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## The World Psychiatric Association (WPA)

The WPA is an association of national 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 134, spanning 112 different countries and representing more than 200,000 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 65 scientific sections, aimed to disseminate information and promote collaborative work in specific domains of psychiatry. It has produced 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 on the website [www.wpanet.org](http://www.wpanet.org).

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# Are psychiatrists an endangered species?

**MARIO MAJ**

President, World Psychiatric Association

It may be true that psychiatrists are becoming an endangered species, as stated in H. Katschnig's paper introducing the Forum of this issue of the journal (1). What we must do is to catch the essence of the problem and turn the possible risk into an opportunity for growth.

There are indeed different theoretical orientations in psychiatry, but this should be viewed as an unavoidable reflection of the bio-psycho-social complexity of mental disorders, which requires an equally complex bio-psycho-social approach. Other neighbouring professions may have a clearer identity and appear less divided than we are, but one of the reasons for this is that their vision and approach are more unilateral, thus being not sufficient to address the bio-psycho-social complexity of mental disorders. The existence of a biological, a psychological and a social component in our discipline is not a weakness, but an evidence of its peculiar integrative nature, and should be perceived, presented and promoted as such. Rather than denigrating and fighting each other, the proponents of the different approaches should look for synergy and cross-fertilization. Dialectics is welcome, but destructive fanaticism should be actively discouraged (rather than applauded, as unfortunately is often the case).

There is indeed a continuing debate in psychiatry on what is a disorder, on the relationship between disease and functional impairment, on the role of values vs. evidence in the diagnostic process (2-6). I am not convinced, however, that this discussion is just a sign of the weakness of the theoretical foundation of our discipline. If I were an internist, I would follow this debate with great interest. Psychiatry may be just forerunning a discussion which in the future will involve medicine as a whole.

It is true that diagnostic criteria for mental disorders change from time to time, and that we have two competing diagnostic systems. But, is this really shacking the foundations of our clinical practice? I do not think so. I do not believe that clinicians are currently disoriented about what is schizophrenia or depression, or that they are eagerly waiting for the new edition of the two diagnostic systems in order to learn what they are. The main diagnostic concepts in psychiatry have shown a remarkable stability over the decades: considering that they are just "arbitrary conventions", they have done remarkably well (and many thousands of patients have benefitted from their delineation). This does not mean, of course, that these concepts should not be refined, and many clinicians will certainly welcome future opportunities to make their diagnostic assessment more articulated and personalized (7-9), and will be pleased to witness that "renaissance of psychopathology" which has been repeatedly invoked in recent years (10,11).

There is indeed an ongoing discussion about the effectiveness of antipsychotics and antidepressants (12). It is very unfortunate that this debate is being so heavily influenced by financial and non-financial conflicts of interests (on the one hand, by the financial relationships of some researchers to drug companies; on the other, by the ideological prejudice, sometimes bordering to fanaticism, of several people outside and within our profession). But it would be foolish to even contemplate the idea that antipsychotics and antidepressants do not work, that they are just a placebo. The empirical foundation of their use is very solid, and this use has stood the test of time, in an environment which was completely unfavourable. They have changed and will change to the better many thousands of lives. Of course, if used properly, as well-trained specialists in psychiatry are able to do. We have to create, however, a mechanism ensuring that, for each newly introduced antipsychotic or antidepressant, at least one trial be conducted by an entity which is independent from the company producing the drug.

Yes, we psychiatrists are stigmatized, mainly due to our past professional image. What we have to do is to refine our new image and promote it. Many of us treat competently a broad range of mental disorders which are very common in the population. We provide our counseling in prisons, in the workplace, in schools. We are asked by colleagues of other medical disciplines to provide our advice for the emotional problems of their patients. We interact on a continuing basis with user and carer organizations. This new reality of our profession is not well known, and probably not sufficiently developed in several regions of the world. We have to build up this new image and make it public. At the same time, we have to ensure that psychiatric practice worldwide match up to this new image (13-16).

I like H. Katschnig's paper, but I do not share its underlying pessimism. If psychiatry is in a crisis, this is, in my opinion, a development crisis. Our future is in our hands, more than in those of our clients or of politicians. Let's stop blaming ourselves and struggling with each other, and let's work together to upgrade the reality and the image of our profession.

