteria). Survival analyses revealed no significant differences in the time to remission by ethnicity for STPD, AVPD, and OCPD groups. For BPD, the three groups differed significantly (Wilcoxin test for equality of rates, p=0.04), with the Hispanic group showing significantly less remission (15%) than the African-American (35%) and Caucasian (31%) groups. In conclusion, viewed as categories, PDs show moderate levels of stability over 24 months of follow-up, and their course may show some different patterns across different ethnic groups.

PO3.83.
DEVELOPMENT AND EVALUATION OF A COGNITIVE BEHAVIOUR THERAPY PROGRAMME FOR PATIENTS WITH PERSONALITY DISORDERS

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Some studies have showed favourable effects of cognitive behaviour therapy on the course of personality disorders. Nevertheless there is still a paucity of standardised cognitive behaviour group therapy approaches targeted at a wide spectrum of indications, and which can be meaningfully integrated into existing health care concepts. Against this background, we developed a new group programme (Bern Integrative Therapy, BIT) for patients with personality disorders from all clusters (A to C; DSM-IV). The therapeutic methodology of BIT is primarily oriented towards psychoeducation, clarification of different styles of dysfunctional personality states and modification of cognitive, emotional and behavioural processing, receiving and sending abilities. Currently a multi-centre study is being conducted evaluating the BIT. 70 patients with personality disorders (according to DSM-IV) participate. The experimental group (n=35) receives the new therapy programme, the control group (n=35) is treated with a "classical" behaviour therapy approach (social skills training, SST). After a therapy phase of 15 weeks, a catamnestic phase of 37 weeks follows. Allocation to the two treatment conditions is randomised. The data collected till now indicate an improvement of self-efficacy, emotional coping, and maladaptive interpersonal behaviour styles in the experimental group. Furthermore, a reduction of symptomatic impairments and the individual suffering as well as an improvement of the level of psychosocial functioning can be observed. These first results might indicate that our new therapy approach could be used in psychotherapeutic standard care within and outside psychiatric hospitals.

PO3.84.
NOT DEFICIT BUT EXCESS: COPING IN PERSONALITY DISORDERS

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DSM diagnoses of personality disorder (PD) lack a theoretical background and are useless for guiding psychotherapy. A number of attempts are currently undergoing in order to adapt the Axis II taxonomy to more informative, useful, and theoretically sound psychological constructs, such as coping. Furthermore, the modification of coping strategies improves the PDs' prognosis. The aim of this work is to study the coping strategies that characterize PDs and, accordingly, should be the focus of the psychological interventions. We studied 382 outpatients with a broad range of PD severity. We used the Personality Diagnostic Questionnaire (PDQ-4), which assesses DSM PD criteria and the COPE, which assesses the disposition to use 15 different coping strategies structured in three wider coping dimensions: problem-focused, emotion-focused and dysfunctional. Subjects were assigned to several levels of PD severity by means of the PDQ-4 and inter-group differences in coping were tested by ANOVA. The use of

some adaptive coping strategies slightly decreased with the severity of PD ('positive reinterpretation' and 'acceptance'), whereas dysfunctional strategies ('venting emotions', 'denial', 'mental disengagement', 'behavioral disengagement' and 'alcohol/drug use') were markedly increased. A strong relationship between PD severity and the relative use of adaptive and maladaptive strategies was found. PDs, as a whole, are more characterized by the over-utilization of dysfunctional strategies than by a deficit on adaptive ones. Psychological interventions should primarily focus on the extinction or blockade of dysfunctional strategies.

PO3.85. IMPULSIVITY, APATHY AND COGNITIVE EXECUTIVE FUNCTIONS

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Impulsivity, apathy and cognitive executive dysfunction are all neuropsychological features which may be present in the context of both axis I and axis II psychopathology. Moreover, they can be considered as "trait" features within non-clinical personality organizations. 50 non-clinical subjects (20 males and 30 females, mean age 42.08±15.9) underwent a psychometric and neuropsychological examination with the Marin Apathy Scale, the Barratt Impulsiveness Scale, the Wisconsin Card Sorting Test (WCST) (number of completed series and perseverative errors), the Stroop Colour Word (attentional resistance to interference), and the AB-AC (proactive mnestic interference related to learning) for the evaluation of executive functioning. Negative correlations were observed between apathy and impulsivity, positive correlations among lower performances at WCST, apathy and impulsivity. Moreover, attentional resistance to interference and proactive mnestic interference related to learning were related with perseverative errors but not with the number of completed series at WCST. No correlations were observed with apathy and impulsivity. A growing body of research supports the role of executive functioning in the dimensions of apathy and impulsivity in clinical samples of axis I and axis II disorders. The present study showed that also in non-clinical samples executive functions may contribute to plasticity of apathic and impulsive behaviors. In this context, as executive functioning is a complex organization which involves forward planning, cognitive flexibility and self-regulation, it would be more useful to identify the simpler, specific processes that underlie the global executive function.

PO3.86. COGNITIVE SYMPTOMS IN PSYCHOSES AND NEUROBIOLOGICAL HYPOTHESES: A CONTROLLED STUDY

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Thought disorders are among the most important cognitive symptoms in psychoses. They occur with a high frequency in schizophrenia and affective psychoses, and within the families with affected individuals. The aim of the present study was to explore the discriminant significance of cognitive symptoms in bipolar and schizophrenic patients. The sample consisted of 10 schizophrenic patients and 10 bipolar patients (DSM-IV criteria) and 10 healthy controls. We used the Italian version of the Thought Disorder Index (TDI). We found statistically significant differences between schizophrenic and bipolar patients and between bipolar patients and controls. Qualitative analysis suggested some specific features in the two diagnostic groups. Two alternative hypotheses about thought disorders as indicators of concurrent and construct validity of the concept of psychosis were formulated: a) anomalies in excess of semantic memory and b) deficit of working memory.

PO3.87. QUETIAPINE IN BORDERLINE PERSONALITY DISORDER

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We present the preliminary data on six outpatients with borderline personality disorder (DSM-IV criteria), treated with quetiapine for 12 weeks. The target sample will consist of 15 patients. Quetiapine clinical efficacy has been evaluated by means of the Hamilton Depression and Anxiety Rating Scales, the Brief Psychiatric Rating Scale (BPRS), the Modified Overt Aggression Scale, and Clinical Global Impression (CGI). Possible side effects have been assessed by the Krawiecka Manchester Rating Scale (KMRS). Cognitive functionality has been analysed using a neuropsychological set of tools to assess attention, cognitive flexibility, psychognosis, and cognitive functions. All the patients (5 females, 1 male; mean age 34±4.5 years) completed treatment. The mean quetiapine dose was 300 mg/day (range 250-550 mg/day). Impulsivity, aggressiveness, depression, and anxiety remarkably decreased ($p<0.05$), together with the BPRS rating for the eidetic dimension ($p<0.05$). We also observed an improvement in theory-of-mind performances, selective attention (Stroop Test) and executive functions (Wisconsin Card Sorting Test). No patient presented any side effect, except a perceived slight sedation reported during the first four days of therapy.

PO3.88. PERSONALITY AND PSYCHOPATHOLOGY: CORRELATIONS BETWEEN PSYCHOPATHOLOGICAL DIAGNOSIS AND PERSONALITY CHARACTERISTICS

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We present the results of a pilot study aiming to assess the possible relations between Axis I and II disorders on one side, and personality variables such as those assessed by Cloninger's Temperament and Character Inventory (TCI), alexitimia, the cognitive-emotional organization of personality, and the attachment model on the other one. We enrolled 20 consecutive patients recruited in a neuropsychiatric clinic of Rome between November 2003 and February 2004. All patients were administered the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) and Axis II Disorders (SCID-II), the Brief Psychiatric Rating Scale (BPRS), the Hamilton Depression Rating Scale (HDRS), the Bech-Rafaelsen Mania Scale (BRMS), the Temperament and Character Inventory (TCI), the Toronto Alexitimia Scale (TAS-20), the questionnaire of Experience in Close Relationship (ECS), and the Questionnaire for Personal Sense (QSP). The administration of tests and scales was made when the subjects could properly answer questions, after the acute phase of disorder. In the sample examined, the association between alexitimia and Axis I disorders appeared to be remarkable, as well as the association of specific temperamental traits with different Axis II disorders.

PO3.89.
ATTACHMENT STYLES, ALEXITHYMIA, DEPRESSIVE AND ANXIETY SYMPTOMS IN UNIVERSITY STUDENTS

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Evidence has been provided that insecure attachment is a risk factor for psychiatric disorders. In the present study, the attachment style was investigated in 267 university students by means of the Bartholomew Scale (BS), the Attachment Style Questionnaire (ASQ) and the Parental Bonding Instrument (PBI). Alexithymia was evaluated by means of the Toronto Alexithymia Scale-20 items (TAS-20). Psychopathological assessment was carried out by means of the Zung Self-Rating Anxiety Scale (SAS) and the Zung Self-Rating Depression Scale (SDS). An insecure attachment style was observed in 56% of the subjects, alexithymia in 33%, anxiety and depressive symptoms in 43% and 33% respectively. Subjects with anxious symptoms and those with depressive symptoms, as compared with subjects without symptoms, showed: a) less confidence in self and others, more need for approval, higher emotional involvement and discomfort with closeness, as assessed by the ASQ; b) a perceived parental attachment pattern characterized by overcontrol and lower care, as assessed by PBI; c) more difficulty in the identification and description of feelings on the TAS-20. Insecure attachment style, alexithymia, anxious and depressive symptoms were significantly related to each other. Our findings suggest that an insecure attachment style may be a risk factor for anxiety and depressive symptoms and that this relationship is mediated by an impairment in the identification and description of feelings.

PO3.90.
EMOPHANIA, A "POSITIVE" VIEW OF BORDERLINE PERSONALITY DISORDER

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One of the most significant fears of a person with borderline personality disorder (BPD) is "to lose oneself" in a therapy. Many are those who think (wrongly) that it is their borderline disorder which made them what they are now. Thus, some may violently reject the BPD diagnosis because, in their mind, they would no more be "me" but "my disorder", a situation which would be highly destabilizing. Therefore, they say: "if I am sensitive it is because I have BPD" or "who would I be without this disorder?" The truth is that "it is not because I suffer from a borderline disorder that I am sensitive, but because I am sensitive I was in a population at risk to develop a BPD". Therefore, "recovery from the disorder is not to lose my sensitivity but to get rid of my BPD". In my experience, BPD people have almost all (at least inside of them) of the following traits defining emophania: altruism, self-derision, kind-hearted, curiosity, empathy, enthusiasm, very demanding of oneself, strength of character, generosity, modesty, naivety, open-mindedness, taking a new look at oneself, sensitivity, probity. What is the connection between "being emophane" and "having a borderline disorder"? According to my theory, a person suffering from BPD is an "emophane". An "emophane" person may not suffer from any disorder, or he/she may have developed psychiatric disorders such as an avoidant personality disorder or BPD.

PO3.91.
SPECT VIDEO EMOTIONAL ACTIVATION PARADIGM IN BORDERLINE PERSONALITY DISORDER: A PILOT STUDY

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Borderline personality disorder is mainly characterised by instability of self-esteem, interpersonal relations and mood. The tendency to react to frustrations with acting outs suggests the presence in such patients of a difficulty in the symbolising process, that does not allow a correct "mentalization" and therefore the attribution of a meaning to the stressful events. Several neurobiological studies of borderline personality disorder show a pattern characterised by hypoactivity of frontal and prefrontal areas and a malfunctioning of amygdala. We performed single photon emission tomography (SPECT), using a video emotional activation paradigm, in a patient with borderline personality disorder and a control subject. Faced with violent scenes in the video, the patient, but not the control subject, showed an activation of limbic areas and prefrontal cortex. This activation pattern may be the neurobiological correlate of a cognitive activity put in action in order to manage the strong emotion triggered by the video, absent in the control subject.

PO3.92.
THE ROLE OF FAMILY FACTORS IN THE DEVELOPMENT OF GENDER IDENTITY DISORDER

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Gender identity disorder, characterized by strong and persistent cross-gender identification accompanied by persistent discomfort with one's assigned sex, is a multifactorial clinical condition. Biological, psychological, social and family factors each play a determinant role in the development of the disorder. The aim of this study was to examine the role of family factors. Eighteen male referrals for treatment of gender identity disorder and their family members were included. A semistructured interview was carried out to investigate family variables including closeness/distance, hierarchies, and interactions. Gender identity disorder was shown to be significantly related to family factors of "mother-son enmeshed relationship", "higher position of the mother in family hierarchy", and "mother-son conflictual interaction". Mother-son enmeshed relationship develops, reinforces and/or establishes the opposite sex characteristics through "identification" mechanism. Higher position of the mother at the top of family hierarchy serves to continue the pathological process of identification with opposite sex (the mother) through the mechanism of "paradoxical authority". Although "mother-son conflictual interactions" are a product of the prementioned family factors, they can persist and interfere with the process of psychotherapy, predicting relapse.

PO3.93.
LIVING WITH CONTRADICTIONS: EXPERIENCES OF SAME-SEX ATTRACTED MEN WITHIN HETEROSEXUAL MARRIAGE

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Married or previously married men who have sex with men are confronted by a unique range of issues and challenges in regards to self-identity and the negotiation of transitions between personal and pub-

lic identities. Such challenges highlight the complex interrelationships between the lived experience of same-sex attraction, and the discursive context in which such attraction occurs for them: heterosexual marriage. In-depth interviews were conducted with 25 men who have sex with men who were previously, or currently, married to a woman. Open-ended questions were used to elicit participants' childhood experiences, identity and disclosure issues, reasons for marriage, sexual behaviours, children, mental health issues, their regrets, and their hopes for the future. Some thought of themselves as 'gay' before they married; some realised after; a few saw themselves as attracted to both men and women. A common theme was the importance of children, as a reason for marriage (along with other societal pressures and the internal pressure to be 'straight'), and as one of the best things about their life. The men described their periods of confusion and inner turmoil in terms of sadness and pain, some reporting depression and suicidality. Most situated themselves in a caring stance in relation to their wife/ex-wife, expressing concern for her well-being, regret for the pain that they directly or inadvertently caused her. Some situated themselves in an antagonistic stand-off. These self-representations are discussed in the light of the previous literature, with a focus on suggestions for therapeutic goals and strategies.

PO3.94. MENTAL HEALTH TREATMENT IN FAMILIES WITH INCESTUOUS RELATIONS

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The Center for Studying and Attending Relations with Sexual Abuse (CEARAS) provides mental health treatment to families with incestuous relations referred by the courts. The existence of other incestuous relations in the same family, the previous knowledge of the incestuous relation by the mothers, and the lack of a symbolic perception of the boundaries, are among the features which have been observed in the families. The data have been obtained through the analysis of 114 incestuous families in 4 years. Other incestuous relations beyond the denounced ones have been found in 40% of the families. The mother's involvement has been observed through her difficulty of denouncing the partner. 42% of the incestuous relations involving father or stepfather (71% of total) have been denounced by the mother. However, 47% of these denouncements have been made after separation of the couple and the others have occurred as a consequence of the conflicts between the couple. As an illustration, mother's complaints about use of alcohol and other drugs by the partner have appeared in 69% of these families whose mothers have denounced the current partner, contrasting with the percentage of these complaints in the rest of the sample which involves fathers or stepfathers: 17%. We consider the genital sexual relation between members of the family only a symptom of an incestuous familiar dynamics. For this reason the treatment must involve the whole family.

PO3.95. PERSONALITY, LIFE EVENTS AND DISSOCIATIVE SYMPTOMS IN SUBJECTS WHO EXPERIENCED A CAR ACCIDENT

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This study analyses personality, life events and dissociative symptoms in a sample of car accident subjects, following a psychodynamic orientation. We collected a sample of 50 accident subjects, hospitalized in a traumatological ward, and a control sample without a history of accidents for at least two years. The samples were matched for age, sex and education. We administered a semistructured interview focusing on the accident, the Paykel's Interview, the Minnesota Multiphasic Personality Inventory (MMPI) and the Dissociative Experience Scale (DES). There was a significant difference (p=0.002) in the prevalence of life events (Paykel's interview) in the six months before the accident: the probands experienced more life events, above all in the undesiderable and uncontrollable categories. The MMPI's Simulation and Hypochondria scores were higher in the accident sample. Probands also had significantly high scores on factor 2 ("typical activity of dissociated states") and factor 3 ("depersonalization-derealization") of DES. We intend now to explore the relationships between dissociative symptoms, personality and life events.

PO3.96. REPETITION, DISSOCIATION AND LIFE EVENTS IN ACCIDENTS

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Road traffic, job, home and leisure accidents are an important cause of morbility and social problems in the industrialized world. The aim of this study is to investigate the psychological factors related to having an accident, referring to a psychodynamic theoretical background. We examined 338 subjects, aged 14-65, coming to an emergency ward between 15 and 22 March 2004, using a semi-structured interview, Paykel's Interview for Recent Life Events and the Dissociative Experiences Scale (DES). 107 of them completed both the interview and the tests: 81% reported at least one other accident in their life, 46% in the last two years; 46% reported at least one event believed to be traumatic. 46% of the subjects expressed their awareness about recent life changes and 48% accepted responsibility about the accidents. There was a strong correlation between total life events and mean DES values (p=0.003); factor 1, imaginative absorption-involvement (p=0.002); factor 2, dissociative states related activities (p=0.041); and factor 3, depersonalization-derealization (p=0.037).

PO3.97. ACCULTURATIVE STRESS: A COGNITIVE-SOMATIC TREATMENT MODEL

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This presentation outlines an acculturative stress treatment model derived from extensive research with subjects from over 20 countries. Acculturative stress ("culture shock") is a reaction of international sojourners to cross-cultural conflicts, often developing when one's internalized cultural norms, both conscious and unconscious, become threatened or confused. A frequent symptom is cognitive anxiety, referring to the cerebral processes that produce worry and the effects of worry, including concentration difficulties and the experience of anxiety-provoking thoughts and images. Another common symptom is somatic anxiety: the presentation of physical/bodily complaints in response to stress. The model is a short-term treatment designed to provide culture-specific knowledge and support and to mediate the effects of acculturative stress, particularly cognitive anxiety and somatization. It employs an integrated approach involving psychotherapy, psycho-education and psychotropic medication. Ini-

tial sessions assess the stressors affecting the patient, the patient's symptomatology, and appropriate treatment. The presentation outlines effective cognitive interventions utilized by the model, intended not to alter the patient's cultural belief system, but to identify and modify conflicts induced by cross-cultural inconsistencies. It suggests when anti-anxiety or other medications may be indicated. It also discusses effective treatment of somatic discomfort via an established relaxation training protocol enabling the patient to identify and ultimately control distressful physiological cues. The model uses diagnostic tests to rule out underlying psychopathology in select cases and suggests when psychotropic medications may be indicated. The model's combination of integrative mind-body therapeutic approaches has proven to reduce symptoms and promote lasting acculturative adjustment.

PO3.98. OBSERVATIONAL STUDY ON PSYCHIATRIC SYMPTOMS IN IMMIGRANTS IN A FIRST AID SETTING

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We studied a sample of 834 patients referred for psychiatric consultation in a first aid setting during the first six months of 2003. Immigrants represented 9.3% of the sample. The average age of Italian patients was 46 years, that of immigrants was 33 years. Among immigrants, the most represented area of origin was East Europe, followed by North Africa and Sub-Saharan Africa. The most prominent disorders in the Italian group were depressive and anxious-depressive syndromes, while in the immigrant group they were psychotic syndromes and anxiety disorders (p=0.03). We are now extending the sample, and analyzing quali-quantitative differences in presented symptoms (in particular in the characteristics of psychotic symptomatology), with a specific focus on transcultural and ethnical issues.

PO3.99. THE SICK BUILDING SYNDROME: A BRAZILIAN STUDY

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The sick building syndrome (SBS) is a condition in which occupants of a building experience acute health effects that seem to be linked to time spent in a building, but no specific illness or cause can be identified. Building occupants complain of symptoms associated with acute discomfort: headaches; eye, nose and throat irritation; a dry cough; dry or itchy skin; dizziness and nausea; difficulty in concentrating; fatigue; mood disturbances (depression and irritability) and sensitivity to odors. Specific causes of SBS remain unknown. We report the results of a Brazilian clinical study investigating aggression in relation to serum testosterone in patients with SBS. We applied the Aggression Questionnaire Revised, Brazilian Version (AQ-RBV) to 16 females with SBS. The results suggest that aggression and irritability in female SBS patients can be increased by elevated testosterone serum concentration.

PO3.100. NEUROPSYCHIATRIC MORBIDITY IN WALL PAINTERS EXPOSED TO SOLVENTS IN RIO DE JANEIRO, BRAZIL

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Occupational exposure to solvents can cause neuropsychiatric problems. We carried out a clinical and neuropsychological evaluation of painters exposed to solvents in the maintenance department of the Federal University of Rio de Janeiro, comparing them with non-exposed workers. Exposed workers (n=58) and non-exposed workers (n=20) underwent clinical evaluation, laboratory tests, occupational anamnesis, standard psychiatric anamnesis. We used the Clinical Interview Schedule (CIS), the Q-16 test, the Rey Osterreith Complex Figure (ROCF) Test, the Coding Subtest of the Wechsler's Adult Intelligence Scale (WAIS), the Computerized Visual Acuity Test (TAVIS2R) and both series of Manual Dexterity Tests. The workers were male, with an age ranging from 41 to 50 years, and 13 years of average employment time. Among the exposed workers, about 70% had another income source and the most frequent occupation was that of free lance painter. As regards CIS in the exposed group, 93% were considered "negative" for values >19; the highest scores were found for reported symptoms such as irritability, sleep disturbance and lack of concentration. All the non-exposed workers were considered "negative". The Q-16 test revealed 79% of "negative" workers in the exposed group and 100% in the non-exposed group. The neuropsychological evaluation found significant differences between the two groups.

PO3.101. SELF-INJURIOUS BEHAVIOUR IN ADULTS WITH INTELLECTUAL DISABILITY

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It has been reported that self-injurious behaviour occurs in 2-13% of people with intellectual disability and that is commoner in males, in severe intellectual disability and in autism. To investigate this, we assessed the presence of self-injurious behaviour through a direct clinical observation in a sample of 48 adults with intellectual disability (23 females, 25 males; age range 25-34 years; average 41.4 years; 7 with mild, 27 with moderate, 8 with severe and 6 with profound intellectual disability; all from a semiresidential structure). 7 subjects (14.58%) presented self-injurious behaviour (1 eye poking, 2 skin picking and scratching, 3 biting and 1 head banging): 3 were females, 4 males; 2 with moderate, 4 with severe and 1 with profound intellectual disability; 3 with a diagnosis of pervasive developmental disorder. Two were taking risperidone 2 mg/day, 2 fluvoxamine 200 mg/day, 1 risperidone 9 mg/day and fluvoxamine 100 mg/day, 1 sulpiride 200 mg/day and 1 was without pharmacological treatment. The results of this study seem to confirm international literature data and therapeutical implications of self-injurious behaviour in people with intellectual disability.

PO3.102.
EATING DISORDERS AND OBESITY IN PEOPLE WITH INTELLECTUAL DISABILITY

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In this study a sample of 48 not institutionalised adults with intellectual disability (23 females, 25 males; age range 25-34 years, average 41.4 years; 7 with mild, 27 with moderate, 8 with severe, 6 with profound disability) was investigated for eating disorders, using the Diagnostic Assessment for the Severely Handicapped-II (DASH-II) and ICD-10 or DSM-IV-TR diagnostic criteria. 4 subjects (8.33%) were diagnosed as suffering from an eating disorder (1 male, 3 females, 1 with mild and 3 with moderate disability). The diagnosis was binge eating disorder in one case, eating disorder not otherwise specified in two and anorexia nervosa in one. As a second step, the body mass index (BMI) was calculated for every single subject. Three subjects (6.2%) had a BMI<18.5, 16 (33.0%) had a BMI of 18.5-24.9, 16 (33.0%) had a BMI of 25.0-29.9 (6 receiving antipsychotic treatment) and 13 (27.8%) had a BMI>30 (3 receiving antipsychotics).