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## NO HEALTH WITHOUT MENTAL HEALTH

### A WPA INTERNATIONAL CALL FOR RESEARCH PROPOSALS

The World Psychiatric Association (WPA) is the largest association active in the mental health field worldwide, with 134 Member Societies (national psychiatric societies), representing more than 200,000 psychiatrists, and 65 Scientific Sections.

In the WPA Action Plan 2008-2011, one of the objectives is to foster the collaboration between psychiatry and other medical specialties, in all regions of the world, in exploring and addressing the multiple interrelationships between mental disorders and physical diseases.

As one of the activities pursuing this objective, the WPA will fund an innovative international project involving research centres in psychiatry and at least one other medical specialty, investigating the epidemiology, pathogenesis, social implications, cultural variation and/or management of the comorbidity between one or more mental disorders and one or more physical diseases.

Proposals will have to include a description of the project (max 1200 words), a list of the participating centres, a timetable, a detailed budget, and a short curriculum vitae of the proposed leaders of the project (a lead psychiatrist and a lead specialist of another medical branch).

Proposals should be sent by e-mail to the WPA Secretariat ([wpasecretariat@wpanet.org](mailto:wpasecretariat@wpanet.org)) by June 30, 2010.

# The long-term costs of traumatic stress: intertwined physical and psychological consequences

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*The gradual emergence of symptoms following exposure to traumatic events has presented a major conceptual challenge to psychiatry. The mechanism that causes the progressive escalation of symptoms with the passage of time leading to delayed onset post-traumatic stress disorder (PTSD) involves the process of sensitization and kindling. The development of traumatic memories at the time of stress exposure represents a major vulnerability through repeated environmental triggering of the increasing dysregulation of an individual's neurobiology. An increasing body of evidence demonstrates how the increased allostatic load associated with PTSD is associated with a significant body of physical morbidity in the form of chronic musculoskeletal pain, hypertension, hyperlipidaemia, obesity and cardiovascular disease. This increasing body of literature suggests that the effects of traumatic stress need to be considered as a major environmental challenge that places individual's physical and psychological health equally at risk. This broader perspective has important implications for developing treatments that address the underlying dysregulation of cortical arousal and neurohormonal abnormalities following exposure to traumatic stress.*

**Key words:** Post-traumatic stress disorder, allostasis, kindling, hypertension, heart disease

*(World Psychiatry 2010;9:5-10)*

One of the greatest challenges to the field of traumatic stress has been the observation that many individuals who coped at the time of their traumatic exposure became unwell at a later date.

This observation was particularly challenging in the context of World War I and World War II because the prevailing psychopathological theories at the time did not have a clear rationale for this phenomenon and led to considerable stigmatization of disabled veterans (1). The later emergence of disability in veterans was attributed to compensation neurosis, pre-existing personality disorder, and suggestibility (2). Furthermore, with the blossoming of the general life events stress literature, this pattern of morbidity was not consistent with the prevailing views about high levels of acute distress that progressively ameliorated with time (3, 4). The life events literature which reached its zenith in the 1960s and 1970s focused on notions such as brought-forward time, and emphasized that there was generally a window of approximately six months following which a life event stress could lead to the onset of disorder (5). Delayed onset post-traumatic stress disorder (PTSD) was seen as inconsistent with this conclusion about the window of effect of stressful life events (6).

A primary question has been about how a model of psychopathology could account for this lingering and delayed impact of extreme adversity. Prevailing psychoanalytic constructs and later learning theory did not readily provide an answer to this question. Many significant observations in the context of the depression literature have not been readily adapted by the field of traumatic stress until recent links through the research concerning the relevance of child abuse to depression (7).

This paper explores the evidence about the delayed effects of traumatic stress and their cumulative burden on psychological and physical health. An underlying psychopathological model is summarized and its potential implications for treatment are discussed.

## THE RELATIONSHIP BETWEEN ACUTE STRESS DISORDER AND PTSD

The relation between acute post-traumatic symptoms and the emergence of PTSD is an issue of considerable theoretical and clinical importance. There is now a significant body of research documenting that the majority of people who develop PTSD do not initially meet the diagnostic criteria for an acute stress disorder (8). In contrast, the majority of those who have an acute stress disorder are likely to display subsequent PTSD.