PO3.103.
QUALITY OF LIFE IN PEOPLE WITH INTELLECTUAL DISABILITY OR MENTAL DISORDERS

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The Quality of Life Instrument Package (QoL-IP) was translated to Italian through four revisions. The final instrument was administered to a sample of 200 adult subjects, randomly chosen among patients with intellectual disability (ID), mood disorders or schizophrenia, and healthy people. ID affected QoL less significantly than mental disorders. People who were considered clinically recovered from a psychiatric disorder still had significantly higher scores than healthy controls.

PO3.104.
A NEEDS ASSESSMENT IN PATIENTS WITH FORENSIC LEARNING DISABILITY

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We report the results of a needs assessment conducted on a group of patients with forensic learning disability originating from two adjoining Strategic Health Authority areas in Northern England. We found that patients described under the rubric of forensic learning disability are a heterogeneous group with wide ranging psychiatric needs. The majority of population studied were cared for outside their geographical area of origin, either in specialist national health service (NHS) facilities or the independent sector. Those with an additional diagnosis of mental illness were most likely to be detained in NHS facilities within the region; a diagnosis of personality disorder was associated with placement in either a high secure setting or the independent sector. Individuals with no diagnosis other than mental retardation were most likely to be detained in services provided by specialist learning disability/mental health trusts out of the area. There were a small group of female patients who were all placed outside the region. Offending behaviour was most likely to consist of violence against person, sexual offences and arson. The majority of the population assessed were felt to have long-term needs. The study raised important considerations for statutory provision of forensic services across the area, particularly the need to offer services with a treatment regime germane to the needs of the population under review.

PO3.105.
INTEGRATION OF HANDICAPPED CHILDREN IN THE COMMUNITY

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Our study focused on children with psychic/motor problems, with special regard to their adjustment within the family and their work and social integration after leaving school. The investigation allowed us to elaborate a number of tools (medical, psychic-pedagogical, social, etc.) which can help to face the problem of handicapped children.

PO3.106.
PRENATAL AND POSTNATAL FACTORS PREDISPOSING TO PSYCHIC/MOTOR DISTURBANCES IN CHILDREN IN MOLDOVA

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Humanitas, Chisinau, Moldova

We investigated the prenatal and postnatal factors predisposing to psychic/motor disturbances in the newborn children in Moldova. At the same time, we elaborated a programme of prevention focusing on these factors. Among the ecological predisposing factors, are the consequences of the Chernobyl catastrophe and the irrational use of chemicals, pesticides, exfoliates in agriculture. Among the psychosocial factors, is the unstable socio-economic situation in Moldova, as a result of the transition from a totalitarian state system to a democratic one.

PO3.107.
MOOD OR ANXIOUS DISORDERS IN SIGNIFICANT OTHERS OF PSYCHIATRIC PATIENTS

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We studied the significant others (SOs) of 264 adult patients with mood and anxious spectrum disorders, with the aim to explore in how many of them the same disorder of the patient was present. All reliable sources of information were used. 44% of the SOs had the same disorder of the patient. A review of the above sample after three years and a study of a further group of 266 adult outpatients confirmed the above results. Further studies should explore whether the disorder of the SOs preceded their life in common with the patient or instead arose from a difficult interpersonal relation.

PO3.108.
COMBINING FUNCTIONAL NEUROIMAGING AND BEHAVIORAL EXPERIMENTS TO INVESTIGATE THE FUNCTIONAL INTEGRITY OF BRAIN SYSTEMS IN PSYCHIATRIC DISORDERS

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The interpretation of abnormal activation patterns in functional neuroimaging studies under specific task conditions is only possible when patients can perform the task correctly. This prohibits direct investigation of the neural substrates of cognitive deficits in psychiatric disorders. Therefore, in order to identify specific dysfunctional cortico-subcortical brain networks in psychiatric patients, it is necessary to combine functional neuroimaging studies in healthy human subjects with corresponding behavioral experiments in both patients with circumscribed brain lesions and patients with psychiatric syndromes. This approach may also allow to explore possible compensatory neuronal mechanisms in patients with normal task performance. We will exemplify this approach in the area of executive functions which are disturbed in several psychiatric disorders. First, we will review recent functional neuroimaging studies providing evidence for the co-existence of two working memory systems in the human brain which differ from each other in terms of their functional-neuroanatomical implementation and presumably also with respect to their evolutionary origin. These two brain systems may also have different functional roles in the cognitive control of goal-directed action. We will then show results from behavioral and neuroimaging experiments in brain-lesioned patients which served to validate this functional-neuroanatomical model of human working memory. Finally, we will report corresponding behavioral investigations in patients with schizophrenia and affective disorders that revealed specific dysfunctions of these brain networks involved in executive functions. The findings of these studies may be helpful to improve diagnostic accuracy and therapeutic efficiency.

PO3.109.
INTERPRETING INDIVIDUAL CHANGE ON THE ANCHORED VERSION OF THE BRIEF PSYCHIATRIC RATING SCALE

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There is remarkably little information regarding how to interpret change on the Brief Psychiatric Rating Scale. The purpose of this study was to develop a new, psychometrically sophisticated method for determining whether a psychiatric inpatient has improved, remained stable, or deteriorated. Lachar et al. conducted an exploratory factor analysis on 1,556 patients that yielded four subscales for the test, and then replicated them using confirmatory factor analysis on 1,234 patients. The internal consistency of these subscales, as measured by Cronbach's alpha, was: resistance .78, positive symptoms .79, negative symptoms .74, and psychological discomfort .81. Simultaneous ratings of 131 inpatients by an attending psychiatrist and a resident yielded the following intraclass correlation coefficients: resistance .84, positive symptoms .73, negative symptoms .60, and psychological discomfort .69. The above data from Lachar et al. was used to create reliable change tables for the four factor scores and the total score. The standard error of difference was computed for each subscale using the intraclass correlations and the standard deviations from each rater, and then multiplied by z-scores creating reliable change confidence intervals (70%, 80%, and 90%). A quick reference table was created for routine clinical use. To be 80% sure that a patient has improved or declined beyond the probable range of measurement error, his or her score must change by 4 points for resistance, 6 points for positive symptoms, 5 points for negative symptoms and psychological discomfort, and 13 points for the total score.

PO3.110.
BIAS IN THE LOCF METHOD FOR IMPUTING MISSING DATA ILLUSTRATED WITH CLINICAL TRIALS DATA

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The last-observation-carried-forward (LOCF) is a popular method for dealing with missing data on patients who prematurely drop out of the study. Because missing data are rarely missing completely at random, psychiatric researchers and biostatisticians increasingly are becoming concerned with bias in outcome assessment that can result through its use. We characterized, through a simulation study, the bias in estimating endpoint values resulting from the LOCF method for imputing missing data. Using real data from a psychiatry clinical trial, we simulated data loss at different time points and for 5-45% amounts of loss. The difference between the "true mean" Hamilton Rating Scale for Depression (HAM-D) using complete data set and the mean of the simulated data sets was used as a measure of LOCF effect (bias). The probability of bias of a given magnitude for different amounts of missingness was determined. Bias increased as the amount of missing data increased, ranging from near 0 when only 5% of data were missing and the missingness occurred near the end of the treatment course, to 7.1 when 45% of data were missing and the missingness occurred early in the treatment course. The probability of bias of magnitude ≥3 was approximately 0.12 when 20% of the data were missing and the missingness occurred uniformly over time. These results illustrate that the difference between the "true" measure of endpoint computed from complete data and that estimated using LOCF can be large and its impact may depend upon the time and amount of missing data.

PO3.111.
WORKING WITH THE CULTURAL OUTLINE (DSM-IV) IN DIFFERENT WAYS

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The Cultural Outline, CO (DSM-IV) is not widely known, and hardly ever used, in Swedish health care. The Stockholm County Transcultural Centre has addressed this issue by spreading information about, and encouraging the use of the CO within the multicultural health care system of Stockholm. Various reasons are given for not using this instrument, e.g. lack of familiarity, disagreement with the claim that culture may be of importance in psychiatric diagnostics. Even those who agree that cultural aspects are important, never or rarely make use of the CO. Lack of time is an often mentioned reason. While time pressure is very much a clinical reality, there are still possibilities to make constructive use of the CO, not only within general psychiatric pratice but also in a liaison psychiatry setting, if it is used in an informal and

imaginative way. The example to be presented is the author's work as psychiatric "pain consultant" at the St. Göran Pain Clinic. The clinic serves the entire population of Stockholm County on referral basis and offers psychiatric consultation as part of its multidisciplinary pain management and rehabilitation program. Approximately 40% of the clinic's patients have an immigrant background. The CO has shown itself to be a useful tool for both patients and caregivers.

PO3.112.
AMERICAN INDIAN ADOLESCENTS' PATHWAYS TO PSYCHIATRIC SERVICES

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Mental health service research on American Indian youth is virtually nonexistent, despite their known high needs. This paper details the specialty and nonspecialty service pathways of 401 American Indian Southwestern youth. We examine the services of 196 urban and 205 reservation American Indian youth, using the Service Assessment for Children and Adolescents (SACA). Questions were refined to include culturally relevant services from healers and informal providers (family, elders, etc.). 190 of the youth's providers were interviewed to assess their training, salaries, and extent of services provided. The most common pathway into mental health, addiction, or behavioral services was through the courts or police (n=58). Informal helpers (parents, extended family, elders) were next (n=44), followed by self-referrals (n=29), teacher referrals (n=20), social worker referrals (n=19), and friend referrals (n=8). No youth was referred by a physician. Youth got to psychiatric services primarily from informal helpers, to school services from informal helpers or teachers referral, to healers from informal helpers, and to nonspecialty social services from informal helpers or the courts. The most important findings were the absence of referrals from physicians, the key role of informal helpers, court, and self-referral in accessing psychiatric services, and the high referrals from the court and informal helpers. To increase access to mental health services, it is imperative to provide potential referrers training and referral support.

PO3.113.
MENTAL HEALTH SERVICE UTILIZATION IN CHILE

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In order to address the growing burden of mental health problems in Latin America, a better understanding of mental health service utilization and barriers to care is needed. Many Latin American countries have nationalized health care systems that could potentially improve access. The Chile Psychiatric Prevalence Study was a national household survey of 2987 persons over the age of 15 in whom DSM-III-R diagnoses were obtained using the Composite International Diagnostic Interview. The survey included a section that examined mental health service utilization in the past six months, and explored barriers to obtaining psychiatric treatment. Although there was a high utilization of health care services in general, a large proportion of individuals who had a psychiatric disorder did not receive care. The severity of the psychiatric disorder correlated with increasing help-seeking. Only a small proportion of individuals with a disorder sought specialized mental health care services. Regional disparities and inequities in access to care exist in Chile. In addition, indirect barriers to care are important deterrents to service utilization, in particular among those with lower socio-economic status.

PO3.114.
REGIONAL DIFFERENCES IN PSYCHIATRIC DISORDERS IN CHILE

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Psychiatric epidemiological surveys in developing countries frequently are conducted in regions not necessarily representative of the entire country. These studies are often generalized to provide data on large population pools. The Chile Psychiatric Prevalence Study using the Composite International Diagnostic Interview was conducted in four distinct regions of the country on a stratified random sample of 2,978 people. Lifetime and 12-month prevalence and service utilization rates were estimated. Significant differences in the rates of major depressive disorder, substance abuse disorders, non-affective psychosis, and service utilization were found across the regions. The differential prevalence rates could not be explained by socio-demographic differences between sites.

PO3.115.
PSYCHIATRIC DISORDERS AMONG THE MAPUCHE IN CHILE

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The Mapuche are the largest indigenous group in Chile. The study examined the prevalence rates of DSM-III-R psychiatric disorders and service utilization among this group compared to the non-indigenous population. The Composite International Diagnostic Interview (CIDI) was administered to a stratified random sample of 75 Mapuche and 434 non-Mapuche residents of the province of Cautín. Lifetime prevalence and 12-month prevalence rates were estimated. Approximately, 28.4% of the Mapuche population had a lifetime and 15.7% a 12-month psychiatric disorder compared to 38.0% and 25.7%, respectively, of the non-Mapuche. Few significant differences were noted between the two groups; however, generalized anxiety disorder, simple phobia, and drug dependence were less prevalent among the Mapuche. Service utilization among the Mapuche with mental illness was low. This is a preliminary study based on a small sample size. Further research on the mental health of indigenous populations of South America is needed.

PO3.116.
THE MINI-MENTAL STATE EXAMINATION: NORMS FOR A LATIN AMERICAN POPULATION

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The Mini Mental State Examination (MMSE) is used widely internationally. Normative data outside the United States are rare. The Composite International Diagnostic Interview (CIDI) with the MMSE was administered to a stratified random household sample of 2,978 individuals aged 15 or more in Chile. DSM-III-R lifetime prevalence rates were estimated. The average MMSE score ranged from 16 to 29 depending on the level of educational attainment. Age, marital status, population density and income heavily influenced MMSE scores. When the MMSE scores were controlled for sociodemographic variables, those with any psychiatric disorder had significantly lower scores, but this effect was not found for any specific diagnosis.

PO3.117.
THE CLINICAL REAPPRAISAL STUDY IN THE ESEMeD PROJECT

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The European Study of the Epidemiology of Mental Disorders (ESEMeD) is a project co-funded by the European Commission and GlaxoSmithKline. In three of the ESEMeD countries, France, Italy and Spain, we have conducted a clinical reappraisal study, in subsamples of the population interviewed, in order to address the issue of the possible discrepancies between lay interviews with fully structured instruments (Composite International Diagnostic Interview, CIDI) and clinical expert interviews with more flexible clinical instruments (Structured Clinical Interview for DSM-IV, SCID). The clinical reappraisal study will allow us to address the criticism that epidemiological studies overestimate prevalence and focus on disorders that are not clinically significant. In this paper we report the data about the Italian sample (192 subjects). The concordance between CIDI and SCID expressed as Cohen's kappa is the following: major depression 0.36 (CI 0.13-0.58), any mood disorder 0.27 (CI 0.07-0.47), panic attack 0.34 (CI 0.2-0.9), any anxiety disorder 0.5 (CI 0.33-0.66), any disorder 0.39 (CI 0.23-0.54). The sensitivity and specificity are: major depression 0.33, 0.96; any mood disorder 0.25, 0.96; panic attack 0.24, 0.99; any anxiety disorder 0.48, 0.95; any disorder 0.42, 0.91. These findings support the hypothesis that CIDI generally underdiagnosed disorders because of false negative assessments.

PO3.118.
THE NEW ORGANIZATION OF PSYCHIATRIC SERVICES IN ARMENIA

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The organization of psychiatric services in Armenia is going to be implemented as follows. In every region of the country a regional dispensary will be created as the central regional institution of psychiatric care, able to carry out the administrative management. This dispensary would include the mental health cabinet, with psychiatrists, psychotherapists, clinical psychologists and social workers. The internists of the regional policlinic would collaborate to this cabinet. The regional service would also include the psychiatric inpatient department in the structure of the dispensary or in the general hospital; a psychotherapy department; a narcological department; a social rehabilitation workshop; a psycho-neurological sanatorium and patients' colonies. Such institutions may be governmental or non-governmental. The goals of this regional mental health service will be psychological counselling of the population as a whole; medical-psychological help to patients (including non-psychiatric patients); psychiatric help to patients; medical, psychological and social rehabilitation and legal advice.

PO3.119.
THE INTERDEPARTMENTAL MENTAL HEALTH CENTER AS A NEW MODEL OF SPECIALISED EXTRAMURAL PREVENTIVE SERVICE

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The new paradigm of "preventive psychiatry" has been repeatedly described in documents of the World Health Organization (WHO) and in the scientific literature. In Tomsk we have developed an interdepartmental mental health center as a new model of specialized extramural preventive service, offering the following functions: a) organisation, co-ordination and implementation of mental health care in the population jointly with the district administration, including the health care board; b) conduction of psychopreventive examinations of various social-professional and age contingents of the population with the use of automated methods; c) active detection of patients with neurological and mental disorders and adjustment disorders; d) dynamic observation and outpatient treatment of patients with borderline states; e) referral to hospital of patients with major mental disorders. The center's activity is mainly based on the use of individual and group psychotherapeutic methods.

PO3.120.
PSYCHIATRIC EMERGENCIES AND THEIR TREATMENT IN A GENERAL HOSPITAL

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A descriptive study of psychiatric emergencies treated in the Virgen del Rocío Hospital during the year 2003 (about 4,500 consultations/year) is presented. In this hospital, the on duty psychiatry team works 24 hours a day examining psychiatric outpatients who come to the hospital emergency service, as well as providing urgent consultation for inpatients either in the emergency service, in other hospital services, or in the psychiatric admission unit. Starting from a data register of the examined patients, the study analyzes the origin of the demand for care, the reasons for the consultation, the syndromic diagnosis, the therapeutic action and the patient's destination. The sample analysis, that included more than 1000 cases, shows that self-injurious behavior is the main reason for consultation. The study also analyzes the most frequent diagnosis in relation to the reasons for the consultation, the type of intervention (individual, familial, pharmacological) and the patient's destination.

PO3.121.
SOME REFLECTIONS ON THE ROLE AND THE LIMITATIONS OF THE ITALIAN GENERAL HOSPITAL PSYCHIATRIC WARDS

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The reform of psychiatric services in Italy, which started in 1978, led to the deinstitutionalization of psychiatric patients, allowing only general hospital psychiatric wards to admit patients in situations of urgency and/or emergency or against their will. The following are some critical issues emerging from clinical experience: a) the request for admission is more frequently based on a social emergency than on a clinical urgency; b) the management of a ward in which several different men-

tal disorders which require very different therapeutic interventions coexist is very complex; c) those pathologies which are not very clamorous do not receive appropriate care; d) the response to pathologies emerging in some specific age groups, such as adolescents and the elderly, is not adequate; e) financial resources are inadequate to face an increasing request for intervention, which involves a progressive reduction of the duration of hospitalizations and does not allow admission of patients who need a long-term hospitalization.

PO3.122. THE ROLE OF THE PSYCHIATRIC HOSPITAL IN THE HEALTH CARE SYSTEM TODAY

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The role of the psychiatric hospital has been questioned along the last decades. New legislations and changes in the society have determined significant innovations in psychiatric care all over the world. In this context, the psychiatric hospital has been criticized as the symbol of the social stigmatisation of people with mental disorders. However, as specialized hospitals can be useful in cardiology or pediatrics, there is no technical contraindication to the existence of institutions specifically designed to the promotion of the health and the quality of life of people with mental disorders. The authors studied several institutions at the local, national and international level, through visits, interviews and revision of the literature. What emerges from this study is the need to approach this subject in a scientific and medical way, in the perspective of the defense of the human rights, the autonomy and the quality of life of patients. Rather than with the political issue of whether mental hospitals should be closed or not, the society should be concerned with the quality of the care to the individuals with mental disorders, be it provided in the community, in outpatient units or in hospital wards.

PO3.123. DESCRIPTIVE RESEARCH ON YOUNG PATIENTS WITH PSYCHOSIS OR MANIA AT FIRST ADMISSION TO A PSYCHIATRIC WARD

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The study is based on the clinical records of young patients (less than 30 years of age) admitted for the first time to our Psychiatric Clinic between 1996 and 2002. We examined social and demographic characteristics, positive and negative symptoms, depressive and manic symptoms, consciousness impairment. Data concerning the period between the onset of the symptoms and the hospital admission were also collected. The sample consisted of 32 subjects with a mean age of 22.56±3.08 years. 93% of them had positive symptoms, 87% had delusions, in particular of persecution (59%), 34% had auditory hallucinations. Consciousness was impaired in 31% of cases. Manic symptoms were present in 20% of the sample.

PO3.124. SATISFACTION ABOUT CARE IN PSYCHIATRIC INPATIENTS

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The aim of this study was to evaluate the quality of treatment as perceived by psychiatric inpatients. Along 8 months (July 2003-February 2004) we administered two anonymous questionnaires, the General Satisfaction Questionnaire for use with psychiatric in-patients (GSQ-8) and the Questionnaire on the Opinion of Users, to all psychiatric inpatients at the moment of their discharge. Of 97 inpatients, 58 gave back at least one filled questionnaire. Preliminary data suggest that all the evaluations (16 items) were clearly positive, with the exception of two: the global improvement in living since the first contact with our psychiatric service and the information about drugs' advantages and side effects. The free comments contained in both questionnaires converged in two positive opinions (about kindness of doctor and nurses and their unitary working as a group) and two negative ones (about food and some boring because of lack of activities). In conclusion, the administration of the two questionnaires during eight months allowed us to monitor how our activities are perceived by patients and better evaluate their needs and expectations during hospitalization. We are planning to improve the weak aspects and introduce new group activities. Meanwhile we are keeping on administering the questionnaires.

PO3.125. COMPARATIVE STUDY OF INTERVENTIONS IN A MENTAL CRISIS CENTER IN 1999-2003

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Our mental crisis center for children and adolescents is active since 1993, with a SOS phone line and the availability of appropriate treatment in a counseling center, specialized for mental crisis. The preventive and therapeutic activity involves a team of psychiatrists and psychologists. In this ten-year transition period the need of this kind of mental crisis center for children and adolescents became more essential. This study discusses some data concerning the clients referred to our center. During the period 1999-2003 our SOS phone line provided 2030 therapeutic interventions of which the most frequent were: for emotional problems 44.6%, for depressive conditions 8.1%, for problems in communication with peers 6.4%, for family problems 6.1%, for intimacy problems 5.5%, for physical, mental and sexual abuse 5.3%, for school problems 4.4%, for addiction 3.7%, for adolescent crisis 2.1%, for problems in communication with parents 2%.

PO3.126. URGENT PSYCHIATRIC CONSULTATIONS IN A GENERAL HOSPITAL

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During the year 2003, 728 urgent psychiatric consultations were carried out by our unit. The activity concerned 202 males (mean age: 45.1 years) and 203 females (mean age: 43.4 years). The highest number of visits has been requested by the infectious diseases, emergency

and medicine units. The distribution for disorders appears similar to previous years, with a predominance of alcoholism and substance abuse in males, depression, anxiety disorders and eating disorders in females. Data show that the focus of urgent intervention is first screening diagnosis and psychopharmacological intervention rather than integrated treatment.

PO3.127.
A GROUP APPROACH IN PATIENTS HOSPITALIZED IN AN ACUTE PSYCHIATRIC WARD

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We describe the group approach applied in our acute psychiatric ward. The group with patients takes place in the ward three times a week. During this activity, patients must be free from any other engagement. They are stimulated to participate by the conductor and by the professionals. A conductor, a nurse and a trainee take part in the group at every meeting. The professionals give the continuity and the space-time stability to the group. The patients stay in the group for a short period, linked to the hospitalization, with a wide emotional-relational space useful for the reciprocal enrichment. Everytime the professionals report to each of the new patients the previous experience. At the end of each session, the professionals meet for a discussion of the outcome of the session. An emotional and educational support is offered to the professionals both by a structured supervision and by meetings among peers.

PO3.128.
APPLICATION OF THE DRUG ATTITUDE INVENTORY IN A PSYCHIATRIC DAY HOSPITAL

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The purpose of the study was to explore, through the Drug Attitude Inventory (DAI), the attitude toward the use of drugs, especially antipsychotics, and the possible relationships between this variable and recurrences of the disease. The questionnaire has been administered to all patients admitted to a day hospital in 2003. More than half of the patients had a diagnosis of schizophrenia. Among these patients, the sensitivity of the instrument was found to be higher in those with mood or personality disorders.

PO3.129.
AN OUTPATIENT SERVICE WITHOUT WAITING LIST FOR PSYCHIATRIC EMERGENCIES

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An outpatient service without waiting list was set up in 1998 at the Psychiatric Clinic of Milan State University, with the purpose of quickly providing a diagnostic picture and suitable indications for treatment. Users have free access to the service, which allows the patient to be immediately accepted for treatment. From 1998 to 2003, 865 patients used the service. During their consultation, the requests made by users were evaluated by specialists who collected their case history and, following a diagnostic assessment, fixed an appointment with one of the outpatients' departments of our clinic or one of the centres in the area best equipped to offer suitable treatment. Most of the 865 users were women (59.4%) and were young to middle-aged (45.1 years). Most of the subjects had been referred by their general physicians (39.7%) or by other specialists (24.5%). The most frequent diagnoses were mood disorders (30.3%) and panic disorder (10.5%). 37.3% of subjects were sent to the psychosocial centres in the area, 21% to the psychotherapy service, and the remainder to other outpatient facilities or specialized services.

PO3.130.
A PSYCHOTHERAPY SERVICE IN A PUBLIC INSTITUTION: ANALYSIS OF DROP-OUTS

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The aim of this study was to analyze any underlying dynamics leading to drop-out at the Psychotherapy Service of the Psychiatric Clinic, Milan State University. In this service, patients undergo a clinical assessment and test phase (level I). A team discussion of the case follows, ending in the formulation of a diagnosis and indications as to the treatment required (level II) and, subsequently, possible acceptance for brief analytic psychotherapy (PBA) or brief crisis psychotherapy (PBC) (level III). Among 86 patients attending the service, a total of 23 (26.7%) dropped out: 4 (17.4%) at level I, 13 (56.5%) at level II, and 6 (26.1%) at level III. The level I drop-outs had relational problems with a significantly higher frequency ($p=0.04$) than drop-outs of the other levels. Analysis of the drop-out phenomenon may provide a useful tool in order to improve the running and efficacy of a mental health service and to investigate the dynamics occurring within the therapeutic process.

PO3.131.
JAPANESE BRAZILIAN PSYCHIATRIC OUTPATIENTS IN JAPAN AND IN BRAZIL: PROFILE OF THOSE REMAINING AND THOSE RETURNING

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The Japanese immigration to Brazil started in 1908. Almost a century later their descendants in Brazil become the largest community of Japanese descendants outside of Japan. But the economic situation changed. The growth of the industries demanded the opening of the country for the immigrants to work in the factories and in 1990 the Government of Japan allowed the Japanese descendants to return and work in Japan. We compared the sociodemographic data and diagnosis of all consecutive Japanese Brazilian psychiatric outpatients in Japan (remaining group) and in Brazil (returning group) from 1997 to 2000. The group in Brazil were mostly male, not married, lived alone in Japan, had a short stay period there and were classified in the schizophrenia group. In Japan they were mostly female, married, living in family or with friends, had a long stay period and were classified in the anxiety group. In the logistic regression analysis the most significant factor associated with the returning group (in Brazil) were living alone and the short stay period.

PO3.132.
RELATIONSHIP BETWEEN THERAPEUTIC ALLIANCE AND OUTCOME IN A PSYCHIATRIC DAY-HOSPITAL

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The aim of this research is to evaluate the therapeutic alliance between patients and clinical staff and to analyze its development in a day-hospital context. Our hypotheses are that the early therapeutic alliance between patient and staff correlates positively with outcome, and that the patient's pre-treatment characteristics do not correlate significantly with the therapeutic alliance between patient and staff. The sample is composed by 23 patients with psychotic, affective or personality disorder who completed for the first time a partial hospitalisation treatment at our day-hospital. Before the start of treatment, the symptom level (Short-Check List-90, SCL-90), global function (Global Assessment Scale), attitudes toward the institution and the treatment and psychosocial perceived support were measured. After one week, the therapeutic alliance established between the patient and the staff was measured with an adaptation of the Working Alliance Inventory Short form (WAI-S). At the end of the treatment both the symptom level and the therapeutic alliance were retested. The global symptom level reduction was taken as outcome measure. The main preliminary result is the lack of a significant correlation between early therapeutic alliance and outcome, and a positive correlation between the development of therapeutic alliance and outcome. Only one of the pre-treatment patient characteristics – attitudes toward institution and treatment – correlates positively with early therapeutic alliance.

PO3.133.
A FOLLOW-UP OF PATIENTS HOSPITALIZED IN A PSYCHIATRIC CLINIC IN ATHENS AFTER THE 2000 REFORM

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In the year 2000, the Ministry of Health of Greece decided a reduction in the number of beds of psychiatric departments in Athens (2000 beds less) and created mixed departments for voluntary and involuntary admissions. This study was carried out by telephone interviews in patients who were hospitalized at a psychiatric clinic during the year 2002. The sample included 252 patients. Of these, 140 accepted to participate in the study, 53 refused to participate, 53 could not be traced because their telephone number was not available or was wrong, and 6 had died or gone to foreign countries. 79.3% of interviewed patients had not been re-hospitalized, 17.1% had been re-hospitalized, and 3.6% were still in the psychiatric clinic while we conducted the study. In spite of the difficulties we had to face and the short duration of our hospitalizations (around 20.4 days), these results can be regarded as satisfactory. The majority of our patients did not undergo a further hospitalization.

PO3.134.
THE GLOBAL MENTAL HEALTH ASSESSMENT TOOL (GMHAT)

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The Global Mental Health Assessment Tool (GMHAT) is a computerised, semi-structured clinical interview developed to identify and risk stratify a range of common mental health problems. It provides a computer-generated diagnosis, symptom rating, risk assessment (including risk of self-harm) and generates a referral letter to psychiatric services. This study aimed to assess its usefulness, its comparison with clinical diagnosis and Hospital Anxiety Depression (HAD) rating and its inter-rater reliability. The UK Department of Health's National Service Framework (NSF) for mental health cites the general practitioner (GP) as a central player in the diagnosis and management of common mental health problems. There are few usable tools to aid the GP in this and those available are of limited usefulness. Proposed changes to mental health care services in the UK such as the provision of "gateway workers" mean that a usable computerised tool could be potentially valuable to primary healthcare teams. Patients came from three sources: GP surgery, psychiatric outpatients and psychiatric inpatients. All patients were assessed using HAD rating prior to GMHAT. GP patients also had simultaneous rating by GP and psychiatrist. Inter-rater agreement on mental health symptom groups ranged from 0.67 to 1.0 (Pearson's correlation). The computer-generated diagnosis correlated highly with the clinical diagnosis. There was significant agreement between HAD and GMHAT scores. GMHAT-PC required brief training to use, was easy to administer and was completed within 10-15 minutes. It has potential value for primary healthcare teams.

PO3.135.
FREQUENT ATTENDERS OF PRIMARY CARE: MEDICAL, PSYCHIATRIC AND PSYCHOSOMATIC COMORBIDITY

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Anxiety, mild-moderate depression and somatoform disorders, the common mental disorders described by Goldberg, may affect up to 60% of patients in the primary care setting and have proven to play a causal role in the phenomenon of high utilization of health care services, especially when they are combined with medical morbidity. The 50 top most frequent attenders (FAs) at a general practitioner (GP) clinic in the north of Italy were compared to 50 randomly selected average attenders. Sociodemographic and medical data were collected from GP files. The Structured Clinical Interview for DSM-IV, SCID-brief version for research and the Diagnostic Criteria for use in Psychosomatic Research (DCPR) were administered to both patient groups. Quality of life was also evaluated through the WHOQOL brief version. 98% of FAs suffered from at least one medical disorder and 68% from at least one psychiatric disorder, versus 54% and 6% respectively in the control group. Moreover, 66% of FAs gave positive results in all three diagnostic fields (medical, psychiatric and psychosomatic), versus 4% of controls, proving medical-psychiatric comorbidity to be more frequent in the case group. Quality of life was found to be significantly poorer among FAs. Exces-

sive utilization of primary health care services may be associated with medical-psychiatric comorbidity: there is a need for the development of dedicated diagnostic and therapeutic tools addressing the specific needs of medical patients with concurrent psychological distress.

PO3.136. DIFFERENCES BETWEEN MEDICAL AND SURGICAL PROFESSIONALS IN REFERRING ORGANIC PATHOLOGY TO LIAISON PSYCHIATRY CONSULTATION

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The present study is based on a sample of 1300 patients of the Timis County Hospital, referred to the liaison psychiatrist from the different departments of the hospital over a time-span of 18 months between May 2002 and December 2003. We analyzed in closer detail 316 patients who presented organic psychiatric disorders. Approximately one quarter of the psychiatric pathology was organic. 93% of these patients were referred from medical departments. Over half of patients with organic disorders had organic depressive (44%) or anxious (9%) disorders, mostly referred from the medical departments. Of the patients referred from medical departments, 55% had organic depressive and anxious disorders, while the respective percentage was only 27% for the surgical wards. The rest of the pathology included Alzheimer's and mixed dementias (16%), organic personality disorder (11.4%), mild cognitive disorders (9%), delirium (5.4%) and 5% other disorders (hallucinosis, organic dissociation, other organic and unspecified disorders). These data suggest that medical wards refer to the liaison psychiatrist mostly affective and anxious disorders, while the surgical wards refer mostly agitated and flagrantly disturbed patients. Surgeons prefer to demand emergency psychiatric consultation and treatment, while medical wards expect the liaison psychiatrist to share the responsibility of medical care.

PO3.137. REFERRAL PATTERN OF NEUROLOGICAL PATIENTS TO PSYCHIATRIC CONSULTATION-LIAISON IN A GENERAL HOSPITAL IN TAIWAN

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A high prevalence of mental illness has been found among patients with neurological disease. However, there are only a few studies related to this issue. The aim of this preliminary study is to investigate the characteristics of psychiatric consultation in patients with neurological disease. Fifty-six patients hospitalized in a neurological ward were referred to a consultation-liaison psychiatric service over 10 months. This retrospective study is to determine the demography, reasons for referral, psychiatric comorbidity, and the different opinion on the diagnosis between the neurologist and the psychiatrist. Psychiatric diagnosis was made by a psychiatric consultant according to the DSM-IV criteria. The rate of psychiatric referral from neurological ward was 6.15%. The mean age of patients was 40.8±13.2 years. Common reasons for referral were differential diagnosis (49.2%), excessive emotional reaction (16.9%), psychotic symptoms (12.3%), previous psychiatric history (12.3%), and suicide attempt at ward (6.2%). Psychiatric diagnoses included mood disorder (26.2%), delirium (26.2%), organic mental disorder (15.4%), psychotic disorder (10.8%), anxiety disorder (7.7%), dementia (4.6%), and somatoform disorder (1.9%). Different opinion between neurologist and psychiatrist occurred in 29.2% of all the patients. The rate of neurologists following the psychiatric recommendation for further psychiatric outpatient follow-up was only 20%. Enhancing the liaison with neurologists is important to improve the service of psychiatric consultation.

PO3.138. THE BURDEN OF PSYCHIATRIC DISORDER IN PRIMARY CARE: ENCOURAGING PATIENT INITIATIVE

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There is evidence that behavioral intervention for minor psychiatric disorders in primary care settings can be highly effective. A successful example is brief intervention for heavy/problem drinkers. There is evidence that a physician initiated intervention of no longer than 3-5 minute results in a statistically significant and long-term change in drinking patterns. However, there are many impediments to behavioral interventions in primary care clinics, including lack of time, provider reluctance, and lack of reimbursement. Even when heavy/problem drinkers are identified immediately before the primary care visit, brief intervention is done in a minority of cases. One possible solution to this problem is to develop cost-effective technologies for patient self-directed treatment that could be used in primary care. In this presentation we will discuss our work with interactive voice response (IVR), an automated telephone system that can be used to guide patient self-directed screening and treatment remotely. IVR is a low-cost system that can be accessed by patients from their home telephone. We will describe and illustrate how an IVR system operates. We will then present results from our use of a simple IVR-based intervention for primary care patients with heavy/problem drinking. Finally we will describe our plans for using this system for self-directed screening and intervention for problems such as alcohol misuse and other behavioral problems that are commonly encountered in primary care settings.

PO3.139. PSYCHIATRIC LIAISON IN PRIMARY CARE: USEFULNESS OF AN ATTITUDE SCALE

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The study aims to explore the potential of an attitude scale in categorizing doctors for the purpose of educational intervention aimed at enhancing clinical skills in primary care. A 25-item questionnaire designed to measure attitude to referral was administered to a cross-section of doctors seen in primary care. The study was conducted in randomly selected walk-in primary care facilities in Lagos metropolis. One hundred and twenty-six doctors (males 83.3%) were studied. Responses to questionnaire items were subsequently classified as positive, non-committal or negative, and weighted +1, 0 or –1 respectively. The sum of the weighted scale was computed to determine the score for each doctor. Principal component analysis indicated a 10 factor solution accounting for 64% of the variance. Screen plot revealed that the three most important factors have Eigenvalue 2.3468, 2.0201 and 1.8751, respectively corresponding to avoidance, self-doubt and pessimism. The first three discriminant functions that emerged accounted for 76.6% and 78.7% respectively of the variances of the two (high or low scorers) groups. Correct classification of

high scorers was 66.7% and for low scorers 53.2% of the grouped cases. Older age (0.744), female sex (0.579), more years since graduated (0.729) had the largest absolute pooled correlations between variables and standardized canonical discriminant functions for low scorers. For high scoring doctors, longer duration of undergraduate psychiatry training (0.573), having postgraduate medical qualifications (0.692) and younger age (-0.542) had the highest correlations. The scale may be useful for determining predictor variables in referral attitude to psychiatry, and for the selection of doctors for interventions to improve the attitude. Continuing educational needs for low and high score individuals may not be the same.

PO3.140.
A CONSULTATION SERVICE FOR COMMON PSYCHIATRIC DISORDERS IN PADUA, ITALY

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Anxiety and depressive disorders have a high prevalence in primary care. An anonymous questionnaire was sent to 76 general practitioners (GPs) working in the catchment area of a mental health service. The questionnaire included 20 items composing 5 sections: training, knowledge of the service network, relationship between physician and patient, needs and proposals. 58% of the respondents declared they were treating between 20 and 30 patients with anxiety disorders, and 38% more than 31 patients; 50% of the respondents declared they were treating more than 30 patients with depression; 24% of the respondents declared they were treating more than 30 patients with somatic complaints without medical confirmation. The results of the questionnaire revealed that the GPs perceive the task to treat mental patients, and in particular the so-called common mental disorders, as clearly demanding. The consultation service for primary care is intended to facilitate communication between physicians through formal consultation-liaison meetings and a telephone consultation service.

PO3.141.
COUNSELLING SERVICES FOR GENERAL PRACTITIONERS: A PILOT EXPERIENCE

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In Italy the relationship between psychiatry and general medicine is on the whole still in an embryonic phase. Despite this, several pilot experiences exist, which have developed improved methods of collaboration. One of these is in operation at the Department of Mental Health in Savona. Since the mid 1990s, several psychiatric and psychological outpatient consulting rooms for use by general practitioners have been established in our region. The clinics are staffed by professionals with a specific training in the diagnosis and treatment of a variety of illnesses. These include depression, panic disorder, obsessive-compulsive disorder, somatoform disorders, adjustment disorders, disorders common in the elderly, eating disorders, geriatric disorders and psychoncological disorders.

PO3.142.
QUALITY CONTROL OF COUNSELLING OFFERED TO GENERAL PRACTITIONERS

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The Department of Mental Health of Savona, after developing various forms of collaboration with general practitioners (GPs), evaluated the quality of the counselling offered, by administering a questionnaire to 246 GPs working in the area. The questionnaire consists of 21 multiple-choice questions subdivided into three areas. The first outlines the typology of the sample. The second concerns the level of information offered, the method of communication and the evaluation of the interventions. The third explores further needs. The results are presented and their implications are discussed.

PO3.143.
DOES THERAPY LIVE UP TO EXPECTATIONS?

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Patients presenting with depression in primary care have varying expectations of how successful treatment will be. We investigated patient and professional predictions of treatment success within a primary care randomized controlled trial of cognitive behavioural therapy and non-directive counselling for depression (Beck Depression Inventory, BDI>13). Formulations were derived from a list of 13 potential problems on self-completed questionnaires. Patients and therapists also predicted the likely success of the three treatment options for each of the problems identified in the formulation using a seven point Likert scale. Patients and therapists then rated success after treatment (four months) and patients self-rated again at 12 months. We report changes between predicted and self-rated success for each problem identified in formulations for 411 patients recruited into the trial, of whom 362 received therapy. Significantly better than predicted treatment success (measured using Wilcoxon paired ranks test) was reported by patients at four months for: depression (47%, p=0.02), work-related problems (60%, p=0.03) and confusion (51%, p=0.03). At 12 month follow up, patients reported significantly better than expected improvements in: family problems (67%, p=0.008), relationships (52%, p=0.003) and childhood related issues (71%, p=0.008). Therapists also reported better than predicted treatment success for depression (43%, p=0.009), work-related problems (47%, p=0.005), family problems (47%, p=0.003) and relationships (46%, p=0.03), as well as anxiety (48%, p=0.006) and stress (44% p=0.04). Interestingly there were no significantly worse than anticipated treatment successes for either patients or therapists for any of the problem headings. Patients and professionals may be unnecessarily pessimistic about the likely impact of talking therapies across a range of problems presenting among patients with depression in primary care. Outcome often surpasses expectations.

PO3.144.
DOES IT MATTER IF THERAPISTS AND PATIENTS AGREE UPON WHAT IS WRONG?

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Good communication is a crucial clinical skill, particularly in mental health care. Previous research indicates a link between improved clinical outcomes and agreement between practitioners and patients about the patients' core presenting complaints. However, our recently published study suggested that this detailed mutual baseline understanding may be less important in determining outcome from depression in primary care, than agreement that the problem is psychological in nature, and referral for psychological therapy appropriate. We compared problem formulations completed by patients and therapists for subjects participating in a primary care randomized controlled trial of cognitive behavioural therapy and non-directive counselling for depression (Beck Depression Inventory, BDI>13). Formulations were derived from a list of 13 potential problems on self-completed questionnaires. Outcome measures included BDI at four and 12 months, failure to attend any therapy after referral, dropout from therapy, and patient satisfaction. Among 464 patients recruited into the trial, 395 were referred for talking therapy. We conducted logistic regression analysis controlling for baseline BDI, therapy type, patient age, gender and satisfaction. Patient recovery at four months (BDI<14) was significantly associated with agreed problem formulations between patients and therapists at therapy end (four months OR 2.2, p=0.04). Agreement had no significant impact on risk of BDI caseness after one year. In determining primary care depression outcome, agreed problem formulations between therapists and patients at the end of therapy may be more important than at the beginning. Whilst this agreement may be an indication of successful therapy, it may also be a key factor in the process.

PO3.145.
ASSERTIVE OUTREACH: LOCAL AND REGIONAL COMPARISONS

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Assertive outreach (AO) is a mental health service available 24 hours per day, where staff deliver practical support, care co-ordination and advocacy, with a holistic, intensive focus on needs. The UK Department of Health requires the provision of AO for adults with severe mental health problems, high use of hospital, difficulty maintaining contact with services and complex or multiple needs. Consequently, there has been rapid development of AO teams in England. The present study provides information about the caseloads of 27 AO teams in the north east of England, catering for a general population of about 4 million people. Using the Matching Resources to Care-2 (MARC-2), the Health of the Nation Outcome Scales (HoNOS) and the Global Assessment Scale (GAS), we surveyed 800 individuals. We will report on their demographics, diagnoses, service use, medication, risk, social problems, and compare the study cohort to standard community mental health team caseloads. We will discuss local and regional variations, and explore some reasons for teams to diverge from the AO fidelity criteria.

PO3.146.
HELPING RELATIONSHIP AND DAILY OCCUPATIONS IN ADULT PSYCHIATRIC FOSTER HOMES

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This presentation explores the helping relationship formed between the resident(s) and the caregiver of a typical psychiatric foster home while they engage in their occupations. Its objectives are: a) to outline their daily time use including "helping activities"; b) to illustrate and define the helping relationship using a person–environment–occupation transactional model. A qualitative/quantitative exploratory case study with multiple levels of analysis was conducted in Montreal, where foster homes represent 51% of the psychiatric residential resources. Data collected include individual time diaries and six in-depth semi-structured interviews. Residents' daily time use is dominated by sleep (40%) and leisure (32%). The caregiver mostly spends time in household chores (37%) oriented towards the care of others. Qualitative findings expose the processes leading to the realisation of those activities and the creation of a bidirectional helping relationship that can be beneficial or not for the helper or the help receiver. Emerging themes such as help/absence of help, help indicators/need for help, spirituality and affects, autonomy, occupations and occupations' meaning are regrouped around the model's concepts. Occupations shape and influence the interactions resident(s)-caregiver on a physical, social and psychological level. The helping relationship can enhance or inhibit occupational behaviours. Thus, the dynamics of the helping relationship surrounding daily occupations in foster homes will be discussed. While examining consumer's daily lives this presentation illustrates the complementarity between qualitative and quantitative methods and the richness of multiple perspectives.

PO3.147.
EVALUATING INTERVENTION IN A COMMUNITY-BASED CHILD AND ADOLESCENT UNIT: A LONGITUDINAL STUDY

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Evaluating treatment in child psychiatric practice must necessarily include an analysis of those characteristics which lead to non-attendance. Research has shown that this is a multifactorial issue, including factors such as the type of presenting problem, family's functioning and the therapeutic team's organization. Early termination is a result of the interaction of these factors. The aim of this study was to compare evidence collected at two time periods concerning factors affecting treatment compliance and to investigate whether early termination rates differed after modifications in procedure were made by the child psychiatric service. Epidemiological data were collected from the patient files for two time periods. At Time A, 1990-1994, 455 cases were examined, while at Time B, 2000-2002, 476 cases were examined. These were the total number of cases admitted to our service during those periods. During Time A, 58.6% of cases failed to comply with treatment, while at Time B, 45.7% failed to comply. Statistical analysis showed that early termination of therapy occurred at different stages between time periods. Sex and age of the child, the socio-economic

status and functioning of the family, as well as the referral source are unrelated to compliance in both samples. On the contrary, the type of problem presented by the child and the type of recommended treatment are correlated with treatment compliance. These results are discussed with respect to the re-examination of certain aspects of our service's functioning and consequent modifications with respect to its techniques concerning admission and intervention.

PO3.148.
THERAPEUTIC CONTRACT AND TREATMENT ADHERENCE IN PSYCHIATRIC PRACTICE

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Ensuring patients' adherence to treatment is a major challenge in psychiatry as well as in general medicine. A review of the literature shows that the rates of non-adherence in psychiatry range from 20 to 90 percent and are strongly associated with clinical (relapse, rehospitalization, mortality and poor outcomes) and economic consequences. This paper presents the main factors associated with poor treatment adherence in seriously mentally ill outpatients and the strategies for improving treatment adherence, highlighting the role of therapeutic alliance and therapeutic contract as the main tools to build up a collaborative partnership, in which both the patient and the practitioner assume the responsibility to develop a treatment regimen to which the patient can adhere.