A number of longitudinal studies of accident victims have demonstrated that it is only with the passage of time that the level of symptoms crosses a threshold sufficient to warrant a clinical diagnosis (9-13). A similar phenomenon was found in a study of severely injured US troops who were assessed at one month, 4 months and 7 months. This study demonstrated that 78.8% who had a disorder at 7 months did not attract a diagnosis at one month (14). Further support for the delayed emergence is the finding from the screening of military populations that symptoms increase in the first six months following deployment (15,16). Additional adversity, conflict or stress plays a role in the later emergence of psychopathology (17). Hence, in a significant number of individuals, PTSD is a disorder that is not initially manifest in the aftermath of the trauma. Rather, there is a progressive escalation of distress or a later emergence of symptoms, particularly in military and emergency service personnel. A related construct is delayed onset PTSD.

## DELAYED ONSET PTSD

Delayed/late onset PTSD is defined in the DSM-IV (18) as a disorder meeting the diagnostic criteria for PTSD which is present after a post-trauma adjustment period of at least 6

months during which diagnostic criteria were absent or sub-threshold (19). From a theoretical point of view, these are likely to be individuals who have managed to contain their individual distress by adaptive means, but subsequent stresses and/or the natural progression of neurobiology have led to the manifestation of the symptoms. A recent review emphasized the confusion which has arisen from different definitions of delayed onset PTSD (20). For example, different interpretations of the concept include an individual who has had sub-syndromal symptoms that have subsequently crossed a threshold of clinical severity as well as an individual who has been asymptomatic and then at some later point developed the disorder.

The existence of this delayed form of PTSD emphasizes how a traumatic experience can apparently lie relatively dormant with an individual only to become manifest at some future point. Many unanswered questions remain about when and how this sub-clinical state is triggered into a full-blown syndrome of PTSD. However, increasingly the evidence would suggest that sub-clinical symptoms leave the individual at risk of progressive activation with further environmental stress or trauma exposure.

A related construct in the depression literature is how individuals who have had partial remission following treatment for an episode of a major depressive disorder are at significantly greater risk of a further recurrence (21). This vulnerability relates to the sensitivity of individuals with residual depressive symptoms to environmental triggers. The underlying neural structures that are sensitive to activation are the same that have been identified as being relevant to the aetiology of PTSD. For example, Ramel et al (22) highlighted that amygdala reactivity is an important issue in people with a history of depression in contrast to those without such a history. These results indicated that the amygdala plays an essential role in modulating mood congruent memory, particularly during the induction of sad states of mind in individuals who are vulnerable to depression.

In such individuals, the cognitive and neural processing of emotional information potentially contributes to the vulnerability for negative emotions and the onset of depressive episodes (23). Hence, there is a significant body of literature documenting that individuals who are primed in emotionally labile and sensitive states are at risk for the progressive intensification of further symptoms, particularly when these resonate with the environment. Hence, the presentation of delayed onset of PTSD is not a unique construct in mental health.

Furthermore, Hedtko et al (24) demonstrated that there is a cumulative effect of exposure to interpersonal violence in terms of PTSD, depression and substance abuse problems. The cumulative risk model highlights the ongoing interaction between prior stress exposure and subsequent life events. The severity of stresses that are experienced prior to and following a traumatic exposure have a significant impact on the incidence and severity of the condition (25). Hence, delayed onset PTSD is intimately involved with the

fact that individuals live in a dynamic environment in which traumatic events and other life stresses interact, with the progressive accumulation of risk.

A related question is whether a longer duration of repeated exposures to trauma in defined time periods carries a greater risk of PTSD, a question relevant to the military and police. The recent UK study of Rona et al (26) provides the first reliable data from the military addressing this question and suggests that the risk of PTSD is greater in those units that have had longer durations of deployment with less time to recuperate between deployments. This study highlights that PTSD is an emerging disorder where multiple traumatic events progressively increase the risk of occurrence.

## THE ENDURING IMPACT OF TRAUMATIC MEMORY

The repeated recollection of traumatic memories is a central component of the phenomenological response to traumatic events. Freud highlighted the importance of traumatic memories in his first lecture with Breuer, suggesting that these were the “agent still at work” playing a central role in symptom onset and maintenance (27). Subsequently, modelling in epidemiological samples has highlighted how traumatic memories account for the relationship between exposure to traumatic events and the symptoms of hyperarousal and avoidance (28).