PO3.149.
SOCIAL NETWORK AND MENTAL ILLNESS

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The project "Social network and mental illness" began in 1999. It provides "natural helpers", recruited in the natural social network of patients, in order to take care of users on a voluntary basis. For each helper-user couple, a specific program is planned by the service to help the user in his rehabilitation process and to address his needs. Up to now 43 users have been involved. They are mostly middle-aged, single and alone. The process is standardized and the outcomes are evaluated by validated as well as original instruments. One outcome of the program is an improvement in the quality of life of users. Results are also observed in the relationship between the psychiatric service and the community and in the social perception of mentally ill people. The best responders are very disabled users, with an age between 35 and 54. The project also showed that natural helpers who live in the neighbourhood are a better resource than those who live in the same building of the users.

PO3.150.
REHABILITATION IN THE HISTORY OF PSYCHIATRY

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According to Pinel, "madness is not the loss of reason, but only an other way in which Man expresses himself". On this basis, Pinel developed his "moral" treatment of psychiatric patients. "Mad House" private institutions were created to host mad people so that they could leave from their families and social environment, which was considered an important cause of their illness. The most interesting part of "moral" treatment was the type of work that the patient had to do, which could be either manual or intellectual. Our study aims to review this kind of approach in different countries and through different periods of time. A better knowledge of the past may enable us to better understand the present.

PO3.151.
PSYCHIATRIC REHABILITATION THROUGH THE IMPLEMENTATION OF A SOCIAL STRUCTURE GENERATING PRODUCTIVE ACTIVITIES

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Psychiatric rehabilitation has to find practical solutions for the integration of the psychiatric patients who, step by step, have been excluded and isolated from human relationships. For this reason, our department joined the regional project on the elaboration of activities aiming to the social and working integration of schizophrenic patients. We have developed the following projects: ancient book-bidding and setting, artistic pottery, graphic arts, computerized publishing trade, cartoons. Labs were set in the premises of the former mental hospital in Nocera Inferiore. We aim to increase of at least 20% the number of young patients with serious psychiatric pathologies who are included in programs of rehabilitation and vocational training, and to decrease of at least 20% the rate of hospitalization in acute psychiatric wards and private structures of the patients participating in the project.

PO3.152.
CINEMA AND PSYCHIATRIC REHABILITATION

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It is well known that a film gives us more details than what the scriptwriter originally set out to convey. Its capacity to stimulate us and its ambiguity enables us to interpret these images in numerous ways. The cinema has always represented new ideas, changes in society and changing mentality and is an instrument (for psychiatrists, patients and their families) in which we can "recognise ourselves", see our ideas clearly, our attitudes and our behaviour. "Seeing ourselves" in a film image is not a form of self protagonism or identifying oneself in a film role, but a way of arriving at self criticism and consequently being able to change. The ability to change is a dynamic process that in therapy is useful for both patients and psychiatrists. The cinema can be used as a form of therapy and rehabilitation. On this basis we have created a computerised data base which contains access to about 400 films.

PO3.153.
PSYCHOSOCIAL FACTORS AFFECTING SPECIALITY CHOICE

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Medical doctors develop their professional activities under strong pressure. Not many descriptive studies address the psychosocial situation of medical practitioners or the motivational and risk factors predicting future situations of malpractice, stress or professional burnout. This was a descriptive study of first year medical residents in the 12 Octubre Hospital, focusing on the relationship between speciality

choice and psychosocial aspects, life events, parental relationship, influence of teaching figures, important illnesses within the family, and different incentives. We used an ad-hoc questionnaire for psychosocial characteristics, the Paykel Scale for life events, and the Parental Bonding Instrument. The chosen specialities were medical (48%), surgical (24%), support (11%), primary care (17%). The speciality chosen was determined in 25% of the residents by some serious illness suffered in their families. The lower the education level of their parents, the higher was the respondents' interest in social prestige. A higher number of life events directed towards closer contact with patients. Maternal overprotection seemed to affect significantly the choice between support and internal medicine and primary care specialities.

PO3.154.
CHARACTERISTICS OF PERSONALITY IN A GROUP OF PRIMARY CARE PRACTITIONERS

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We assessed personality traits in 30 primary care practitioners (73% women; age 26-28 years), by using the International Personality Disorders Examination (IPDE). The mean dimensional scores were: paranoid 10.71; schizoid 21.42; schizotypal 9.25; histrionic 23.75; antisocial 5.92; narcissistic 16.66; borderline 21.84; obsessive 29.58; dependent 20.83; avoidant 39.16. The highest scores were obtained for cluster C (anxious, dependent and obsessive) disorders. Perhaps obsessive characteristics are important for medical work so they could be enhanced during the years of medical specialization.

PO3.155.
MORAL SENSITIVITY IN BRAZILIAN PSYCHIATRIC PRACTICE

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The Moral Sensitivity Questionnaire (MSQ) has shown to be a valid and specific instrument for the evaluation of psychiatrists' moral sensitivity attitudes. In this study, we administered the Brazilian version of the instrument to 522 Brazilian psychiatrists. The Cronbach's alpha for the instrument as a whole was 0.75. This result is similar to that reported for the original version. There was a total agreement concerning the constructs of autonomy, human integrity and relationship. A partial concordance was achieved for benevolence and professional practice. A strong disagreement was found for conflicts. The variables significantly related to the scale's constructs were age, religion, length of professional experience, type of psychiatric practice and region of origin.

PO3.156.
A NEW SYSTEM OF EDUCATION AND TRAINING IN PSYCHIATRY: THE EXPERIENCE OF GEORGIA

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Georgian Psychiatric Society

After a reform of the system of medical education, there are now three stages of the development of a specialist in Georgia: higher medical education (undergraduate), postgraduate professional training (residency), continuing medical education (CME). At medical universities (more than 20 in Georgia), training in psychiatry usually takes place in the fourth and fifth year. Undergraduate training is not uniform throughout the country. At the postgraduate level, instead, there is a unified system of education, a modern system of residency training, which is based on the law of "professional training of medical staff in occupational residency" (1999). We have a three year training in general psychiatry, child and adolescent psychiatry, alcohol and drug abuse and psychotherapy. Since 1998, according to the law of "medical activity", we implemented the system of certification. Medical activity is authorized only for those who have the state certificate. The physician must prolong the certificate every 5 years. Recertification can be obtained through passing an examination or obtaining a definite number of credit hours. The Postgraduate and CME Council, including 31 members who represent professional associations, high medical schools, scientific institutions, medical clinics and the Ministry of Labor, Health and Social Affairs, manages the medical education system in every stage.

PO3.157.
INTERNATIONAL DIFFERENCES IN PSYCHIATRIC TRAINING

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Psychiatric training systems differ between countries. Training programs can be seen as a parameter of the mental health quality care provided in any community. We performed a descriptive qualitative and quantitative analysis of 24 worldwide psychiatric training systems. The characteristics of psychiatric training, the level of training, the access to training systems differ significantly from country to country. There is a need to encourage evidence based mental health, and to improve systems of evaluation and control of the quality of care. Clinical supervision needs to be broadly implemented. There is a need to standardise and validate medical training across different countries. Training in psychiatry must contain more clinical and medical components in order to improve the system of specialisation. It must encourage a long-term learning culture, searching for processes whereby simple information is converted into expert knowledge.

PO3.158.
A NO-PROFIT WEB SITE ON MENTAL ILLNESS: A TWO-YEAR ITALIAN EXPERIENCE

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A no-profit web site dedicated to people with mental illness has been activated two years ago in Italy, with the purpose to provide information and to answer questions regarding the most important psychiatric disorders. During this two-year period, 4782 questions were addressed to the 'meet the expert' direct line of the web site. 'Anxiety' (1111 contacts), 'depression' (1030), 'panic disorder' (681) and 'insomnia' (190) were the most common topics considered. Moreover, relatives of people with mental illness were interested to receive additional information on psychotic symptoms, namely 'hallucinations' or 'delusion', or on 'schizophrenia' spectrum disorders. Regarding treatment options, the most frequently asked questions were on selective serotonin reuptake inhibitors, namely paroxetine (1088), sertraline (428), citalopram (405) and their side effects. Questions related to alcohol or substance abuse (198) were also addressed to

web site experts. These preliminary data should be interpreted cautiously. Internet is a powerful way to provide information or to answer questions, but it cannot substitute the direct doctor-patient relationship. Nevertheless, this preliminary experience may help to understand the needs and doubts of people with mental illness and their relatives.

PO3.159.
THE PSY.CH.E. INTERVIEW: AN INSTRUMENT FOR THERAPEUTIC CHANGE EVALUATION

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The aim of our research is to analyse the psychological change induced during psychiatric treatments, either psychotherapeutic and/or psychopharmacological. In order to assess the distinctive features of this therapeutic change we have elaborated a specific instrument of evaluation, the Psychological Change Evaluation – PSY.CH.E. Interview. This interview consists of seven sections. Each section, composed of ten items, concerns a specific dimension of the psychological change (e.g., the "expected change" deals with the expectations about the coming change; the "change matrices" considers the factors that mainly promote the change; the "problem mastery" evaluates the control of the patient over psychological difficulties, etc.). A clinician, not involved in the therapeutic intervention, administers this interview, separately, both to the patient and to the therapist; the administration can be repeated during treatment.

PO3.160.
THE V.I.E.W. QUESTIONNAIRE: AN INSTRUMENT FOR EVALUATION OF THERAPEUTIC AND TEACHING ACTIVITIES CARRIED OUT IN VIDEOCONFERENCE

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The use of "telepresence" represents a methodology with a high potential for psychological therapy (telepsychiatry, telepsychotherapy) and for teaching. We are carrying out tele-psychiatry interventions (V.I.T.A. Project) and tele-teaching activities; therefore we are interested in analysing the experience of "videoconferencing", in comparing its effectiveness with the "face to face" experience and in improving the efficacy of this kind of intervention. We elaborated a questionnaire (Video Intensive Experience Willingness – V.I.E.W.) to be administered to patients and students following psychotherapy sessions or lectures carried out in videoconference. By means of this questionnaire we try to evaluate the experience in different moments (before/during/after the session or lecture) and to analyse the "therapist-patient" or "teacher-student" relationship according to several aspects: expectations, psychological involvement, cognitive and emotional participation, etc.

PO3.161.
TELEPSYCHIATRY AND TELEPSYCHOTHERAPY: A STUDY ON THE EFFICACY OF THERAPEUTIC TREATMENTS CARRIED OUT IN VIDEOCONFERENCE

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Since some years our research group has been carrying out psychiatric and psychotherapeutic interventions by means of videoconference. Here we present the results of the analysis of verbal and non-verbal communication between therapist and patient during a psychotherapeutic treatment carried out in videoconference. Sessions have been selected from different phases of the treatment and have been analysed by independent assessors according to two specific grids of evaluation. The preliminary results seem to support the therapeutic efficacy of this kind of treatment. Some considerations about defining general outlines of these clinical interventions will be proposed.

PO3.162.
THE V.I.T.A. PROJECT: AN EXPERIMENTAL STUDY OF PSYCHIATRIC AND PSYCHOTHERAPEUTIC INTERVENTIONS IN TELEMEDICINE

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The "telepresence" allows innovative strategies of intervention in psychiatry. Within this general framework the authors present the Velletri Intensive Telepsychotherapy Assistance - V.I.T.A. Project. The project was started three years ago and is based on psychotherapeutic treatments systematically carried out in videoconference. It is aimed to define the feasibility criteria (technical and psychopathological) of this kind of treatments; to compare it with "face to face" psychotherapy; to pinpoint its elective fields of application in psychotherapy, especially with regard to acute episodes of "crisis". Psychiatric consulting assistance and psychotherapeutic treatments are carried out by means of regular video connections between the research centre and patients who are living in towns near Rome. These treatments are completely tape-recorded, transcribed and submitted to independent assessors for specific scoring.

PO3.163.
CAPACITY TO CONSENT TO TREATMENT

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This study investigated the ability of patients with schizophrenia to consent to treatment with oral antipsychotics. Their capacity to consent to treatment was compared with their fitness to plead, as assessed by the MacArthur Fitness to Plead Tool. 45 inpatients with an ICD-10 diagnosis of schizophrenia or schizoaffective disorder were recruited. Levels of capacity were compared with psychiatric symptoms and subject's global assessment of functioning. Twenty subjects (44.5%) chose oral antipsychotics, fourteen (31%) chose no treatment and eleven subjects (24.5%) were unable to make a choice. Those who chose no treatment had lower levels of understanding, appreciation and reasoning than those who chose oral antipsy-

chotics. The former group also had higher scores on the Positive and Negative Syndrome Scale (PANSS) positive scale and Global Assessment of Functioning (GAF) scale. Those who could not make a choice had the lowest level of capacity and worse scores on the PANSS positive scale and GAF scale. These data suggest that the capacity of those who refuse to consent to treatment is more impaired than those who consent to treatment. Those who are unable to make a choice have the least capacity. Reduced capacity in those who choose no treatment and those who cannot choose is associated with positive psychiatric symptoms and poorer global functioning.

PO3.164.
CAPACITY TO CONSENT TO A COURT REPORT AND 'DOCTORS PRIVILEGE'

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The objective of this study was to examine the relationship between the amount of information given and the uptake rate in a simple dichotomous choice, to consent to be assessed for a court report or not. Uptake rates are compared for two different consent protocols, one giving minimal material information, the other giving a greater amount of information. 33 inpatients with a diagnosis of schizophrenia, all of whom were on remand and required a court report, were recruited to the study. These individuals were asked to provide written consent to the preparation of a court report using 2 different consent forms. Their psychiatric symptoms and measures of capacity were compared with their refusal or acquiescence to the preparation of a court report. We used the MacArthur Fitness to Plead competence assessment tool and the Brief Psychiatric Rating Scale (BPRS). Twenty-three (70%) of the subjects consented, when shown the short consent form, whereas only twenty-one (63.6%) of subjects consented when presented with the more detailed version. Three subjects (9%) changed from consent to refusal when they were presented with more information, while one subject (3%) changed from refusing to consent. These data suggest that giving more information does deter subjects from giving consent, particularly those with least capacity. Those who withheld consent had significantly lower scores on scales of understanding, reasoning and appreciation. Capacity to consent was not correlated with severity of psychosis, as measured by the BPRS. Those who changed their mind were the most impaired of the group in terms of psychiatric symptoms.

PO3.165.
WHO DO I WORK FOR? THE PHYSICIAN'S ROLE IN NON-MEDICAL DECISIONS

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Dramatic improvements in public health and the diagnosis and treatment of mental and physical illness have changed the nature of medical care and the very nature of illness itself. Diagnosis is early, treatment effective. End organ damage and disability are long delayed and work is no longer as physically demanding as it was. Most illness today is chronic; most people can work while receiving treatment. These positive changes in health, treatment, illness and work have blurred the line between health and illness, between the capacity to work and disability. But physicians are pressured by employers, patients and insurers to make a decision about the patient's work capacity based on strictly medical facts. Employers assume that getting well and being able to work are synonymous. Patients assume their subjective feelings are a reflection of illness and expect the physician to advocate for them. None of the parties acknowledge the impact of psychiatric issues, benefits, work structures, and other non-medical issues on the decision and are aware of the long-term financial, social and emotional consequences of it. The presentation will explore how non-medical, psychiatric and motivational issues impact the decision to leave or return to work and physician approaches to the dilemma of responding to the question "Can this patient work?"

PO3.166.
HERMENEUTICS IS A TOOL FOR GOOD PSYCHIATRIC PRACTICE

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Psychiatry as well as the other medical disciplines is dominated by biological methods, while humanities do not play a relevant role. This predominance of the biological paradigms influences the medical way of thinking and acting: the interaction between patient and doctor is superimposed by the performance of biotechnical procedures, psychiatric practice sticks to the results of randomized controlled trials and meta-analyses. However, the criticism of patients and society of the reductionistic medical view grows and an increasing number of patients undergo alternative care. These developments indicate a tendency towards deprofessionalization in medicine and require a fundamental change. This change might be performed by the intentional introduction of hermeneutics in psychiatric practice. Hermeneutics is the contextual understanding of meaning and sense of human phenomena (methodology of humanities). Hermeneutical thinking enables to perceive the patient with his specific pattern of relations, abilities, desires, personal values, and limitations; the patient can be comprehended as a unique individual. The long and outstanding hermeneutical tradition of psychiatry (philosophy, history, psychotherapy) provides a basis for a revival of hermeneutics as an appropriate tool to meet the requirements of new mental health care in postmodern society.

PO3.167.
OVERCOMING THE DEPERSONALISATION OF THE THERAPEUTIC RELATIONSHIP

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In the world of high tech, the man often feels threatened and devalued. This is reflected in our relationship with mentally suffering patients. It seems, in the relations with our clients, that our words are losing the power of transmission of meanings. The verbal capacity of doctors risks to be substituted by the language of the apparatus. The time spent with our clients is becoming short and the doctor-patient dyad is being threatened. This serves as a bell of the risk of changing attitudes of the psychiatrists toward their patients. We know that the base of such a dyad is the exchange of feelings and ideas between two partners. The patients are expecting in our times from their doctors much more than before. Medicine is advancing rapidly. It is up to the doctors to find a balance between their engagement with their patients on one side and their culture-bound attitude on the other. To overcome the depersonalization of the therapeutic relationship in our times of high tech, we should keep in our minds the humanistic approach in psychiatry as an element that provides the stability and confidence in the doctor-patient dyad. It is of primary importance to avoid the narcissistic biases seen sometimes in our relations with the

clients. The patient should not be considered only as an object, but before all as a subject, as a human being in relations with others, that needs feelings and meanings of others. First of all, we must expel those tendencies seen in medical practice when the doctors "gain the upper hand" in relations with patients. It would be inhuman to convert in a sort of trade such relations. Nowadays we must represent our role as "professional partners", which means to be with patients in a relationship of mutual respect. Communicative equality means to take seriously the communicative needs and interests of the patient. The medical work today seems to be dominated much more by the evidence-based knowledge and technical procedures than by the art of communication. Our patients need warm communication. It is important to keep the therapeutic aspects of the communication process. The quality of the communication should be improved by acquiring deep knowledge and experience. In our everyday medical practice there is a continuous need for the improvement of such a communication. To fight against the depersonalisation of the doctor-patient dyad, we need to train continuously in the skills of the communication. It remains then to us to integrate such skills in clinical practice.

PO3.168. COMMUNICATING RISK: ANOTHER TOWER OF BABEL?

G.S. Gosall
Edenfield Medium Secure Unit, Manchester, UK

A series of medical reports about mentally ill patients by consultant psychiatrists from general adult psychiatry and forensic psychiatry were analysed for statements describing the risk of harm to self and/or others. The phrases used were collated. Psychiatrists and members of the legal profession were then asked to study these phrases and specify their perception of the likelihood of a risk occurring in percentage terms as described by each phrase. An answer of 0% would indicate that there was no risk at all, while an answer of 100% would indicate that the risk event would definitely occur. The results showed that there was a wide variation in the perceived risk amongst professionals for each phrase used to communicate risk, such that the use of such phrases is almost meaningless without more information.

PO3.169. ETHICAL AND LEGAL ASPECTS OF PSYCHIATRIC TREATMENT IN BULGARIA

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In Bulgaria, ethical and legal aspects of psychiatric care are a major focus of attention. Ethical issues are an integral part of student curriculum and post-graduate education. The WPA Declaration of Madrid is included in each issue of the Bulletin of the Bulgarian Psychiatric Association (BPA); a special link to the Section on Ethics and Psychiatry is present on the BPA website; an Ethics Committee has been established in the BPA; a consensus statement on risk assessment in dangerous behavior has been produced. Ethical and legal guarantees for keeping patients' rights are emphasized: early intervention of legal institutions; public procedure, accepting participation of media and human rights organizations; obligatory lawyer defense; treatment based only on clinical indications; obligatory risk reassessment for a period no longer than 6 months.

PO3.170. THE USEFULNESS OF THE ASSESSMENT OF QUALITY OF LIFE IN PSYCHIATRIC PATIENTS

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Mental Health Research Institute, Tomsk, Russia

We assessed indices of quality of life in patients under treatment at the Mental Health Research Institute of Tomsk. We also assessed the influence of quality of life indices on conducted therapy and on the attitude of the patient toward the stay in the hospital. A semistructured interview including a questionnaire for the assessment of social functioning and quality of life of mentally ill was administered to 20 patients with a verified diagnosis of schizophrenia. We found that inclusion of indices of quality of life allows to improve the efficacy of conducted psychopharmacotherapy. An advantage of this approach is involving the patient him/herself into the therapeutic and rehabilitative process, strengthening the therapeutic alliance and reinforcing the patient's sense of responsibility for his/her social behaviour and his/her health.

PO3.171. THE SHADOW LINE: PSYCHIATRY AND DRUG INDUSTRY

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Health care costs are more and more rising, and national health services' officers are making hard decisions about how and where to spend public resources. Facts testify that over the past ten years there has been a very expensive change in the medications used to treat mental illnesses: new generation antidepressant and antipsychotic drugs have replaced many pre-existent patent medicines; anti-epileptic drugs are being recommended with greater frequency as mood stabilizers. The newer medicines offer the promise of ever-increasing efficacy and lesser side effects; at the same time their prices are going up remarkably. The pharmaceutical industry is the most profitable business in the G-7 countries. Marketing costs currently exceed 30% of revenues, far surpassing outlays for both research and development and drug production. Several psychiatrists attend sponsored continuing medical education events and lunches organized by drug companies, and have their expenses for participation in meetings covered by companies. The once clear boundary between academic medicine and industry has become increasingly blurred; industry donors are in a special position to both foster academic work and determine which plan is conducted. Some published research tends to favour drug company sponsored products, and some clinically important studies remain unpublished or are published with a long delay. A substantial literature confirms the considerable impact of promotional activities on the opinions and prescribing patterns of physicians. There are associated ethical problems, including: a) higher costs of pharmaceuticals; b) non-rational prescribing; c) waste of national health system funds; d) limited development of alternative, independent sources of continuing education, information, and verification of drug effectiveness and side effects. While it is unwise to advocate the total separation of the academic and medico-professional communities from industry, more transparency in this complicated relationship is warranted.

PO3.172.
THE RELATIONSHIPS OF PSYCHOLOGICAL WELL-BEING AND PSYCHIATRIC DISORDERS TO COGNITIVE SCHEMATA AND WORK

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In psychiatric literature, studies that investigated the presence of psychiatric disorders and psychological well-being at the same time are absent. The aim of the present study was to identify the relationships of psychiatric disorders and well-being to cognitive schemata and satisfaction with work in a population of health care workers. The study was carried out in a general hospital located in an urban area in central Italy. A sample of 514 health care workers completed an anonymous previously validated instrument including four scales assessing psychiatric disorders, psychological well-being, satisfaction with work, and cognitive schemata. The one-year prevalence of workers with a psychiatric diagnosis according to the Composite International Diagnostic Interview (CIDI) was 22%. The absence of psychiatric diagnosis was associated with well-being and satisfaction with work. Psychological well-being was correlated with satisfaction with work and negatively associated with most of dysfunctional cognitive schemata (all cognitive schemata except three: alarmism, perfectionism and hostile attitude). Satisfaction with work was negatively associated with hostility and poor control of the outside events. The presence of a psychiatric disorder diagnosis was associated with most of dysfunctional cognitive schemata (all cognitive schemata except three: perfectionism, difficulty to change, and hostile attitude). Our findings suggest that psychological well-being could be equated with the absence of psychiatric disorders, with the absence of the majority of dysfunctional cognitive schemata, and with a favourable opinion about work conditions.