The triggering of these memories is also a consequence of fear conditioning mechanisms (29), and these serve to sustain and kindle the increased arousal that is central to the symptoms of PTSD (30). The disorder arises because some individuals are unable to progressively shut off the acute stress response, which is ubiquitous at times of exposure to such events. From a learning theory perspective, this process is seen as a failure of extinction or new learning in the aftermath of the fear conditioning. Rather, there is a progressive augmentation of the amplitude of the response to reminders.

## TRIGGERING AND SENSITIZATION

A primary component of the symptomatology of PTSD is the re-experiencing or reliving of the traumatic memory, that has both elements of psychophysiological reactivation and psychological distress. A unique part of this condition is the repeated reactivation of the traumatic memory and the associated stress response with the attendant risk of the progressive augmentation of the reactivity of the individual (31). In fact, the suggestion has been made that in PTSD there is a failure of the retention and extinction of conditioned fear and that this is an acquired deficit in the condition (32).

On reviewing the available evidence, Rauch et al (33) have suggested that in PTSD there is an exaggerated amygdala response which underpins the excessive acquisition of fear associations and the expression of fear responses. A corresponding deficit of frontal cortical functioning plays a cen-

tral role in mediating extinction. There is also a deficit in the appreciation of the context of safety, which is related to hippocampal function.

The central mechanism is the process of sensitization to the subtle reminders of traumatic memories as well as exposure to prior and future traumatic events. This process of reactivity to minor cues, which very frequently goes unrecognized, serves to progressively increase and exacerbate the reactivity of the dysfunctional individual (34). This leads to an interaction between the individual's distress, psychophysiological reactivity, and the neurohormonal response at the time of the traumatic event. In discussing this question, it is important to recognize that some traumas in combat and policing are not the equivalent of a single traumatic event such as being in a motor vehicle accident. Combat and emergency service work involves repeated activations of the fear and stress systems that are then prone to present as future dysregulation over time.

Individuals who develop PTSD have been found to have a progressive evolution of dysfunction as described above (30). Progressively, they react to the presence of potential threat with greater amplitude or intensity and ultimately develop a generalized overreactivity to a range of stimuli in their civilian and military environments that remind them of the traumatic event. This cycle of increasing reactivity to a widening range of cues in their environment serves to further reinforce the distress response. This pattern is not unique to PTSD and has been highlighted in depression as having a critical role in early episodes (35).

Elzinga and Bremner (36) have further characterized the role of the noradrenergic system in the enhanced encoding of the emotional memories and fear-conditioning in individuals who develop PTSD. The failure of the normal neurotransmitter inhibitory mechanisms that quell the stress response appears to be important in the progression of the individual's distress into a full blown post-event or post-traumatic stress disorder. According to Miller (37), childhood trauma increases the risk of adult psychopathology because of the same process of sensitization (7). Shalev (38) has highlighted that this process is also intimately integrated into the person's social and cultural setting. He states that traumatic events are followed by "a critical period of increased brain plasticity, during which irreversible neuronal changes may occur in those who develop PTSD". He also emphasizes the importance of group cohesion, marital discord, and leadership skills as mediating factors.

Fear conditioning, kindling, and sensitization contribute to the manner in which repeated activation of the fear memories, in PTSD, leads to the emergence of spontaneous intrusive memories (39). In depression, a similar process predisposes an individual to negative affective appraisal and increasingly depressed mood. There is an emerging medical scientific literature indicating that pharmacological agents may be able to modify these responses (40).

The measurement of the startle response can objectively characterize the sensitization that occurs in the fear and

alarm response in PTSD. Increased heart rate in response to sudden loud tones is an abnormality that emerges following traumatic exposure (41,42). This increased reactivity suggests the role of fear conditioning and the impact of the environment following the event. The acquisition of an increased startle response was not related to the severity of the event or the initial intensity of the symptoms. These observations are consistent with the model of progressive neuronal sensitization and increasing heart rate reactivity over the subsequent six months to trauma exposure. This pattern of increased reactivity is also observed in relation to innocuous and aversive stimuli in a conditioning experiment where increased autonomic reactivity was demonstrated to both types of stimuli (43). Once conditioned, those with PTSD had reduced extinction to conditioned responses.

PTSD is only one of the outcomes that have been associated with trauma exposure. The emergence of multiple physical symptoms also has a strong association, and the consensus opinion is that these syndromes are indicative of a general reflection of distress. The underlying mechanisms of these disorders have been related to similar mechanisms of sensitization noted in those with PTSD (44). In parallel, multiple traumas have an accumulative effect on physical health which appears to be independent of the development of PTSD (45).

## **PHYSICAL MORBIDITY ASSOCIATED WITH TRAUMATIC STRESS**

There is longstanding interest in the effects of stress on health, due to the strain that it places on the adaptive capacity of individuals, which thereby leads to an increased risk of disease.

The effects of stress on the hypothalamic pituitary adrenal axis (HPA) and the autonomic nervous system have long been studied and the regulation of these systems has been referred to as "allostatic load". This refers to the wear and tear on the body in response to repeated cycles of stress. This phenomenon has the potential to be manifest in various ways, influenced by the interaction with other personal and environmental risk factors for disease. Hence, the physiological dysregulation that underpins allostasis represents a final common pathway to disease that can be manifest in various ways.

Particularly in the context of post-deployment syndromes, the link to musculoskeletal symptoms has become a focus of increasing interest. Equally, the role of allostatic load has come to be seen as an important risk for coronary arterial disease and its antecedent risk factors. However, the intermediary role of PTSD has not been the focus of particular interest in explaining these relationships until recently. The emerging body of evidence, which coincides with the real prevalence of PTSD in studies such as the National Comorbidity Survey Replication (46), suggests that physiological dysregulation associated with PTSD may play a central mediating role in a range of conditions.

## PTSD AND PSYCHOSOMATIC SYNDROMES

Andreski et al (47) reported that, of all the psychiatric disorders, PTSD is the one with the strongest relationship with somatization and particularly medically unexplained pain. Although there is substantial literature relating somatization to PTSD, this body of knowledge is seldom referred to in the broader literature about somatization, which has largely focused on the role of depression and anxiety (48-52). Particularly in the light of more recent epidemiological studies which suggest the previous underestimation of the prevalence of traumatic events and PTSD in many settings, there is a greater need to focus on the possible role of trauma in populations with medically unexplained symptoms (53).

There has been an increasing recognition of a shared pattern of symptoms and aetiology between whiplash, fibromyalgia, irritable bowel, chronic fatigue and PTSD. In particular, disorders of the HPA axis have been identified in all these disorders (54,55), where the shared dysfunction appears to be an enhanced negative feedback of the axis. Such stress-induced changes have been associated with major impacts on neurogenesis and brain functioning (56,57). A recent prospective study has suggested that this dysfunction of the HPA axis plays an important role in the onset of chronic widespread musculoskeletal pain in a general population sample (58). McEwen's model of allostasis has focused on the temporal lobe and the changes induced by cortisol at the times of stress exposure (56). Whilst focusing on the importance of this process in PTSD, persistent pain has also been associated with stress-like induced alterations of hippocampal neurogenesis and gene expression (59).

Sensitization is a critical process in the onset of pain syndromes and also in PTSD, as outlined above. The exposure to environmental triggers to the traumatic memory structure plays a critical role in the emergence and progressive escalation of an individual's distress across time, which includes somatic dimensions. This complex biological process emerges in the weeks and months following the event, involving the interaction between the individual's distress and the neuro-hormonal response at the time of the traumatic event (34).

The central role of the amygdala in the kindling in PTSD has much in common with the phenomena of windup of C fibre evoked pain (60). The centrality of this process has been suggested in both fibromyalgia and chronic fatigue (61,62).

Similar patterns of sensitization and modified pain sensitivity have been characterized in irritable bowel syndrome (63,64). The shared neurobiological abnormalities in these conditions are a further argument in favour of a generalized stress response syndrome underpinning multiple complaints. Furthermore, this has been associated with a modified autonomic function, that is also thought to play an important role in the pain response in fibromyalgia patients, individuals with neck and shoulder pain, and irritable bowel disorder (65), and has been found to be present also in individuals absent from work with a stress related illness (66).