PO3.173.
OUTCOME EVALUATION IN PSYCHOTHERAPY: A GENERAL SELF-ADMINISTERED QUESTIONNAIRE

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Outcome evaluation in ordinary care, i.e. evaluation of effectiveness, is becoming a requisite in treatment research. In psychotherapy, the most promising tools are questionnaires which are self administered by clients/patients. We present a self-administered questionnaire, known as the Psychotherapy Outcomes Questionnaire, which has been developed by the Mental Health Unit of the Italian National Institute of Health, to evaluate psychotherapy effectiveness. The questionnaire integrates perceived efficacy of psychotherapy (5 questions) and opinion about the psychotherapeutic process and cost (7 questions). It ends with a general satisfaction question. All answers are expressed on a 7 level scale. A test-retest study at 2 weeks distance was performed on 30 subjects with very good reliability results. Factor analysis will be performed on more than 100 clients/patients.

PO3.174.
PILOT STUDY ON THE THERAPEUTIC PROCESS IN CRISIS PSYCHOTHERAPY

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The aim of this work, which is part of a more extensive study on efficacy of crisis psychotherapy, was to evaluate the therapeutic process and any correlation with outcome in depressed patients. The patients were consecutively recruited from those attending the crisis psychotherapy outpatient centre of the Department of Psychiatry of Padua University (January 2000-December 2002). Twenty-six of them fulfilled the inclusion criteria and were administered the Hamilton Rating Scale for Depression (HDRS), the Beck Depression Inventory (BDI), the Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II), the Global Assessment of Functioning (GAF) and the State-Trait Anxiety Inventory (STAI), on entry into the study and three, six and twelve months later. The Session Evaluation Questionnaire (SEQ) was also employed to evaluate patients' feelings and thoughts after each session. Some sessions were also audio-recorded. Results indicated a significant improvement in depression, anxiety, anger and social functioning scores in every follow-up considered. The patient's SEQ scores and cross evaluation of patient and psychotherapist at each session exhibited significant trends for some SEQ subscales (i.e. depth, positivity, good therapist). The positivity subscale showed a significant correlation with BDI ($r = -.78$; $p<0.001$) and HDRS ($r=-.54$; $p<0.05$) at the first follow-up. Analysis of audiotapes showed a specific correlation between SEQ scores and the amount of time devoted to the focus of psychotherapy. SEQ positivity subscale scores displayed a significant correlation with outcome scores.

PO3.175.
PSYCHOTHERAPEUTIC PROBLEMS IN HOLOCAUST SURVIVORS AND THEIR CHILDREN

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The study focused on the families of Holocaust survivors. The project started in 1989 in the context of political and social transformation in Poland, when the "jewish taboo" has been addressed for the first time. The first stage of research was based on interviews with survivors and their children (40 patients). Then, after identifying the psychopathology of those studied, several suggestions for psychotherapy have been formulated. They were as follows (for survivors): a) to reframe the position of "victim" to the position of "strong person"; b) to improve the interpersonal relations with other people; c) to work through the self-pity and guilty feelings; d) to reduce the overwhelming anxiety concerning children and difficulties in separating from them. Regarding the second generation: a) to reduce the guilt feelings concerning their parents and support the separation-identification process; b) to enable the development of self–identity; c) to reach the independence from the anxious and binding parents. The authors have observed a tremendous impact of the experience of parents on the second generation and a significant transmission of the collective and personal traumas.

PO3.176.
CULTURAL APPROACH IN PSYCHOTHERAPY: A RUSSIAN PERSPECTIVE

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A number of different strategies are used by psychiatrists in the process of working with mental patients to reduce their problems and improve their adjustment. Psychodynamic, humanistic, behaviour and cognitive theories of personality are the basis for fundamental approaches to contemporary psychotherapy. Psychotherapy development in Russia brought to light some cultural aspects. Russian patients seem to be more oriented towards seeking help from others than mobilizing personal resources. The psychiatrist is often misperceived as a magician or as a wise adviser. The results of treatment are entirely depending on the doctor's skills and commitment to help. Two cultural trends in psychotherapy are marked out on this basis. The receptive approach includes methods of biological or psychological treatment that produce a positive effect regardless of patient's efforts. Among them are hypnotherapy, relaxation, talkative therapy, lectures and drug treatment. On the contrary, the productive approach demands that initiative in treatment be equally shared by the patient and the doctor. The psychiatrist encourages patient's active position, stimulates aspiration to positive changes in feelings, emotions, behaviour, in the direction of what is called personal growth. The concept of cultural-oriented approach in psychotherapy may help mental health professionals in Russia to work out effective individual programmes for certain groups of mental and psychosomatic patients. It could be also useful in the prevention of burning out during psychotherapy.

PO3.177.
THE FAMILY IMAGE TECHNIQUE AS A COMMUNICATION TOOL FOR TROUBLED FAMILIES

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Graduate School of Education, University of Tokyo, Japan

The family image technique (FIT) provides the family and each of its members with the concrete possibility of illustrating clearly the image they have of themselves. FIT is particularly useful for families suffering from psychological problems, because, in the reflection of their own image, the family members can find a breakthrough towards a better dialogue. The author has been studying many elementary, secondary school and university students along with their parents. The method turned out to be useful to solve latent conflicts and bring forward concealed problems in order to handle with them at their initial stage performing a kind of preventive work. Of course only proper facilities and the presence of skillful personnel can guarantee the functionality of this method and that is the reason why is so important to involve several kinds of experts, like clinical psychologists, probation officers, child guidance center staff, welfare counselors, healthcare counselors, any kind of professional counseling person and so forth and to widen further the field in order to include family sociology, family nursing, family education and family research.

PO3.178.
PSYCHODYNAMIC PSYCHOTHERAPY FOCUSING ON TRANSFERENCE

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This study aimed to evaluate the effectiveness of psychodynamic psychotherapy based on transference in 96 patients (men: 23, women: 73) with a diagnosis on the axis I (n=16), axis II (n=21) or both axes of the DSM-IV. The axis I diagnoses were mood disorders (n=20), anxiety disorders (n=51), eating disorders (n=4). The axis II diagnoses were in cluster A (n=13), B (n=56) and C (n=11). According to Kernberg's criteria all patients were classified as borderline personalities. The sample did not include patients with an antisocial or narcissistic structure of personality. All patients completed a two-year program of psychotherapy. Regarding symptomatology, 76% of the patients presented a "major improvement". Regarding functionality, 50% presented a "major improvement" and 48.9% a "moderate improvement". Regarding interpersonal relations, the corresponding percentages were 54.2% and 43.8%. Only patients completing treatment were included in this analysis.

PO3.179.
SOCIODRAMA AND PSYCHODRAMA TECHNIQUES IN ADOLESCENTS REFERRED TO A MENTAL CRISIS CENTER

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We report on the application of sociodrama and psychodrama in adolescents referred to a mental crisis center. The techniques allow a spontaneous and creative social role playing and an improvement in group communication. The main purpose is to help young people to face many challenges in everyday living, to recognize their own values, to communicate, to deal with important decisions, dilemmas and needs. Ambivalent emotional attitudes are brought up and addressed through a psychodynamic approach.

PO3.180.
THE EFFECTS OF A PSYCHOMOTOR TRAINING ON PATIENTS AFFECTED BY ACUTE MENTAL DISORDERS

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The aim of the present study is to verify the hypothesis that psychomotor training (based on the psychophysic self-knowledge education) can improve the outcome in psychiatric hospitalized patients affected by schizophrenia, bipolar disorders, major depression disorders, and personality disorders. The study has been conducted comparing two groups of patients, having homogeneous diagnoses and demographic characteristics. The first group has been treated with the traditional therapy (pharmacologic therapy + psychotherapy) and the second group with an experimental therapy (pharmacologic therapy + psychotherapy + psychomotor training). The evaluation has been made by structured interviews for the measurement of compliance, insight, aggressivity level and general psychiatric clinical conditions.

Psychomotor training seems to improve the cognitive, emotional and relational conditions, and reinforce self-knowledge.

PO3.181.
A NEW THERAPEUTIC INTERVENTION FOR PSYCHOSOMATIC AND PSYCHOTIC PATIENTS

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We describe our experience with a group intervention for hospitalized psychosomatic and psychotic patients, consisting of weekly story-telling and art-therapy group sessions. The goals of these groups are the sensitization of patients to their inner conflicts and a better understanding and following up of their progress. 83% of the patients receiving this intervention found it helpful to understand themselves, 66.7% found it essential to express their feelings, and 16.7% found it boring. Of the medical staff, 81.8% assert that the groups are helpful, while 54.5% believe that sufficient information is lacking. Nevertheless, 100% advise that the continuation of such groups is essential. Finally, 81% of the nursing staff regard them as a supplement to their practice.

PO3.182.
LANGUAGE AS A DYNAMIC SYSTEM: IMPLICATIONS FOR PSYCHOPATHOLOGY

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In recent years, considerable work has been done in attempting to understand various aspects of speech and language in terms of dynamic systems. In fact, language organizes and modulates sensory experiences, but on the other hand is influenced by action and perception. The aim of our study was to evaluate the presence of sub-symbolic patterns in the speech of psychiatric patients and normal controls. We submitted to recurrence quantification analysis (RQA) the elements of an ordered series (the letters constituting selected speeches) of clinical and non-clinical (control) non-structured interviews. Empirical evidence is highlighted at two levels: a) psychopathology defines informational structures of language, but differential diagnosis needs further improvements; b) synchronization, i.e. a reliable communication, can be measured and assessed in a robust statistical context.

PO3.183.
THE INTANGIBLE DIMENSIONS OF WELLNESS

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For a Maori the sole source of identity is the Iwi (ancestors' unconsciousness). This is the cultural arrangement (the conscious collective) which has persisted since the beginning of Maori time to the biculturalism that reflects modern New Zealand. Treaty law among other things conferred citizenship upon Maori (equity) and ratified customary knowledge (taonga). Public health funding endorses the elements of these arrangements. Recent advances in social policy and academic research recognize a Maori model of (mental) health originating from Iwi, which conceptualises mental illness as a disruption of spirituality subsequently manifesting itself in the body. Restoration of wellbeing commences with the affirmation of the individual by the conscious collective and customary healing aims to identify the precipitant to the disruption. As an example, the ancestors know that internal bloodlines cannot be crossed; a fact reinforced by the collective consciousness. If that knowledge is consciously or unconsciously ignored by individuals, the potency of the mental and physical impairment for the child is tangible. The dismissal of the knowledge is a matter of mind with the inevitable dis-ease of spirit and body, and further includes the secondary dis-ruption of the spirit and the body arising from the knowledge of the unsolicited damage to the other. This paper explores the counterpoint of two mental health models coexisting in a politically sanctioned framework.

PO3.184.
LORD OF THE RINGS, RETURN OF THE KING: THE END OF THE PSYCHIC JOURNEY TOWARD THE SELF

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It is believed that many legends, myths and stories are a reflection of the human beings' psychic elements, evolution, and growth. These products of the mind are considered as the symbolic language of the unconscious psyche telling its story of growth, maturation, fails, fears, beginning, and destination. The intrapsychic symbolism shows itself in the body of the heroes of the myth. I have studied the evolution of the psyche through the intrapsychic journey in the third book of Tolkien's "Lord of the Rings". I first discuss the integration of the Anima to the consciousness of Ego, then the integration of the Shadow to that Ego, and then the identification of the Ego with the Self as the final destination of the human psychic growth and evolution.

PO3.185.
ARCHITECTURE AND THE SOUL THROUGHOUT THE AGES

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The architecture of a people often reflects their character. The symmetrical proportions of a building, interior and exterior, can be inspiring, soothing and reassuring. When architecture is bad, it can have an unsettling effect. Many psychiatric disorders are thereby manifested: e.g., claustrophobia in a building where the exits are tortuously inaccessible to a consumer in a shopping mall. Images of architecture will be presented from the classical era through the renaissance into the modern era when citizens too often feel trapped or bored by an architecture which has lost its corporate soul. The psychotherapist must be alert to these environmental factors and stresses.

SPONSORED SYMPOSIA

SAS1.
FREE YOUR PATIENTS FROM DEPRESSION: TREATING THE SPECTRUM OF SYMPTOMS (Organized by the Lilly/Boehringer Ingelheim Alliance)

SAS1.1.
THE BURDEN OF DEPRESSION: UNCOVERING THE REMAINING NEEDS

M. Bauer
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Depression is a condition that not only affects the minds of millions of sufferers, but also takes a toll on their physical well-being. The somatic aspect of depression is something that has not been studied well enough in the past, yet deserves consideration as an important part of the depressive condition. By treating only the emotional symptoms of depression, residual symptoms, which are usually physical in nature, remain to complicate recovery, often resulting in relapse. This can be avoided by treating the syndrome of depression completely, resolving both the emotional and painful physical symptoms of each patient with depression to bring them to a remitted state.

SAS1.2.
SEROTONIN AND NOREPINEPHRINE: WORKING TOGETHER OR WORKING SEPARATELY ON THE SYMPTOMS OF DEPRESSION?

T. Dinan
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With the recent upswing in interest towards dual acting antidepressant drugs, it has become necessary to question why dual acting drugs should be chosen over single acting drugs. Why should we simultaneously address the serotonin (5-HT) and norepinephrine (NE) systems when addressing each separately seems to alleviate many, if not most, of the obvious symptoms of depression? The answer to this question will be reviewed in this presentation. We will discuss studies that show that disruptions of both 5-HT and NE are instrumental in causing the appearance of depressive symptoms. We will review studies that show that using drugs that act on both systems produces better results than treating a single system alone. Lastly, we will look at how dual acting drugs reduce the severity of the painful physical symptoms that may accompany depression.

SAS1.3.
FINDING A SOLUTION: INNOVATIVE AND BALANCED TREATMENTS FOR ACHIEVING REMISSION

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The definition of "better" when recovering from depression can be a slippery one. Side effects can often interfere with the recovery process, with up to 40% of patients discontinuing treatment within two months. Of those that start antidepressant therapy, up to 45% have no response to their first antidepressant and must be switched to other medications. Even when the therapies are effective with treating most of the symptoms, the presence of any residual symptoms correlates with a huge increase in the rate of relapse compared to patients in an asymptomatic state. Obviously, something is needed to address these issues, and a new class of antidepressants – the serotonin norepinephrine reuptake inhibitors (SNRIs) – may be the answer. The SNRIs have relatively mild side effect profiles and show much better efficacy than the specific serotonin reuptake inhibitors (SSRIs), which are the standard treatments for depression today. More importantly, the SNRIs treat both the emotional and the painful physical symptoms of depression. In doing this, they treat the complete depressive condition, thus allowing more patients to not only attain, but also sustain, a state of remission.

SAS2.
ESCITALOPRAM: INNOVATION THROUGH EVOLUTION (Organized by Lundbeck and Innova Pharma)

SAS2.1.
PHARMACOLOGY OF SEROTONIN TRANSMISSION: UPDATE AND FUTURE PERSPECTIVES

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In mammals, serotonergic neurotransmission regulates a wide variety of neurobehavioral processes, including cognition, affective states, feeding behavior, motor control, and sensorimotor integration. The effects of the neurotransmitter serotonin (5-hydroxytryptamine, 5-HT) are mediated through 13 distinct heptahelical, G-protein-coupled receptors (GPCRs) and one (presumably a family of) ligand-gated ion channel(s). These receptors are divided into seven distinct classes (5-HT1 to 5-HT7), largely on the basis of their structural and operational characteristics, and have been implicated as playing important roles in certain pathological and psychopathological conditions. This degree of physical diversity clearly underscores the physiological importance of serotonin. However, evidence for an even greater degree of operational diversity continues to emerge. Also, the serotonin transporter (SERT) gene is a particularly interesting candidate for genetic involvement in affective disorders, owing to its role in both the regulation of serotonergic neurotransmission and the mechanism of action of many antidepressant drugs. Two different polymorphisms of the SERT gene have been described: a variable number of tandem repeats (VNTR) polymorphisms in intron 2, and a deletion/insertion polymorphism (5-HTTLPR) in the promoter region of the gene, the short variant of which reduces the transcriptional efficiency of the SERT gene. Evidence has been provided that, although the 5-HTT gene may not be directly associated with depression, it could moderate the serotonergic response to stress and influence the response to antidepressant medication. The studies on 5-HT receptors and on SERT clearly demonstrate that the development of molecular genetic technology offers powerful techniques to complement pharmacological approaches to study individual 5-HT functions. In particular, gene-targeting approaches have been applied for the generation of lines of mice with selective and complete elimination of individual 5-HT receptor subtypes ("knockout mice"). The multiplicity and diversity in 5-HT receptors and SERT suggest that, under both physiological and pathological conditions, the status of the 5-HT transmission may vary dramatically from one subject to another and this could represent the basis for differences in responder rates to a given treatment.

SAS2.2.
PHARMACOLOGICAL FEATURES OF SELECTIVE SEROTONIN REUPTAKE INHIBITORS

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Molecules with identical atomic constitution and sequence of covalent bonds, but with different three-dimensional arrangement of the atoms, are called enantiomers. An enantiomer is a molecule that is not superimposable on its mirror image. Enantiomers have identical physicochemical properties, however they rotate the plane of polarized light in opposite directions. The equimolar mixture of two enantiomers is called racemate, and most synthetic drugs which have asymmetric carbon atoms are produced as racemic mixtures, despite the fact that pharmacological activity may reside primarily in one enantiomer. This is in contrast to chiral compounds isolated from biological sources, where only one enantiomer is usually found. Metabolizing enzymes, protein-binding sites, and/or drug receptor sites have three-dimensional structures that may be better suited to interact with one enantiomeric form. Thus, the enantiomers of racemic drugs often differ substantially in their pharmacological activities, protein binding characteristics, and distribution/disposition profiles. Using a single enantiomer can result in an improved therapeutic index, resulting from presumed higher potency and selectivity while removing those side effects that may be due to the less active enantiomer. Use of a single enantiomer can thus result in an improved onset of action and duration of action and a decrease in the propensity for drug-drug interactions. Many commonly prescribed antidepressants are chiral compounds: tricyclic antidepressants and related compounds, mianserin and mirtazapine; selective serotonin reuptake inhibitors (SSRIs) (citalopram, fluoxetine, paroxetine and sertraline); serotonin and noradrenaline reuptake inhibitors (SNRIs) (venlafaxine and milnacipran), and the selective noradrenaline reuptake inhibitor reboxetine. Escitalopram is the dextrorotatory enantiomer of citalopram, and preclinical studies have clearly indicated that the property of inhibiting serotonin uptake resides in this isomer, whereas R-citalopram is devoid of any inhibiting activity. Escitalopram is also extremely selective for serotonergic transport proteins relative to noradrenergic or dopaminergic binding sites when directly compared with other SSRIs. Moreover, escitalopram showed no binding affinity for more than 100 receptors or binding sites tested in vitro, including alpha-1 adrenergic receptors, muscarinic receptors and histamine H-1 receptors. In rat models predictive of antidepressant activity, escitalopram demonstrated higher activity than the racemic drug citalopram with even a shorter onset of action. Several major clinical studies demonstrate that escitalopram produces statistically significant improvements in depressive symptomatology relative to placebo and is well tolerated. Additional studies are needed to elucidate the place of escitalopram in the armamentarium of medication used to treat depression, but at present it appears to hold promise as a potent, effective and well-tolerated antidepressant that may offer a more rapid onset of action than other antidepressants for some patients.

SAS2.3.
THE EVALUATION OF NEW ANTIDEPRESSANTS

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Up to a few years ago, psychopharmacological research had a clear objective: to develop effective therapeutic solutions for mental disorders. This is now an accomplished objective. In fact, modern treatments ensure good results as far as the improvement of the psychopathologic picture is concerned. Actually, they allow us to take care of the social, relational and work reintegration of patients. At this point, a different question arises: from now on, what new molecules do we need? It is not likely, today, that we can develop an "ideal" antidepressant or antipsychotic molecule, matching the requirements of every kind of patient. On the contrary, the real problem is to identify and describe patients who are able to benefit from the peculiar features of each molecule. Nowadays, what we need is an antidepressant drug with a faster than 2-4 weeks onset of action; effective in more than 2 patients out of 3, and able to produce a remission, and to maintain it for a longer period and in a higher percentage of patients. Moreover, clinical practice suggests that we should focus on some variables which often determine the interruption of pharmacological treatment by the patient. They include pharmacological interactions; the activity towards P450 isoenzymes; virtual vs. real dose; sweating, tremor, restlessness; problems with sexual function (ejaculation, anorgasmia, libido reduction); weight gain. Escitalopram, the active isomer of citalopram (equimolecular mixture of the enantiomer S, active and R, inactive) presents an innovative pharmacological profile and clinical activity. The clinical results obtained up to now (the molecule, approved by the Food and Drug Administration, is present in USA, Denmark, Switzerland, Austria, Spain, England and now also in Italy) seem to be very favourable. Now the first results obtained in clinical trials will have to be confirmed by ordinary practice.

SAS2.4.
NEW REFERENCES IN THE THERAPY OF THE ANXIETY SYNDROMES

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Escitalopram, the S enantiomer, is the therapeutically active component of citalopram, while the R enantiomer, also contained in the racemic citalopram, is essentially inactive from the pharmacological point of view. In animal models, escitalopram demonstrated higher antidepressant, antipanic and antiaggressive activity than RS-citalopram, with 4 fold lower effective doses. The pharmacodynamic profile shows a drug potentially characterized by reduced sedative activity, reduced pro-impulsive activity, lack of influence on body weight, and minor sexual effects. These hypothetical features correspond to the four main causes of treatment discontinuation or reduced compliance reported for citalopram. Sedation is the principal cause of withdrawal with selective serotonin reuptake inhibitors both in the short and long period. Then, escitalopram offers a potentially superior effectiveness with a low dose and a better tolerability profile. Escitalopram has been studied on animal models such as "the resident intruder" and "the footshock-induced vocalization", both on rodents. In the "resident intruder" model escitalopram has showed a reduction of aggressive behaviour in a dose-dependent manner and an increased flight behaviour without modifying other behavioural responses. Citalopram, on the contrary, reduces aggressive behaviours only at high doses (1 mg/kg) while the flight-submit behaviour increases at all doses. In this model escitalopram is at least twice as potent as citalopram. The "footshock-induced ultrasonic vocalization" model showed, with escitalopram and standard level of serotonin, a dose-dependent suppression of vocalization. By increasing the serotonin levels (25 mg/kg of L-5-HT), the response was even more empowered. Citalopram and standard levels of serotonin showed only a weak inhibition of vocalization. With increased levels

of serotonin (25 mg/kg of L-5-HT) a complete inhibition of vocalization was observed. With R-citalopram and standard levels of serotonin, the inhibition of vocalization is very weak, and with increased levels of serotonin (25 mg/kg of L-5-HT) an increase of vocalization is determined. This experiment concludes that R-citalopram acts inhibiting the anxiolytic effects of escitalopram. Five controlled clinical studies examined the use of escitalopram in anxiety disorders. Two studies were carried out in patients with generalized anxiety disorder (GAD). The first was a double-blind, placebo-controlled randomized study on 240 patients with GAD treated with escitalopram for 8 weeks, in flexible dose (10-20 mg/day). The second was a meta-analysis of three trials showing efficacy on GAD nuclear symptoms after the first week of therapy compared to placebo. At a flexible dose of 10-20 mg/die, escitalopram was tested in 360 patients with social anxiety disorder, in a double-blind placebo-controlled trial, for 12 weeks: it was found superior to placebo in reducing the total score on the Liebowitz Social Anxiety Scale and the scores on avoidance and fear/anxiety subscales. Escitalopram was evaluated for 10 weeks in a double-blind comparison vs. citalopram and placebo in 351 patients with panic disorder (with or without agoraphobia) with at least 4 panic attacks in the prior 4 weeks and 3 panic attacks in the 2 washout weeks with placebo: remission rates were significantly higher with escitalopram (10-20 mg/die) in comparison to placebo. Escitalopram has shown in all the studies an excellent tolerability profile. However, the use of assessment and outcome measures of cognitive functions, quality of life, "behavioural toxicity", rates of compliance and "drug attitude" is needed, and studies longer than 8 weeks, with long-term compliance evaluation, are warranted. Moreover, we need direct comparisons between escitalopram and citalopram.