## THE RELATIONSHIP BETWEEN HYPERTENSION AND PTSD

A number of studies have suggested that PTSD has a direct relationship with the risk of developing hypertension. A study of a probability sample from the US National Comorbidity Survey examined the interaction between PTSD and major depression as determinants of hypertension. It concluded that PTSD was related to hypertension, independent of depression, and that this finding could possibly explain the elevated rates of cardiovascular disease associated with PTSD (67). This specific relationship explains the high prevalence rate of hypertension identified amongst refugee psychiatric patients (68).

O'Toole and Catts (69) examined an epidemiological sample of Australian Vietnam veterans, aiming to explore the relationship between the physical health consequences of combat trauma exposure and PTSD. Hypertension was one of the conditions that was found to be associated with PTSD, both before and after controlling for potential confounds. In PTSD, it has been recognized that exposure to traumatic triggers leads to increased blood pressure, heart rate, and sympathetic activation of sweating in the hands (70). This abnormality has a significant degree of specificity for PTSD (71). This is consistent with the observation that in PTSD there is increased activity of the sympathetic nervous system, and in particular hyperfunction of the central noradrenergic system (72).

A US population study of hypertensive individuals looked at the impact of the September 11, 2001 attacks. Whilst these patients did not have a particularly high level of exposure, in the two months following the terroristic attacks they had an increase between 1.7 and 3.3 mm of mercury of systolic blood pressure compared with a similar period in 2000. Hence, at a population level, individuals who are suffering from hypertension are at risk of increases in blood pressure as a consequence of exposure to stressful events (73).

This body of evidence indicates that there is a link between PTSD and the risk of hypertension. This is an important development, as it indicates that the failure to specifically look at the relationship between PTSD and hypertension in earlier studies has led to confusion about the link between stress and coronary heart disease. For example, the Australian National Heart Foundation in 2003 suggested that there was no strong or consistent evidence for a causal association between chronic life events, work stress, patterns of hostility/anxiety disorders or panic disorder and coronary heart disease. The intermediary role of PTSD in this relationship is an important link (74).

## HYPERLIPIDAEMIA

Lipid metabolism is an area of importance to the risk of vascular disease. A study of Brazilian police officers demonstrated that officers with PTSD had significantly higher lev-

els of total cholesterol and triglycerides (75). A study from Croatia compared patients with combat related PTSD and a control group consisting of patients with major depressive disorder (76). In this study, lipid profiles consisting of cholesterol, LDL, HDL, and triglycerides were assessed. The groups were matched for age and body mass index (BMI). The individuals with PTSD had higher mean levels of cholesterol, LDL-C, and triglycerides and lower HDL-C than the control group. The arteriosclerotic index was higher in the PTSD than the control group. These results were taken to conclude that patients with combat related PTSD had a higher risk of arteriosclerosis (76-78). It is probable these findings will generalize to other populations.

## THE RELATIONSHIP BETWEEN OBESITY AND PTSD

Obesity is associated with an increased risk for several diseases, including cardiovascular disease. Vieweg et al (79), using a national database, documented a significantly increased BMI in individuals with PTSD, not affected by the decade of life. It was concluded that PTSD may be a risk factor for being overweight. This relationship has also been found in clinical samples (80).

A population study of young adults in Germany (81) examined the relationship between a PTSD diagnosis and having a BMI greater than 30. In the 10-year follow-up of this sample from childhood, obesity was predicted by an antecedent subthreshold or full blown PTSD, with an odds ratio of 3, amongst men but not women. This relationship has not been universally identified, and a series of complexities influencing it should be acknowledged. However, a further population sample in New Zealand did find an association between PTSD and obesity (odds ratio 2.64) (82).

In a study of police officers, the relationship between PTSD symptoms and metabolic syndrome was examined. Metabolic syndrome was deemed to be present if an individual had 3 or more components among obesity, elevated blood pressure, reduced high density lipoprotein (HDL cholesterol), elevated triglycerides and abnormal glucose. The officers with severe PTSD had 3 times the rate of metabolic syndrome of the lowest PTSD severity category (83).