SAS3.
CONTROVERSIES AND CONSENSUS IN THE MANAGEMENT OF BIPOLAR DEPRESSION (Organized by GlaxoSmithKline)

SAS3.1.
THE UNIPOLAR AND BIPOLAR PHENOTYPES

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The growing availability of new drugs for the treatment of bipolar disorder has led to a renewed interest in mood disorders. Although the distinction between bipolar and unipolar disorder has served our field well in the early days of psychopharmacology, in clinical practice it is apparent that their phenotypes are only partially described by the diagnostic classification systems currently used, and this can therefore lead to misdiagnosis. We argue that clinical variability needs to be viewed in terms of a broad conceptualization of mood disorders and their common threshold or subthreshold comorbidity. The spectrum model provides a useful dimensional approach to psychopathology and is based on the assumption that early-onset and enduring symptoms shape the adult personality and establish a vulnerability to the subsequent development of axis I disorders. The importance of subthreshold syndromes should not be underestimated, as the failure to recognise bipolar spectrum disorder could delay treatment and worsen prognosis. Early detection of lower level phenomenology will prevent the occurrence of more severe, life-disrupting symptomatology. Therefore, clinicians need guidance to aid recognition that, in the absence of evident mood alteration, fluctuations in energy levels, alternating phases of psychomotor activity, disruptive functioning and lability of psychological drives should be considered as fundamental indicators of bipolar disorder. Furthermore, the introduction of a refined procedure for the detection and evaluation of a broader range of symptoms would improve the accuracy of the diagnosis and the subsequent treatment of this illness. In response to this requirement, a structured clinical interview (the Structured Clinical Interview for Mood Spectrum, SCI-MOODS) was devised to evaluate the whole range of symptoms, focusing particularly on mild subthreshold manifestations. The SCI-MOODS encompasses the DSM-IV and ICD-10 defined core symptoms, subthreshold and subclinical symptoms, atypical symptoms, behavioural patterns related to the core symptoms and personality and/or temperamental traits. Changes in four "domains" are explored to provide a method of classification that places temperament, personality and affective disorders in a continuum: feelings and behaviour associated with physical experiences, such as eating, sleep and sexual feelings; energy levels, with particular attention to everyday activities, such as work, social life and hobbies; mood, from subclinical depression to severe mixed and manic symptoms and cognitive changes that often occur with mood dysregulation. In the mood spectrum assessment self report (MOODS-SR), items are organized into depressive, manic-hypomanic and rhythmicity/vegetative components. Empirical data demonstrating that the depressive and manic-hypomanic components are significantly correlated both in bipolar and unipolar patients seem to challenge the traditional unipolar-bipolar dichotomy and support the clinical usefulness of the spectrum approach. However, the spectrum concept does not reject the DSM-IV or ICD-10 affective categories, but provides a broader range of symptoms allowing for the possibility of unclear distinction between different DSM mood categories. Furthermore, by including altered mood and mood related features in one spectrum category, the model tends to reduce the problem of comorbidity encountered using the categorical classification systems. The systematic use of instruments such as SCI-MOODS and MOODS-SR with broader symptomatology investigation will allow even relatively inexperienced clinicians to recognise clinically significant bipolar spectrum disorders, identify patients at risk and follow treatment progress by increased awareness of residual symptoms and subtle fluctuations in mood as a consequence of therapy.

SAS3.2.
THE BURDEN OF BIPOLAR DEPRESSION

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Bipolar depression is a part of a complex disease and represents by itself a complex phenomenology. This is probably due to many reasons: a) multifaceted clinical presentations, especially with mixed features; b) rich anxious comorbidity (obsessive-compulsive disorder, panic, social anxiety), poly-substance abuse; c) trait mood lability and cyclothymia; d) clinical instability. The EPIDEP French study, conducted at 15 sites, actually showed that 40% of major depressives are bipolar type II and 6% bipolar-I. Beside complexity, the major burden of bipolar depression is linked to highly frequent misdiagnosis, especially toward unipolar depression. Studies revealed that an important proportion of patients wait more than 10 years to get a correct diagnosis of bipolarity. Recognition of bipolar depression is crucial in order to reduce recurrence and complications due to bipolarity, and to avoid inadequate treatment. Use of self-rated questionnaires can substantially improve the correct recognition of soft bipolarity. Features external to the phenomenology, such as early age at onset, high depressive recurrence, seasonality, cyclicity, switching on antidepres-

sants (or worsening by antidepressants), postpartum onset, bipolar (often "loaded") family history, hyperthymic and cyclothymic temperaments, are more useful ways to distinguish bipolar depression from its unipolar counterparts. Beside increased rates of recurrence and suicide, the burden of bipolar depression is enhanced by the presence of cyclothymia. Cyclothymic depression represents a distinct and more severe and recurrent depressive form within the bipolar-II sub-population (this argues for the utility of the "bipolar-II1/2" sub-entity). Moreover, in cyclothymic depression, a prominent "dark" side (with frequent risk-taking behaviors) characterizes hypomanic episodes. Finally, the cases of bipolar depression with hypomania strictly associated with antidepressants seemed to be a valid soft bipolar sub-entity mostly characterized by the presence of long-standing depressive traits (double depression), higher depressive severity, and completed suicide in the family.

SAS3.3.
LOOKING TO THE FUTURE: THE NEW TREATMENT GUIDELINES FOR BIPOLAR DEPRESSION

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In the treatment of bipolar disorder, the guidelines available for treating mania are fairly standard worldwide, whereas those for bipolar depression vary, often substantially, between countries. Recently, new treatment guidelines for bipolar I depression, based on clinical evidence rather than expert opinion, have been developed by an international consensus group. In developing the guidelines, the group recognized that some commonly held misconceptions about bipolar disorder might be impediments to having these guidelines adopted. The group stressed that bipolar disorder is a chronic lifelong disorder, and that the whole illness, rather than acute manic or depressive episodes, should be taken into account when making treatment decisions. The group treatment recommendations were prioritized on the basis of clinical evidence. Category 1 evidence was represented by randomized, placebo-controlled trial(s) in the treatment of acute bipolar depression and in the long-term treatment of both phases of illness. Category 2 evidence was represented by randomized, placebo-controlled trial(s) in the treatment of acute bipolar depression or randomized, placebo-controlled trial(s) in the long-term treatment of one phase of the illness. Finally, category 3 evidence was represented by randomized, controlled trial(s) in any phase of bipolar disorder treatment. Using these levels of evidence, the recommended first-line treatments for the management of bipolar I depression were lithium, lamotrigine (both category 1 evidence), and olanzapine and olanzapine/fluoxetine (category 2 evidence). For patients who fail to respond to these first-line therapies, the consensus group recommended further options based on whether or not patients have non-rapid or rapid cycling or psychotic symptoms. They also provided guidance for the treatment of breakthrough mania. The group concurred that clinicians should consider the individual patient when deciding what first-line agent to use in bipolar depression, as well as when deciding what treatment to use for patients whose response is inadequate. Although the guidelines focus on drug therapy, the group also emphasized that the optimal management strategy for bipolar depression includes appropriate psychological interventions.

SAS3.4.
LONG-TERM MANAGEMENT OF BIPOLAR DEPRESSION

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Lithium is widely considered as the "gold standard" for long-term treatment of bipolar disorder, with demonstrated efficacy in preventing mood relapse in both phases of the disorder. New data on the efficacy of lithium are available from two large multicentre, randomized, double-blind, placebo-controlled trials comparing lamotrigine and lithium as maintenance therapy in bipolar I disorder. These same studies established lamotrigine as an effective maintenance therapy for the prevention of bipolar depression, both in recently manic and recently depressed patients. A planned combined analysis of the two trials showed that lamotrigine, but not lithium, was significantly superior to placebo in prolonging the time to intervention for a depressive episode ($p<0.001$). Both lamotrigine and lithium were significantly superior to placebo in prolonging the time to intervention for a manic/hypomanic/mixed episode ($p=0.034$ and $p<0.001$, respectively), although lithium was superior to lamotrigine ($p=0.03$). Lamotrigine controlled bipolar depression without causing mood destabilization. The antipsychotics, for example olanzapine, and other anticonvulsants such as valproate and carbamazepine have demonstrated efficacy in acute mania. However, these agents have not been studied as maintenance therapy in the depressive phase. Olanzapine and olanzapine-fluoxetine have been studied in acute bipolar depression (up to 8 weeks), with olanzapine-fluoxetine achieving statistically greater improvement than olanzapine at weeks 4 through 8. In conclusion, the use of lithium and lamotrigine as maintenance therapies in bipolar I depression is supported by category 1 evidence (randomized trials in acute depression and both phases of the disorder).

SAS4.
NOVEL WAYS TO UNDERSTAND DEPRESSION (Organized by Servier)

SAS4.1.
LONG-TERM OUTCOME OF DEPRESSION: STILL A PROBLEM REQUIRING BETTER TREATMENTS

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There has been widespread recognition that the long-term outcome of depression is problematic in more severely ill and hospitalised samples, in spite of modern treatment. We have carried out a series of studies into this problem. A ten-year follow-up of patients treated in the early 1990s has confirmed that recurrence rates are still high, also with considerable residual and sub-threshold symptoms. A study of treatment received in practice after the acute episode confirmed that, while there are some deficiencies, they are not large enough to explain the adverse outcome, and do not occur particularly in those patients who do badly. The discrepancy with trial data appears partly due to trial sample selection and there may also be rebound relapse in trials with rapid medication withdrawal, but in fact treated groups in maintenance trials do show considerable recurrence rates. The main problem appears to be that many depressions are still partially refractory to currently available medications, with better medications still needed. A further approach is to add psychological treatments. In a controlled trial of cognitive therapy (CBT) in unipolar depressives

with residual symptoms, we found significant relapse reduction compared with continued medication alone, which extends to 3½ years after cessation of CBT, as shown by follow-up data. However, CBT had only a weak effect in a trial in bipolar disorder, limited to better prognosis patients with fewer previous episodes.

SAS4.2.
THE RELATIONSHIP BETWEEN SLEEP AND DEPRESSION: NEW FINDINGS FOR AN OLD QUESTION

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Sleep disturbances are commonly observed in patients with major depressive disorder (MDD). However, many questions remain unresolved regarding the nature of the relationship between sleep disturbances and depression. New findings from three different areas of research have important implications for this question. First, a growing body of evidence indicates that sleep disturbances, specifically insomnia, are a risk factor for incident and recurrent MDD. At least eight independent published reports support this conclusion. These data also raise the question whether treating insomnia may modify the risk of later depression. Second, a number of studies show that insomnia symptoms and specific electroencephalography (EEG) sleep characteristics, such as an increase in rapid eye movement (REM) sleep or decrease in slow wave sleep (SWS), confer increased risk for poor treatment outcomes in patients with established MDD. Again, the important unanswered question is whether treatment of these sleep disturbances may improve overall treatment outcomes in depression. Third, a growing number of functional imaging studies using positron emission tomography (PET) have demonstrated consistent patterns of metabolic change associated with REM and NREM sleep in humans, and alterations in these patterns among patients with depression. These changes bear some similarities, but also some differences, from waking PET studies in MDD, suggesting that sleep may be a useful naturalistic probe for studying the neurobiology of depression. Taken together, these three types of findings suggest unique relationships between sleep and depression that may lead not only to improved understanding of pathophysiology, but unique opportunities for intervention as well.

SAS4.3.
HOW DO ANTIDEPRESSANTS ACT ON THE BRAIN? NOVEL DRUGS, NOVEL CONCEPTS

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The need for more effective and more rapid antidepressants has stimulated research on the physiopathological mechanisms of depression, and novel drugs acting at the hypothalamo-pituitary adrenal axis or aimed at promoting cell proliferation in the hippocampus have been identified as potential antidepressants. In addition, alterations in circadian biological rhythms are other symptoms most often associated with depression, and evidence has been reported that endogenous circadian rhythm disorganization can be causally related to affective disorders. Because melatonin is the key neurohormone for biological rhythm synchronization, it was hypothesized that a drug mimicking its actions might be of potential interest to alleviate mood disorders, especially severe depression. This consideration led to the synthesis of agomelatine (S 20098) as a potent (Ki = 0.1-0.5 nM) agonist at human melatonin MT1 and MT2 receptors. Extensive binding assays showed that agomelatine, but not melatonin, also binds to 5-HT_{2C} receptors, at which it acts as an antagonist in the dose range producing clear-cut antidepressant-like effects in several validated paradigms (chronic mild stress, forced swimming test, etc.) in rodents. As expected from 5-HT_{2C} receptor blockade, agomelatine enhanced extracellular levels of both dopamine and noradrenaline, but not serotonin, in the frontal cortex of freely moving rats, and this effect persisted all along chronic treatment with the drug. Altogether, these data demonstrate that the unique association of MT1/MT2 receptor agonist properties and 5-HT_{2C} receptor antagonist properties as that achieved in the molecule of agomelatine yielded a potent antidepressant drug with a completely novel mechanism of action.

SAS5.
THE PSYCHIATRIC PATIENT: NEW TREATMENT PERSPECTIVES ACROSS THE LIFESPAN (Organized by Janssen-Cilag)

SAS5.1.
NEW ANSWERS IN THE TREATMENT OF PATIENTS IN THE ACUTE PHASE

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Patients that require treatment for acute episodes often present with severe agitation, aggression, hostility or violent behaviour with or without psychotic symptoms. These symptoms are often a result of mania, schizophrenia or substance abuse. In the acute setting, treatment choices are driven by symptoms, rather than disease classification. Treatment approaches vary, although the optimal approach may be an atypical antipsychotic agent, with a benzodiazepine given 'as needed'. Besides treatment setting, other factors that affect treatment decisions include the clinician's level of experience, first episode vs. repeat episode, as well as regional differences. In addition, patient factors, such as prior medication history and level of cooperation, as well as medication factors, such as cost, formulation and sedative effects, can influence atypical antipsychotic selection. In the first two hours it is important to eliminate organic causes and substance abuse, and the patient should be monitored at least every 15 min. Treatment should be determined on the severity of symptoms and the risks to the patient and others (suicidal behaviour, violence, etc.). A rapidly dissolving formulation is preferred over standard oral forms. Intramuscular forms should be the last resort. Combination therapy is acceptable, but never a requirement and high doses are not necessarily the best. Calmness is a better endpoint than sleep, except for sleep-deprived manic patients, but is difficult to measure. The primary concern in the 2–24-hour period is to establish a therapeutic alliance with the patient and to continue the psychiatric evaluation. Monitoring should continue at least every 2 hours, more frequently for sedated patients. Atypical antipsychotics are preferred over conventional neuroleptics, but meta-analysis reveals that only risperidone, olanzapine and amisulpiride are superior. The preferred adjunct is a benzodiazepine, followed by valproate or lithium if necessary. Other treatment options (e.g. antidepressants) should be considered at this stage and the patients' preferences (e.g. light on/off, decreasing stimulation vs. distracting from hallucinations) and basic needs (food, clothing, bathrooming) should be accommodated. It is essential to establish a good working relationship between patient and psychiatrist as early as possible in order to forge plans for long-term collaboration. This

will help the patient understand the diagnosis and treatment options. After the first 24 hours, an early start of psycho-education is essential. Long-term success depends upon compliance as this prevents relapses and hastens recovery and social integration. The dose or agent should be changed only if the response is inadequate, or the drug is poorly tolerated or not accepted by the patient, although the best formulation for long-term treatment may not be the same as the one used during the acute phase. Treatment must be individually tailored to each patient's needs. Compliance monitoring is easiest with long-acting injectable antipsychotics, and if used should be started early. In bipolar disease, several double-blind, controlled trials, involving more than 1,250 patients, have demonstrated the efficacy of risperidone (monotherapy or added to a mood stabilizer) for a broad range of symptoms. In both the monotherapy and add-on trials, risperidone significantly and rapidly improved the Young Mania Rating Scale scores when compared to placebo, as early as day three and at least by week 1, as well as at subsequent assessments. Manic patients with and without psychotic symptoms responded similarly well to risperidone therapy. Risperidone was also well tolerated in these acute treatment trials.

SAS5.2.
REDUCING THE RISK OF EARLY TRANSITION TO PSYCHOSIS: USING LONG-ACTING ATYPICAL ANTIPSYCHOTICS IN YOUNG PATIENTS

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A considerable proportion of young individuals who manifest isolated psychotic symptoms transit within 6-12 months into a full blown psychosis and schizophrenia. Although most of them achieve symptomatic remission, more than half relapse again within the following 12 months despite treated with conventional antipsychotics. Furthermore, they are particularly vulnerable to adverse effects (AE) of the treatment. Hence, protracted and carefully dosed pharmacological intervention is essential in ensuring remission of symptoms and optimal outcome in this population. The FutuRis study is the largest and most comprehensive study comparing an atypical and a conventional antipsychotic in early psychosis using appropriately low dose of medication. This randomized, double-blind trial compared the effect of treatment with risperidone or haloperidol on the long-term outcome of early psychotic patients. Forty-nine investigators from 11 countries participated. Subjects (n=535) received trial medication for at least one year and were followed up for a minimum of two and a maximum of four years. This study demonstrates that risperidone was associated with a reduced risk of relapse among remitted, first-episode and early psychotic patients. Furthermore, risperidone was associated with less extrapyramidal symptoms, protracted abnormal movements and akathisia compared with *equivalent* doses of haloperidol. Also, akathisia, which is characterized by intense feelings of restlessness and has been occasionally associated with increased risk for suicide, was seen in fewer patients treated with risperidone compared to haloperidol. Indeed, in this study, fewer risperidone treated patients attempted or committed suicide. Unfortunately, a large proportion of individuals who achieve good remission discontinue treatment prematurely. Among the solutions to poor treatment adherence is administration of long-acting medication. However, until recently this option has been considered mostly in chronically ill patients. The recent availability of long-acting atypical drugs with better AE profile has raised the possibility that more recent onset psychotic patients should be considered for treatment with long-acting drugs.

SAS5.3.
COMPLIANCE: NEW STRATEGIES FOR IMPROVING TREATMENT ADHERENCE AND PATIENT BEHAVIOUR

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The optimal long-term aim of antipsychotic treatment is re-integration into the community. This can only be achieved by maintaining patients in a state of remission for as long as possible. Without antipsychotic treatment, the rate of relapse is very high. With each successive relapse, the patient's long-term prognosis deteriorates and previous levels of functioning are rarely achieved. Patients relapse for a multitude of reasons, including psychosocial stressors, residual mood and psychotic symptoms and drug or alcohol abuse. Non-compliance with antipsychotic medication is thought to be the most important predictor of relapse. Continuous treatment has been shown to reduce the risk of relapse compared to intermittent treatment. With no antipsychotic medication, as many as 70% of patients will experience relapse over one year. It is often difficult to predict which patients will adhere to their regimen and most patients are likely to show some degree of non-compliance in the long-term. Adherence to medication regimens is poor in many disease areas but patients with schizophrenia often struggle with additional issues. The condition itself can be a factor as the patients may have little insight into their illness. Other factors that may affect compliance include cognitive dysfunction, psychotic symptoms, side effects of medication, socio-cultural issues and co-morbid substance abuse. Compliance can be improved by using various strategies: educating the patient about the illness and its treatment with emphasis on the link between stopping medication and relapse; improving the relationship between the healthcare professionals and the patient, which may include specialized clinics and regular contact, and finally choosing a medication that is tailored to the individual patient's needs and that balances efficacy and side effects. Atypical antipsychotics have been shown to moderately improve adherence rates. However, non-adherence with oral atypical antipsychotics remains considerable and therefore interventions which can further improve adherence are warranted. Non-compliance with oral medication can be partly overcome by using long-acting depot formulations that only require administration on a weekly/monthly basis. Until recently only conventional depot antipsychotics were available and these are associated with poor tolerability (especially with regard to motor side effects) and little effect on negative and affective symptoms compared to the atypical antipsychotics. The advent of a long-acting atypical injection has fulfilled a previously unmet need. How do the different treatments affect relapse rates? Conventional antipsychotics are associated with 1-year relapse rates in the range 30-50%. There is some evidence to suggest that relapse rates for conventional antipsychotics can be further improved by using depot formulations that improve adherence. Adams et al., in their systematic review of depot antipsychotics, were however unable to demonstrate a statistically significant difference; one explanation for this could be that patients participating in trials were reasonably compliant with oral medication. Studies of atypical antipsychotics have demonstrated relapse rates in the range of 20-30%. In a recent systemic review and exploratory meta-analysis of randomised controlled trials, Leucht at al. confirmed that, as a group, regardless of whether they can improve adherence, atypical drugs are significantly more effective in the prevention of relapse than conventional drugs. Therefore, combining the benefits of an atypical antipsychotic with those of a long-acting formulation may further reduce relapse rates and enhance community re-integration.

SAS5.4.
REMISSION: NEW PERSPECTIVE IN THE TREATMENT OF SCHIZOPHRENIA

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Without a general consensus on the definition of remission in patients with schizophrenia, relatively few clinical trials have included a measure of remission as a primary outcome measure. However, with the availability of newer, more effective therapeutic interventions with significant impact on patient outcomes, research studies are now attempting to evaluate the effectiveness of antipsychotic treatment in producing remission of symptoms and in promoting long-term recovery. Liberman and Kopelowicz suggested that "continuous medication is almost always a necessity for sustaining high functioning among persons diagnosed with schizophrenia". However, continuous antipsychotic treatment is the exception rather than the rule. Estimates of non- or partial-compliance with medication in schizophrenia range from two-thirds to more than 80%. Long-acting antipsychotics minimize compliance issues and disruptions in treatment, and numerous studies have shown that long-acting injectable drugs are more effective than their oral equivalents. Long-acting injectable risperidone, the first long-acting formulation of an atypical antipsychotic, combines the advantages of an atypical antipsychotic (in terms of effectiveness and tolerability) with the consistent therapy and assured delivery of a long-acting formulation, and as such represents an important advance in the treatment of schizophrenia. Recently, Martin et al. reported on clinical experience in four patients who were switched to long-acting risperidone for reasons including insufficient control of symptoms, adverse events and convenience. Over a year, all four patients showed symptomatic improvements and considerable reductions or disappearance of preexisting extrapyramidal symptoms. They became more socially interactive, with no signs of sedation, fatigue, confusion, depression or anxiety, and none relapsed or required hospitalization. Three of the four had no signs of illness after a year, one had returned to college and another to work. These reports demonstrate the suitability of long-acting risperidone in patients who benefit from long-term treatment and suggest its potential in all such patients. We will examine an analysis of the data from the year long trial of risperidone long-acting injection that takes symptomatic remission as the outcome criterion. The objectives were to assess long-term outcomes for patients who were or were not in remission at study entry. The results suggest that by switching to risperidone long-acting injection, previously stable patients can experience additional improvements, so that more patients can achieve and sustain remission.

SAS6.
BEYOND DEPRESSION AND ANXIETY: UNDERSTANDING TREATMENT MYTHS AND FACTS (Organized by Pfizer)

SAS6.1.
PUBLIC HEALTH RELEVANCE OF TREATING DEPRESSION AND ANXIETY

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Depressive disorders are a public health problem. They are frequent and it is probable that their incidence and prevalence will grow in the years to come. They have a negative impact on the prognosis of physical illness if they are comorbid with it. If left untreated they can have grave consequences, ranging from diminished working capacity and failure in social roles to social isolation and even suicide. Treatment of depressive disorders is possible and can be provided in primary healthcare and in other settings. It is effective and significantly reduces the severity and the prevalence of the illness and its consequences. Currently, only a small proportion of people with depressive and anxiety disorders receive appropriate care and treatment. Their disease often passes unrecognized, and even when recognized patients do not receive therapy that could improve their condition. There are ways to improve this situation, as has been shown in several studies in the past few decades.

SAS6.2.
COMORBID DEPRESSION AND ANXIETY: TREATMENT CONSIDERATIONS

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Comorbid depression and anxiety is present in approximately 50% of individuals with these disorders. Psychiatric comorbidity is frequent in all age groups, and is associated with increased severity of illness, poorer social function, increased somatic symptoms, and greater suicidality. It is also linked to poor treatment outcome, possibly resulting from delayed or diminished response to treatment, or reduced compliance. Although highly prevalent, comorbid depression and anxiety is underdiagnosed, and undertreated despite the availability of effective therapies. There is therefore a need to raise awareness among general practitioners to ensure optimal treatment for patients, and to overcome public misconceptions regarding psychiatric disorders and medications. Clinical trials of antidepressant efficacy in anxiety or depression often exclude patients with psychiatric comorbidity. This presentation will review recent studies demonstrating the efficacy of some agents in patients with a variety of comorbid psychiatric disorders. In a double-blind, placebo-controlled trial, sertraline and imipramine were highly effective in patients with both panic disorder and depression, with sertraline offering greater tolerability and compliance. In patients with major depressive disorder (MDD) and comorbid obsessive-compulsive disorder, sertraline was shown to be more effective in reducing symptoms than desipramine. Venlafaxine treatment has also been reported to benefit patients with MDD and comorbid generalized anxiety disorder. Both sertraline and paroxetine have shown efficacy in patients with post-traumatic stress disorder and comorbid depression or anxiety. These studies indicate that some antidepressants are as effective and well tolerated in patients with psychiatric comorbidity as in single mood and anxiety disorders.

SAS6.3.
TREATING DEPRESSION IN PATIENTS WITH COMORBID MEDICAL ILLNESS

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Rates of depression may be up to 10 times greater in the medically ill compared with healthy individuals; up to 40% of patients with medical illness suffer depression. Comorbid depression complicates treatment, has negative impacts on outcome and recovery, and increases the economic and healthcare burden. In patients with ischemic heart disease, comorbid depression dramatically increases mortality. Depression in patients with ischemic heart disease is common but often untreated. This is possibly because of the perceived frailty of

these patients, or perhaps because such depressions are seen as understandable and therefore not in need of treatment, even though comorbid depression increases cardiovascular mortality 3- to 4-fold in post-myocardial infarction patients. The Sertraline Antidepressant Heart Attack Randomized Trial (SADHART), the first large placebo-controlled trial of a selective serotonin reuptake inhibitor in patients with acute coronary syndromes (myocardial infarction or unstable angina), demonstrated that sertraline was a safe therapy in this patient group, alleviating depression and improving patients' quality of life with no adverse cardiovascular effects. Sertraline was also associated with a reduction in platelet/endothelial activation, a potential advantage in this patient population. These data demonstrate that there are significant benefits in actively treating depression in patients with cardiovascular disease, which may translate into reduced cardiovascular morbidity and mortality.

SAS6.4.
PREVERS: A UNIQUE STUDY DESIGNED TO EVALUATE LONG-TERM PREVENTION OF DEPRESSION

P. Boyer
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Depression is a highly recurrent disorder, and fewer than 50% of patients remain free of symptoms for at least 2 years after recovery from an original depressive episode. Therefore, in addition to alleviating acute phase symptoms, a major goal of antidepressant therapy is the prevention of relapse, and ultimately complete recovery. It is currently recommended that successful acute phase pharmacotherapy is followed by at least 6 months of continued treatment to prevent relapse. Long-term prophylactic therapy may also be necessary in many patients. Several studies assessing the long-term effects of selective serotonin reuptake inhibitors (SSRIs) and serotonin/norepinephrine reuptake inhibitors (SNRIs) in major depressive disorder have suggested that they prevent the recurrence of depression. However, these trials were not designed specifically to address the prophylactic ability of these agents, and have a number of methodological limitations. They are therefore of limited use as a basis for recommending long-term prophylactic therapy in patients at risk of recurrence. The PREVERS (PREVEntion of Recurrences with Sertraline) study was designed to address these methodological concerns and specifically to evaluate the prophylactic efficacy and safety of the SSRI sertraline. The index depressive episode was treated by an antidepressant other than sertraline to identify a pure "maintenance" effect. The design included a single-blind placebo phase to verify stability of remission (eliminating relapsing patients). During the following 18 months of double-blind, randomized treatment, the rate of recurrence, the time to first recurrence, and the relative risk of recurrence were significantly lower with sertraline than with placebo.

SAS7.
INTEGRATING SCIENCE AND MEDICINE: STRATEGIES FOR THE MANAGEMENT OF BIPOLAR DISORDER (Organized by Lilly)

SAS7.1.
BUILDING THE FOUNDATION TO REACH MOOD STABILIZATION

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In the last decade, we have made considerable progress in the treatment of acute mania. Current availability of several atypical antipsychotics has improved our outcomes in acute mania. However, we need to continue research efforts to improve the long-term treatment of bipolar disorder after the resolution of mania. The major goals are to: prevent future episodes of mania; prevent mixed episodes; prevent episodes of depression; and diminish the presence of subsyndromal depression over extended periods of time. Strategies following the resolution of the manic index episode are either to continue the treatment that was successful initially or alternatively to use first atypical antipsychotics for the acute episode of mania and then switch to or add "mood stabilizers" for maintenance treatment. Despite the importance of this public health problem, the empirical basis for our choices is rather limited. This presentation will review the data available currently on lithium, valproate, lamotrigine and olanzapine as prophylactic treatments. It is expected that additional databases for long-term treatment will become available soon. These studies may help us to redefine what constitutes a mood stabilizer. Furthermore, we may need to reconsider the use of monotherapy in the long-term treatment of bipolar disease.

SAS7.2.
NEW ADVANCES IN TREATMENT OPTIONS DURING THE MAINTENANCE PHASE: TWO PIVOTAL MAINTENANCE STUDIES

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Psychiatrists view the treatment of bipolar disorder in three dimensions: mania, depression, and maintenance. Efficacious maintenance treatment should help patients remain in remission and prevent relapse into mania. Since the 1970s, lithium has been accepted as the standard of care maintenance treatment for patients with bipolar disorder. More recently, anticonvulsants, antipsychotics, and antidepressants have been evaluated for efficacy in different dimensions of bipolar disorder. According to the American Psychiatric Association Practice Guidelines, there is limited evidence that maintenance antipsychotic agents are effective in prophylaxis against recurrence and no evidence that their efficacy in maintenance treatment is comparable to lithium or valproate. In September 2002, the first randomised, double-blind comparison of olanzapine and lithium was presented at the Third European Stanley Foundation Conference on Bipolar Disorder. Rates of relapse into mania were significantly less with olanzapine than with lithium (14.3% vs. 28.0%, $p<0.001$), indicating that olanzapine may provide efficacious maintenance treatment. The conclusions from this study are encouraging for the long-term treatment of the disorder. Additionally, researchers must continue efforts to improve outcomes for bipolar disorder.

SAS7.3.
TREATMENT ADHERENCE AND FUNCTIONING IN BIPOLAR DISORDER: WHAT SHOULD OUR OBJECTIVES BE?

E. Frank
Department of Psychiatry, University of Pittsburgh, PA, USA

Once considered a 'good prognosis' disorder, bipolar disorder is now known to be associated with considerable functional impairment over the patient's lifetime and, in many instances, with a deteriorative course. It is also a disorder in which treatment adherence represents a major therapeutic challenge. This presentation will review the most recent data on impairment in bipolar disorder, the relationship between treatment adherence and impairment and then focus largely on strategies for enhancing both treatment adherence and functional outcomes. The role of more structured psychotherapy in this process will be discussed. Strategies common to those interventions leading to improved outcomes will be reviewed, including a) psychoeducation about the illness and the medications used to treat it, b) management of medication side effects, c) promotion of a regular sleep-wake cycle, d) regular monitoring of mood states and collaborative illness management strategies. The presentation will conclude with a discussion of how these strategies can be implemented in everyday practice with individuals suffering from bipolar disorder.

SAS8.
CLINICAL STRATEGIES IN MANAGING SCHIZOPHRENIA AND BIPOLAR DISORDER (Organized by AstraZeneca)

SAS8.1
RESOLVING ACUTE SYMPTOMS WITHOUT COMPROMISING LONG-TERM TREATMENT GOALS

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Acute management is often required when a patient first presents with psychotic symptoms or experiences a relapse following previously successful interventions. In addition to experiencing delusions and hallucinations, such patients can prove uncooperative, display aggressive and hostile behaviour, and may represent an immediate danger to themselves and others. Current guidelines recommend treatment of acute psychosis with second generation antipsychotics in the majority of situations, because of their efficacy across a broad range of symptoms and more favourable side effect profiles compared with conventional antipsychotics. Second generation antipsychotics have beneficial calming properties and successfully treat the symptoms of aggression, anxiety and hostility that can accompany acute exacerbations of schizophrenia. Together with proven clinical efficacy, the second generation antipsychotic quetiapine shows dose-independent tolerability and high patient acceptability, features which are likely to promote patient adherence to medication and an improved quality of life. To achieve optimum clinical effectiveness it is essential to implement the correct dosing regimen. A rapid initiation schedule can be used to provide well-tolerated, effective treatment in hospitalised patients with acute schizophrenia. Furthermore, while current prescribing information recommends that quetiapine be administered at doses up to 750 mg/day, there is growing evidence that higher doses are well tolerated by some patients.

SAS8.2.
COMPARISON OF QUETIAPINE, OLANZAPINE AND RISPERIDONE IN A RANDOMIZED STUDY IN PATIENTS WITH SCHIZOPHRENIA

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Several studies comparing atypical antipsychotics with conventional agents have shown the former to have comparable efficacy and superior tolerability. However, few studies have directly compared the efficacy and tolerability of atypicals. This study is the first direct comparison of three atypicals in patients with schizophrenia. This multicentre, randomised, parallel-group, rater-blinded study was designed to compare the efficacy and tolerability of quetiapine with olanzapine and risperidone in patients with a DSM-IV diagnosis of schizophrenia. Eligible patients had a Positive ad Negative Syndrome Scale (PANSS) total score of ≥70 including a score ≥4 on at least two items of the positive subscale. Patients received a flexible dose of 400-800 mg/day quetiapine, 10-20 mg/day olanzapine or 4-8 mg/day risperidone. Efficacy measures included PANSS total and subscale scores, and Brief Psychiatric Rating Scale (BPRS) hostility cluster score (sum of scores for anxiety, tension, hostility, suspiciousness, uncooperativeness, and excitement). Extrapyramidal symptoms (EPS) were assessed using the Simpson-Angus Scale (SAS) and the Barnes Akathisia Scale (BAS). Interim results are reported following 8 weeks of treatment. Mean scores were calculated on a last observation carried forward basis. Patients were randomised to quetiapine (n=25), olanzapine (n=21) or risperidone (n=19). Baseline PANSS total scores were 103.5, 99.5 and 93.2, respectively. PANSS total scores were reduced by 34.3% with quetiapine (mean dose 592 mg/day), 30.3% with olanzapine (mean dose 15.2 mg/day) and 24.5% with risperidone (mean dose 4.5 mg/day). PANSS positive and negative subscale scores were reduced from baseline by 38.9% and 30.6% (quetiapine), 38.2% and 21.0% (olanzapine) and 36.7% and 17.2% risperidone, respectively. PANSS general psychopathology subscale scores were reduced by 31.3% (quetiapine) 30.0% (olanzapine) and 24.0% (risperidone). BPRS hostility cluster scores decreased by 40.1% (quetiapine), 34.2% (olanzapine) and 31.7% (risperidone). With respect to EPS, changes in SAS scores were observed (quetiapine: 2.9 to 2.5; olanzapine: 3.4 to 2.6; risperidone: 3.8 to 6.0) and BAS scores changed from 1.2 to 0.9 (quetiapine), 0.7 to 0.5 (olanzapine) and 0.3 to 1.4 (risperidone). Mean weight gain from baseline was 1.6% (quetiapine), 4.6% (olanzapine) and 2.5 (risperidone). These interim data suggest that all three agents have similar efficacy. However, quetiapine demonstrated a better tolerability profile overall, as treatment-emergent EPS occurred with risperidone and weight gain with olanzapine and risperidone.

SAS8.3.
CURRENT APPROACHES IN THE DIAGNOSIS AND TREATMENT OF MANIA

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Mania is still often misdiagnosed, especially when psychotic symptoms are present, resembling schizophrenia, or when symptoms are mild, resembling personality disorders (histrionic, antisocial, and borderline) or substance use disorders. The first and main issue in the treatment of mania is to make the correct diagnosis. The use of atypical antipsychotics in the treatment of bipolar mania is becoming more widespread. Research to date suggests that atypical agents are as efficacious as conventional antipsychotics (and traditional mood stabilisers such as lithium) for the treatment of manic, psychotic and

affective symptoms. Abnormalities in dopaminergic transmission are implicated in the psychotic symptoms associated with severe mania, and since atypical agents specifically modulate dopaminergic systems, this may explain their broad-based efficacy. In fact, treatment guidelines now recommend the use of atypical antipsychotics as first-line therapy for acute mixed or manic episodes, administered either alone or in combination with a mood stabiliser, depending on the severity of the episode. Quetiapine has recently been licensed for the treatment of bipolar mania. In a combined analysis of data from two 12-week, randomised, double-blind, placebo-controlled trials, treatment with quetiapine (n=208) resulted in a statistically significant reduction in manic symptoms, assessed with the Young Mania Rating Scale (YMRS), from baseline to endpoint, compared with placebo (n=195). This reduction in the YMRS score with quetiapine was significantly greater from as early as day 4 ($p<0.05$), and continued to improve up to week 12 ($p<0.001$). Furthermore, response (≥50% reduction in YMRS score) and remission (YMRS score ≤12) rates, measured at week 3 and week 12, were significantly higher for quetiapine than placebo ($p\leq0.002$). Additionally, patients treated with quetiapine had significantly greater improvements in agitation and aggression (reduced Positive and Negative Syndrome Scale activation subscale scores, $p<0.001$), as well as in their level of functioning (increased Global Assessment Scale score, $p<0.001$), compared with those who received placebo.

SAS8.4.
BIPOLAR DEPRESSION: FROM CORRECT DIAGNOSIS TO OPTIMISED TREATMENT

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Depression is the most prevailing phase of bipolar disorder. In 60 to 80% of patients, bipolar disorder starts with a depressive episode. However, the correct diagnosis of bipolar disorder is usually delayed for several years and in many instances not made at all. This can be explained, in part, by a misdiagnosis of unipolar depression. Especially bipolar II patients are often not diagnosed correctly because patients and relatives tend not to report the hypomanic episodes. However, correct diagnosis as early as possible is a prerequisite for correct treatment. Long-lasting exposure to antidepressant monotherapy, especially to older tricyclics, may cause switches into mania or even induce a rapid cycling course. Current guidelines on bipolar depression therefore suggest either the treatment with a mood stabiliser in monotherapy, or the combination treatment of a mood stabiliser with a modern antidepressant. To our current knowledge, combination treatment may optimise acute response and at least in some instances maintenance treatment. More recently, additional treatment options, as augmentation treatment with thyroid hormones or omega-3-fatty acids, have been tested. The most promising new candidates for the treatment of bipolar depression, either in monotherapy or in combination treatment, however, are the atypical antipsychotics. Both olanzapine and quetiapine have proven efficacy in the acute treatment of bipolar depression in randomised, placebo-controlled trials. Especially quetiapine appears to have an effect size which is at least comparable or may be even better than the one observed in studies with antidepressants or lamotrigine. If these first data are backed up by subsequent studies, atypical antipsychotics may become an additional cornerstone in the treatment of bipolar depression.

SAS9.
THE MANY PHASES OF BIPOLAR DISORDERS: EPIDEMIOLOGY AND MANAGEMENT (Organized by Sanofi-Synthelabo)

SAS9.1.
EPIDEMIOLOGY OF THE BIPOLAR SPECTRUM

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The available studies report that the incidence of bipolar disorder may be 15/100.000/year in both the European and North American populations aged 15 years and over, without gender difference. The prevalence rates indicate that 1% of the population aged 15 to 64 years is affected by bipolar I or II disorders and 3% of the same population if we consider bipolar spectrum. However, due to the great difference of the data presented in the above-mentioned studies and also to difficulties to make a right diagnosis of bipolar disorder or of the different manifestations of the bipolar spectrum, we must consider that these figures are underestimated. We discuss international epidemiological data on the bipolar spectrum, comparing methodologies and trying to derive from this big amount of numbers more precise and detailed reports.

SAS9.2.
MANAGEMENT OF ACUTE MANIA

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Manic episodes are a potentially destructive aspect of bipolar disorder and must be treated effectively, rapidly, safely, and in a humane manner. There have been many recent advances in pharmacological treatment of mania, and more modest advances in identifying predictors of response. We discuss pharmacological and non-pharmacological aspects of managing manic episodes. Non-pharmacological aspects include strategies for managing overstimulation and behavioral dyscontrol. Pharmacological aspects include evidence for rapidity of response, differential predictors of response across treatments, and the role of combination treatments. Finally, we discuss the crucial transition between acute and maintenance treatment.

SAS9.3.
LONG-TERM MANAGEMENT OF BIPOLAR DISORDER

G.M. Goodwin
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Relapse is a frequent event in the course of bipolar disorder. For that reason, its prevention is a primary goal for treatment. Optimisation of our approach to this problem is currently limited by the quality of the clinical evidence. For the moment, we must be guided by the evidence we do have - mainly monotherapy data - and the inferences we can draw by extrapolation and experience. Guidelines can help rationalise choices and improve audit of naturalistic data. Lithium still provides the gold standard for long-term treatment of bipolar disorder. The placebo-controlled evidence to support its use has been superior to that for the alternatives. However, we have to distinguish between lithium's efficacy against manic relapse and its weaker, although probably still significant, effect against depressive relapse. Alternative monotherapies include valproate, olanzapine, carba-

mazepine, and lamotrigine. Their use, alone or in combination with each other and perhaps earlier in the illness course, is the subject of current debate. There is an increasingly pressing need for further long-term studies of prophylaxis to compare new drugs head-to-head and in combination with lithium. To be useful, such studies will have to be large, and if they are to be large, they must be designed in a way that makes them extremely user-friendly for busy clinicians. A culture needs to be established in ordinary clinical practice to facilitate the entry of patients with bipolar disorder into simple trials that can determine moderate but worthwhile benefits for treatment.

SAS9.4.
BIPOLAR DISORDER IN OLD AGE: DIAGNOSTIC AND MANAGEMENT ISSUES

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There is conflicting evidence concerning the prevalence of bipolar disorder in old age. Epidemiological studies report a 0.1% prevalence of bipolar disorders in patients over 65 years, compared to 1.4% in patients aged 18-44 and 0.4% in patients 45-64 years old. Among hospitalized patients over 60, mania is diagnosed in 5-10% of cases. Studies comparing incidence and prevalence rates of elderly bipolar disorders vs. younger adults have produced inconsistent results. A major issue when considering a diagnosis of bipolar disorder in old age is the differentiation between late-onset bipolar disorders and recurrent episodes of an illness that began at a younger age. New cases appear to be more frequently depressive recurrences than manic episodes. Mania is often related to organic causes, such as cerebrovascular or endocrine diseases, or focal lesions, particularly in the right hemisphere. As a consequence, a neurological and neuromorphological evaluation can be useful for differential diagnosis. The pharmacological management of bipolar disorder in late life is complicated by physiological changes associated with aging, higher sensitivity to develop side effects, concomitant medical disorders with drug-drug interaction phenomena (due to polypharmacy) and compliance problems. These factors need to be carefully taken into account when selecting drugs (mood stabilizers, antidepressants or antipsychotics) for the treatment of elderly bipolar patients. Concerning pharmacokinetics, there are differences in the absorption, distribution, metabolism and excretion among the various drugs. Pharmacokinetic parameters are influenced by changes in gastrointestinal motility and renal function, atherosclerosis, muscular mass reduction and increased body fats, which are related to volume distribution and bioavailability differences observed in the elderly compared to adults. Among mood stabilizers, valproate appeared to be better tolerated in elderly patients. The use of atypical antipsychotics (e.g. risperidone) in old age patients is recommended because of their proven efficacy and their lower propensity to cause extrapyramidal side effects.

SAS10.
ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD), A LIFE-LONG IMPAIRING DISORDER: AN INTERNATIONAL PERSPECTIVE (Organized by Lilly)

SAS10.1.
CURRENT CONCEPTS ON THE NEUROBIOLOGY OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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Attention-deficit/hyperactivity disorder (ADHD) is an early onset, clinically heterogeneous disorder of inattention, hyperactivity and impulsivity. In contrast to the acceptance of ADHD as a childhood diagnosis, its prevalence in adults and its implications for clinical practice remain a source of controversy. Family studies consistently support the assertion that ADHD runs in families. Heritability data from twin studies of ADHD attribute about 80% of the etiology of ADHD to genetic factors. Adoption studies of ADHD implicate genes in its etiology. Molecular genetic data are bolstered by considerations suggesting that DRD4 and DAT genes may be relevant for ADHD. Independently of genes, prenatal exposure to nicotine and psychosocial adversity have been identified as risk factors for ADHD. Structural and functional imaging studies consistently implicate catecholamines-rich fronto-subcortical systems in the pathophysiology of ADHD. The effectiveness of stimulants, along with animal models of hyperactivity, point to catecholamine dysregulation as at least one source of ADHD brain dysfunction. Although not entirely sufficient, changes in dopaminergic and noradrenergic function appear necessary for the clinical efficacy of pharmacological treatments for ADHD, providing support for the hypothesis that alteration of monoaminergic transmission in critical brain regions may be the basis for therapeutic action in ADHD.

SAS10.2.
ATTENTION-DEFICIT/HYPERACTIVITY DISORDER FROM A EUROPEAN PERSPECTIVE

H.-C. Steinhausen
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Since the beginning of the last century, a dominant European tradition has stressed brain involvement in hyperkinetic disorders (HD), whereas the later evolving North American tradition has both stressed behavioural and social functioning in attention-deficit/hyperactivity disorder (ADHD). In addition, there are slight differences in European ICD-10 criteria for HD and North American DSM-IV criteria for ADHD. These and other factors have contributed to a marked variation of prevalence rates in epidemiological studies. Evidence-based standards for the assessment of ADHD converge between Europe and North America. However, as indicated by the Attention-Deficit/Hyperactivity Disorder Observational Research in Europe (ADORE) study, there are marked variations of treatment within Europe. Pharmacoepidemiological studies indicate similar trends of increasing prescription rates on both sides of the Atlantic. However, the increase in Europe as compared to North America is on a lower scale. Recent European studies on the course and outcome of ADHD have added to the conclusion that this is frequently a chronic disorder requiring long-term treatment.

SAS10.3.
COMORBIDITY AND DIFFERENTIAL DIAGNOSIS IN CHILDREN AND ADOLESCENTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

G. Masi, S. Millepiedi
Stella Maris Scientific Institute of Child Neurology and Psychiatry, Calambrone, Pisa, Italy

The core symptoms of attention-deficit/hyperactivity disorder (ADHD), that is hyperactivity, impulsivity and inattentiveness, can be found in other mental disorders. Furthermore, at least 75% of ADHD children present comorbid psychiatric disorders. Many of these disorders are both involved in comorbidity and in differential diagnosis. Thus, comorbidity and differential diagnosis are strictly related. The aim of this presentation is to analyze the more challenging differential diagnoses and comorbidities of ADHD, namely with other disrupting behavior disorders (oppositional defiant disorder, conduct disorder), anxiety disorders, mood disorders (both depression and bipolar disorder), obsessive-compulsive disorder with or without Tourette's syndrome, and pervasive developmental disorders.

SAS10.4.
ATOMOXETINE: A NEW, NON-STIMULANT DRUG FOR ADHD. RESULTS FROM A LARGE RANDOMIZED DOUBLE-BLIND STUDY IN CHILDREN AND ADOLESCENTS

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Despite worldwide awareness of attention-deficit/hyperactivity disorder (ADHD), outside Northern America the nature of the disorder is often considered with skepticism and the appropriateness of specific treatment questioned. The disorder is typically treated over extended period, although few placebo-controlled, long-term studies of efficacy have been reported. Different cultural values and social attitudes in specific countries may have induced, in several European countries, higher social acceptance of mild to moderate forms of the disorder. Atomoxetine is a selective inhibitor of norepinephrine uptake, effective in ameliorating inattention, hyperactivity and impulsivity in children, adolescents and adults with ADHD. It is a non-stimulant drug, with no abuse potential. In a global multicenter study, children and adolescents (6 to 16 year old) who responded to an initial 12-week, open-label period of treatment with atomoxetine, were randomized to continued atomoxetine or placebo for 9 months under double-blind conditions. Clinical characteristics, including demographics, ADHD symptom severity and comorbidity, as well response to atomoxetine, were also analyzed on a country base in patients living in several European countries (Germany, France, Spain, Italy, Hungary, Poland, Norway and Sweden). A total of 416 patients completed acute atomoxetine treatment (out of 604 enrolled) and were randomized. At end point, atomoxetine was superior to placebo in preventing relapse, defined as a return to 90% of baseline symptom severity. The proportion relapsing was 65 of 292 (22.3%) for atomoxetine, and 47 of 124 (37.9%) for placebo (p=0.002). The proportion of patients with a 50% worsening in symptoms post-randomization was also lower on atomoxetine: 83 of 292 (28.4%) vs. 59 of 124 (47.6%) for placebo (p<0.001). Compared with patients in the placebo group, atomoxetine-treated patients had superior psychosocial functioning at end point. Discontinuations for adverse events were low in both groups, and tolerability was similar to that observed in acute treatment trials. Patients from the different European countries were, on average, similar for age, sex distribution and severity of ADHD symptoms. Differences in ADHD subtype, comorbidity and previous stimulant treatment were observed among countries. Clinical response to atomoxetine, measured by ADHD-Rating Scale (ADHD-RS), Clinical Global Impression and Conners Parent Questionnaires, were similar, although a difference in the number of items improved on the Child Health Questionnaire was observed. Relapse rate and side effects were comparable among countries and not different from the overall general results of the trial. These results indicate that, in patients who responded favorably to 12 weeks of initial treatment, atomoxetine was superior to placebo in maintaining response for the ensuing 9 months. They also suggest that clinical characteristics of ADHD children and adolescents do not vary greatly when they are recruited by skilled clinicians using standardized diagnostic criteria, regardless of their geographic location.

SAS11.
ROLE OF ANTIPSYCHOTICS IN THE TREATMENT OF BIPOLAR DISORDER: FROM ACUTE SYMPTOM CONTROL TO LONG-TERM MANAGEMENT
(Organized by Pfizer)

SAS11.1.
ACUTE MANIA: EMERGENCY TREATMENT

H. Grunze
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In an emergency care setting, rapid symptom control is critical to the successful management and treatment of patients with acute mania. In this presentation, I will review the therapeutic options currently available for managing acutely manic patients in this setting and will discuss the benefits of rapid symptom control to patients and caregivers. Conventional antipsychotics, as well as newer atypicals, are currently used to manage agitation and aggression in acute mania. Atypicals, however, appear to offer a number of safety and tolerability advantages over older medications (e.g., decreased extrapyramidal symptoms, diminished risk of tardive dyskinesia, lack of increase in serum prolactin levels). Ziprasidone and olanzapine are the only atypicals currently available in intramuscular (i.m.) formulations. I.m. ziprasidone (the first available i.m. atypical) has been shown to reduce agitation as early as 15 minutes after administration. I will review the safety advantages offered by the atypicals and will highlight the efficacy benefits associated with the rapidly acting i.m. delivery of these agents in an emergency setting.

SAS11.2.
MANAGING ACUTE MANIA: PHARMACOLOGIC TREATMENT STRATEGIES

R.S. McIntyre
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Clinicians who manage patients with bipolar disorder typically confront a myriad of complicated treatment decisions. Unfortunately, the complexity of the disorder can make treatment guidelines impractical, as therapy often consists of a combination of two or more medications with mood-stabilizing properties. Lithium has shown efficacy for the treatment of acute mania and depression, as well as for the prevention of recurrence of mania and depression. Valproate and carbamazepine are frequently used as monotherapy and as combination therapy with lithium. Several other drugs with mood-stabilizing properties are used in many combinations to effectively manage the spectrum of symptoms associated with bipolar disorder. Increasingly,

atypical antipsychotics are becoming part of the bipolar treatment regimen. In this presentation, I will review results of clinical trials evaluating the effects of atypical antipsychotic agents alone and in combination with antidepressants and/or mood stabilizers in the treatment of acute mania. Differences in efficacy and tolerability between the available atypical antipsychotics will be reviewed and newly released clinical data will be presented focusing on the treatment of acutely ill inpatients with bipolar disorder.

SAS11.3.
LONG-TERM TREATMENT OF BIPOLAR DISORDER: IMPROVING OUTCOMES

D.J. Kupfer
Department of Psychiatry, University of Pittsburgh, PA, USA

Bipolar disorder is a lifelong episodic condition characterized by mood swings between acute mania and depression. The long-term pharmacologic management of this disorder is complex. The objectives of maintenance treatment are to stabilize the cyclic mood changes associated with this disorder while at the same time managing tolerability and side-effect profiles to maximize general health and compliance. Conventional antipsychotics have demonstrated efficacy for acute mania but appear to have little role in the maintenance treatment of bipolar disorder. The atypical antipsychotics, however, are increasingly being used to control acute manic episodes, and emerging data support their stabilizing and antidepressant properties. Some of the newer antipsychotics show particular promise as maintenance therapy in bipolar disorder, and offer tolerability profiles superior to older medications (e.g., minimal risk of treatment-emergent extrapyramidal symptoms and tardive dyskinesia). In this presentation, I will discuss ways to reduce the risk of recurrence and to promote quality of life over the long term in patients with bipolar disorder. Optimization of long-term treatment regimens and identification of impediments to stability and compliance will be discussed. Recent data regarding the efficacy, safety, and tolerability of atypical antipsychotics as maintenance therapy in bipolar disorder will also be presented.

SAS12.
THE BOUNDARIES OF ANXIETY (Organized by Abbott)

SAS12.1.
ANXIETY AS A PSYCHOPATHOLOGICAL PHENOMENON

S. Pallanti
University of Florence, Italy

Anxiety has a prominent position in the history of psychopathology. In fact, its evolutionary importance has been progressively documented, and it has been actually identified as one of the factors which have most significantly contributed to the evolution of the human species, through its role in the processes of social attachment and risk avoidance. In recent years, the identification of cerebral pathways through positron emission tomography (PET) and magnetic resonance imaging (MRI) studies carried out in experimental conditions and during pharmacological treatment, as well as research concerning the role of the amygdala have allowed more targeted hypotheses, which may be useful for the refinement of current diagnostic concepts.

SAS12.2.
NEUROBIOLOGICAL RATIONALE FOR A SHORT- AND LONG-TERM TREATMENT OF ANXIETY DISORDERS WITH ANXIOLYTICS AND ANTIDEPRESSANTS

G. Biggio
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The efficacy in reducing or eliminating the main symptoms of anxiety disorders and the almost complete absence of side effects have determined in the last 40 years the extraordinary clinical success of benzodiazepines. The handiness of these drugs has also led to neglect for many years their ability to induce tolerance and physical and psychological dependence, associated to a reduction of the threshold of neuronal excitability. Experimental research has demonstrated that an anxiety crisis is associated with the rapid reduction of the function of GABAergic synapses and a parallel reduction of the threshold of neuronal excitability, and with a high sensitivity to stress of monoaminergic neurons located in the frontal cortex and limbic areas. The previous administration of a single dose of a benzodiazepine, through the facilitation of the action of GABA on its receptors on monoaminergic neurons, produces a hyperpolarization of the neuronal membrane and a consequent increase of the threshold of neuronal excitability. An opposite phenomenon occurs instead after chronic administration of a benzodiazepine. The latter treatment induces a reduction of the threshold of neuronal excitability, due to both functional modifications at the membrane level and an effect on gene expression of GABA receptors, which become less sensitive to GABA and benzodiazepines. Paradoxically, these effects are similar to those induced by chronic stress, which is characterized by the hyperexcitability of monoaminergic neurons associated to a reduced basal release. These data have suggested that chronic treatment with benzodiazepines does not represent anymore the treatment of choice for chronic anxiety disorders. On the contrary, the long-term therapy of choice for various anxiety disorders is the prolonged treatment with antidepressants drugs. The therapeutic action of these drugs becomes manifest after some weeks and is associated to a positive effect on neuronal trophism. Neuronal plasticity is enhanced, with positive consequences on the neuronal responses to stressors and neuronal basal activity. This action of antidepressants is mediated by the synthesis of trophic factors, including the brain derived neurotrophic factor (BDNF), and consolidates with time, which suggests that a long-term therapeutic protocol, contrary to the chronic use of benzodiazepines, may be decisive for the remission of symptoms and the prevention of recurrences.

SAS12.3.
THE THERAPEUTIC PLANNING IN ANXIETY DISORDERS

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Anxiety disorders are the most common psychiatric disorders. Approximately 1 out of 4 individuals in Italy reports a lifetime history of at least one anxiety disorder. Comorbidity is also a significant problem, with approximately 75% of individuals with an anxiety disorder meeting criteria for at least one comorbid psychiatric condition. Despite these high prevalence rates, fewer than 30% of individuals who suffer from anxiety disorders seek treatment. Selective serotonin reuptake inhibitors (SSRIs) have emerged as the most favorable treatment, due to their safe and tolerable side-effect profile. Reversible

monoamine oxidase inhibitors, tricyclic antidepressants, and cognitive-behavioral therapy (CBT) are efficacious in the acute and long-term treatment of any anxiety disorder. Little efficacy evidence exists for nefazodone or reboxetine in anxiety disorder samples. Several studies of the serotonin norepinephrine reuptake inhibitors provide promising results. An extended-release formulation of venlafaxine (venlafaxine-XR) has demonstrated statistically superior response and remission rates vs. placebo, good tolerability, and equivalent efficacy to SSRIs. Gabapentin has also been found effective. Pharmacological agents have also been successfully combined with CBT, and this combination may offer distinct treatment advantages. Cognitive-behavioral tools and exposure-based practices may enhance pharmacotherapeutic outcomes in the long term and facilitate relapse prevention efforts. In conclusion, SSRIs and CBT are considered first-line treatment for anxiety disorders. SSRIs are recommended in severe cases of anxiety disorders, in the presence of significant psychiatric comorbidity. Clinical experience suggests that SSRI nonresponders may benefit from trials with additional SSRI agents or a switch to a different class of medications. Partial responders may benefit from SSRI augmentation with CBT, gabapentin, reboxetine or venlafaxine.

SAS12.4.
PANIC DISORDER WITH AND WITHOUT COMORBIDITY: DATA ON EPIDEMIOLOGY, COURSE AND TREATMENT OUTCOME

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The lifetime prevalence of panic disorder with or without agoraphobia is 1.6-2.5%, whereas the 1 year prevalence is about 1%. Epidemiological and clinical studies report a frequent lifetime comorbidity of panic disorder with other anxiety disorders (social phobia 20-30%; specific phobia 10-20%; generalized anxiety disorder 25%; obsessive-compulsive disorder 10-15%), as well as with mood disorders (major depression 50-60%; bipolar disorder 20-25%), personality disorders (40-50%), substance abuse (20%) and physical diseases. The analysis of data from the Epidemiological Catchment Area (ECA) Study indicates that the lifetime comorbidity of panic attacks and depressive disorders is eleven times higher than that expected by chance. Moreover, population studies suggest that the concomitance of depression in patients with a diagnosis of panic disorder is strongly predictive of further depressive episodes, panic attacks, other anxiety disorders and alcohol abuse. The personality disorders most frequently observed in patients with panic disorder are those belonging to the anxious cluster: avoidant, obsessive-compulsive and dependent. Several clinical and epidemiological studies report high rates of alcohol, cocaine and sedative abuse. Several physical diseases are frequently associated with panic disorder: for instance, prospective studies have shown that male subjects with high anxiety levels have a three fold increased risk of fatal coronary events than the general population. Panic disorder per se has been found to be associated with a significant impairment of physical and mental functioning and high rates of work dysfunction and economic dependence. Moreover, this disorder is often characterized by a chronic course with the persistence of symptoms in spite of treatment. Clinical studies show that although 60-70% of patients have a positive response to treatment, only 30-40% recover, while 50% are partially symptomatic and 20% have a stable symptomatology. The factors which have been most frequently studied as possible predictors of a less favourable response to treatment are the severity of anxiety at onset, the presence of severe agoraphobia, the comorbidity with depression and personality disorders, the duration of the disorder and female sex. The comorbidity with depression is associated with a more severe symptomatology, a worse compliance to treatment and outcome, a higher incidence of suicidal attempts and substance abuse, more frequent physical complications and higher costs of assistance.

SAS13.
MAINTAINING GLOBAL PATIENT HEALTH IN THE TREATMENT OF PSYCHIATRIC DISORDERS (Organized by Bristol-Myers Squibb/Otsuka Pharmaceutical Co.)

SAS13.1.
PHARMACOLOGY OF ANTIPSYCHOTIC THERAPY: A NEW DIMENSION IN THE TREATMENT OF PSYCHOTIC DISORDERS

M. Del Zompo
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The dopamine hypothesis remains central to our understanding of schizophrenia and current approaches to its treatment. Increased dopamine activity in the mesolimbic pathway is thought to cause the positive or psychotic symptoms of schizophrenia, while reduced dopamine neurotransmission in the mesocorticol pathway is believed to underlie negative symptoms and cognitive impairment. Both typical and atypical antipsychotics act as antagonists at dopamine D_2 receptors – the basis of their activity against positive symptoms – but differ in their efficacy against negative symptoms and liability for extrapyramidal side effects. This presentation will review differences in the clinical profile of these agents in relation to their receptor binding activity, and will discuss latest thinking about the role of D_2 receptor occupancy and dissociation rates. Dopamine partial agonists represent a new strategy for the management of schizophrenia. These agents can act as functional agonists in conditions of decreased dopamine activity and as functional antagonists in conditions of dopamine overactivity. They have the potential to control both positive and negative symptoms of the disorder through their modulation of dopamine levels. This presentation will discuss the concept of dopamine partial agonist activity with reference to the new antipsychotic aripiprazole. The activity of antipsychotic agents at other receptor types and the implications for clinical efficacy, safety and tolerability will also be discussed.

SAS13.2.
OPTIMISING THE TREATMENT OF SCHIZOPHRENIA

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Patients with an acute episode of schizophrenia are often treated with antipsychotics to reduce disturbed behaviour in the short term, and with continued maintenance treatment to prevent relapse. The introduction of atypical antipsychotic therapies for schizophrenia has led to improvements over typical agents in both treatment efficacy and tolerability. In general, atypical antipsychotics show similar efficacy to typical agents against positive symptoms, but with greater effect against negative symptoms. Other important benefits of atypical antipsychotics are their improved safety and tolerability profiles, particularly the reduction of extrapyramidal symptoms. However, side effects with some treatments can still have a major impact on health, quality of life and compliance with antipsychotic therapy. Individual atypical agents may be associated with sedation, hyperprolacti-

naemia, QT_c prolongation, nausea, weight gain and orthostasis. Therefore, there remains an unmet need for additional well-tolerated antipsychotic agents. This presentation will discuss the relative risks and benefits associated with various treatments, including the new antipsychotic aripiprazole, and will present results of recent clinical trials of the efficacy and short-term safety of these agents.

SAS13.3.
THE NEXT GENERATION OF ANTIPSYCHOTICS: IMPROVED LONG-TERM PATIENT HEALTH

S. Kasper
Department of General Psychiatry, University of Vienna, Austria

Schizophrenia and schizoaffective disorder are chronic conditions in which patients require long-term management to prevent relapse, improve health and promote effective re-integration into society. This presentation will review data from long-term clinical trials examining the effectiveness of current and next generation antipsychotics in preventing relapse and providing long-term control of schizophrenia symptoms. The need for long-term therapy makes treatment safety and tolerability a key factor in the overall effectiveness of antipsychotic medication. Adverse events can impact on patient outcome through their effects both on treatment adherence and long-term patient health. Although atypical antipsychotics offer improved treatment tolerability over typical agents, some atypicals may be associated with distressing side effects, such as weight gain, that adversely affect patient outcome. The differing impact of the different atypical antipsychotics, including the newest agent aripiprazole, on body weight, glucose and lipid levels will be reviewed. The implications of these findings for the long-term health of patients and the overall effectiveness of these antipsychotic therapies will be discussed.

SAS13.4.
NEW THERAPEUTIC OPTIONS FOR THE TREATMENT OF BIPOLAR DISORDER

A. Young
University of Newcastle upon Tyne, UK

Bipolar disorder (BPD) is a chronic illness characterised by episodes of mania or potentially suicidal depression, sometimes requiring hospitalisation. Pharmacological treatment is often necessary to rapidly control the acute stage of mania and for some months after recovery to prevent relapse. Up to 50% of patients do not respond to currently available treatments, so effective treatment of BPD remains an unmet medical need. Patients with BPD are often prescribed a combination of agents such as lithium, valproate, carbamazepine, and lamotrigine, which may have limited therapeutic value and, in the case of lithium, potential toxic effects at therapeutic dosage. Recently, antipsychotic drugs have been used to effectively manage the serious psychotic symptoms of mania. However, typical antipsychotics are associated with adverse effects, particularly extrapyramidal symptoms, which can be particularly severe in patients with BPD. This has led to clinical trials investigating the use of newer, atypical antipsychotics in patients with bipolar disorder. This presentation will provide an overview of recent trial results for antipsychotics in acute mania and discuss new developments in drug therapy, including the introduction of the new antipsychotic aripiprazole, which may lead to future treatment benefits.

SAS14.
RAISING THE BAR IN THE TREATMENT OF PATIENTS WITH MOOD AND ANXIETY DISORDERS (Organized by Wyeth)

SAS14.1.
KEEPING PATIENTS HEALTHY: INCREASING THE CHANCES OF REMISSION AND PREVENTING RELAPSE AND RECURRENCE

F. Benazzi
University of California at San Diego, USA and National Health Service, Forlì, Italy

Major depressive disorder is a chronic illness. After recovering from an episode of depression, many patients experience recurrence within 2 to 3 years. A patient whose recovery is incomplete, and who still has residual symptoms of depression, is more likely to have another episode of depression. In addition, patients who respond to treatment (i.e., show at least a 50% improvement on the Hamilton Rating Scale for Depression, HAM-D) but do not reach remission have poorer social adjustment and miss more workdays. Remission, usually defined as a HAM-D score of 7 or less or absence or near-absence of symptoms, should be the goal of treatment. During remission a patient can recover gradually and maintain psychosocial function. Several obstacles hinder treatment to remission: inadequate duration of treatment, inadequate dosage, patient and physician satisfaction with partial results, treatment discontinuation due to unpleasant side effects, failure to recognize residual symptoms, failure to recognize comorbid disorders, and misdiagnosis. Once remission is reached and a 6-month continuation period has been completed, treatment may be tapered. For patients at high risk for relapse, however, maintenance therapy may be appropriate. Maintenance pharmacotherapy has been demonstrated to be more efficacious than placebo in preventing recurrences of depression in trials lasting several years.

SAS14.2.
INTERPRETING THE RESULTS OF CLINICAL TRIALS

N. Freemantle
University of Birmingham, UK

A wealth of information on the efficacy of newer antidepressants is available in published clinical trials. This presentation will focus on how elements of the design of a clinical trial may affect the outcome and can limit the potential for comparing results across trials. Trials may differ in sample size, duration, medication dosage, controls, patient populations included or excluded, endpoints, and outcome measures. In addition, differences in accounting for attrition over the course of the study may result in misleading estimates of efficacy. Statistical methods exist that enable researchers to combine the results of many comparable studies to achieve greater statistical power. In meta-analyses, results of similar studies are combined to permit detection of differences in efficacy, which may be undetectable in smaller trials. If individual patient data are available from clinical trials, additional results may be gained, particularly for subgroups of patients. However, access to individual patient data is often hard to obtain. The results of relevant meta-analyses will be discussed.

SAS14.3.
THE IMPORTANCE OF RECOGNIZING AND TREATING THE PHYSICAL SYMPTOMS OF DEPRESSION AND MOOD DISORDERS

P. Blier
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Depression is both underdiagnosed and undertreated. Among the obstacles to recognition and treatment is the difficulty of diagnosing patients who present with primarily physical symptoms. Many patients with depression present with numerous vague physical complaints, prompting a search for a medical cause. Yet the more physical symptoms they describe, the more likely they are to have depression. The symptoms most likely to be associated with depression are sleep disturbances, fatigue, musculoskeletal complaints, back pain, and shortness of breath. The relationship between pain and depression is complex and bidirectional. Depression may lower the pain threshold and interfere with coping. Alternatively, pain may precipitate depression in vulnerable patients. It has been hypothesized that there may be an underlying neuronal connection between pain and depression because both serotonin and norepinephrine have been implicated in the pathogenesis of depression and in the perception of pain. This has prompted study of the use of dual-acting antidepressants, those affecting both the serotonin and norepinephrine systems, for patients whose depression is marked by physical symptoms.

SAS14.4.
THE IMPACT OF COMORBIDITY AND TREATMENT OF DEPRESSION AND ANXIETY

P. Alexander
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Many studies have found that patients with depression often have symptoms of anxiety. Depressed patients exhibiting these symptoms tend to be more severely depressed and to have more psychosocial impairment. They respond to treatment more slowly and are more likely to commit suicide. The extent of comorbid anxiety disorders has been estimated to be about 50%, with the most common being panic disorder, generalized anxiety disorder, and social phobia. A recent study examining the full range of Axis I disorders found that 72% of the depressed patients had a concurrent disorder. Additional patients had Axis I disorders in partial remission or clinically significant but subthreshold symptoms of Axis I disorders. Patients with concurrent depression and anxiety disorders are more likely to have occupational dysfunction than patients with depression alone. A World Health Organization (WHO) study found that primary care physicians were more likely to recognize depression when it is accompanied by an anxiety disorder. But even when it was recognized, only half of the patients received pharmacotherapy. Therapeutic approaches include benzodiazepines, azapirones, and antidepressants, alone or in combination, as well as cognitive behavioral therapy and interpersonal therapy. A number of studies have compared these treatment approaches and will be discussed during this presentation.

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