## THE RELATIONSHIP BETWEEN PTSD SYMPTOMS AND CORONARY HEART DISEASE

The US Department of Veterans' Affairs has conducted a normative aging study (84). The sample, including men who had completed two scales for PTSD, was recruited in 1990. The men were followed up and the incidence of coronary heart disease occurring up to May 2001 was assessed. For each standard deviation increase in the level of post-traumatic symptoms, the men had an attributed relative risk of 1.26 for non-fatal myocardial infarction and fatal coronary heart disease combined and 1.21 for all coronary heart dis-

ease outcomes. The importance of this study is that it indicated that the level of post-traumatic symptoms, rather than the PTSD diagnosis itself, is associated with an increased risk of coronary heart disease. These results were maintained after controlling for depressive symptoms.

While hypertension, hyperlipidaemia and obesity are risk factor associations that could link PTSD to heart disease, this could also relate to the exaggerated catecholamine response to trauma related triggers. It has been demonstrated in a variety of settings that catecholamines may lead to injury of the lining intimal endothelium of the coronary arteries, leading to the development of atherosclerosis (85,86). Kubzansky et al (84) concluded that "exposure to trauma and prolonged stress not only may increase the risk of serious mental health problems but are also cardiotoxic".

Boscarino (87) studied a national random sample of 4,328 Vietnam veterans who did not have heart disease at baseline in 1985. The mortality due to heart disease from having PTSD had a hazard ratio of 2.25. When the effects of depression were controlled for, the degree of combat exposure made little difference to the results. The author concluded that "early age heart disease may be an outcome after military service among PTSD positive veterans". Again, this study emphasized that there is a specific risk for heart disease mortality associated with PTSD, but there is also a risk simply associated with an increased level of post-traumatic symptoms in individuals who do not reach the diagnostic threshold.

Another study carried out in former World War II prisoners of war found that prisoners with PTSD had a significantly increased risk of cardiovascular diseases, including hypertension and chronic ischemic heart disease, compared with individuals who had been prisoners of war but had not developed PTSD as well as non-prisoners (88).

In summary, the evidence from prospective studies is suggestive of a link between heart disease and PTSD.

## CLINICAL IMPLICATIONS

The association between PTSD and a number of physical conditions emphasizes that the effects of traumatic stress are far reaching. There is the potential for a pervasive disruption of an individual's neurobiology and psychophysiology following exposure, and PTSD is only one end point. The association with cardiovascular risk factors and inflammatory markers indicates that exposure to traumatic stress leads to a general disruption of an individual's underlying homeostasis (89,90).

In essence, the internal physiological environment of an individual adapts to external demands. This dynamic regulatory process involves a continuous adaptation of physiology in response to environmental demand. When the body is repeatedly stressed, the consequent allostatic state has the capacity to disrupt an individual's health (91). For example, Karlamangla et al (92) looked at the longitudinal impact of allostatic load in the MacArthur studies of successful aging,

and found that those individuals whose allostatic load dropped over a 5 year period had a significantly lower risk of mortality.

Hence, the underlying acclimatization of an individual to an environment and the costs that this exerts on the body is critical to the maintenance of health from a psychological and physical perspective (93). Traumatic stress leads to a disruption of the glucocorticoid system, in concert with a range of other neuropeptides such as corticotrophin-releasing factor (CRF), beta endorphin, neuropeptide Y and the catecholamines. The impact of glucocorticoids on the amygdala and hippocampus as part of contextual fear conditioning is an essential component of allostatic adaptation (94).

## TREATMENT IMPLICATIONS

At the present time, the treatment of PTSD focuses on cognitive behavioural therapy and the use of selective serotonin reuptake inhibitors (95). However, recommended treatments do not take into account the need to address the underlying instability of psychophysiology, particularly in the earlier periods following exposure. In this light, it is interesting that prazosin, an alpha-adrenergic antagonist, has been found to have a beneficial role in the treatment of PTSD (96), and that cortisol has been found in intensive care populations to have a protective effect against PTSD (97).

One treatment that may be of particular significance and requires systematic investigation is neurofeedback (98,99). There is now an established literature about abnormalities of quantitative EEG which suggest a significant disruption of cortical arousal in PTSD (100). Neurofeedback has been used in other disorders where there are demonstrated abnormalities of cortical activity. Particularly in populations at a significant risk for PTSD, such as military and emergency service groups, the use of this technique may be beneficial. Equally, the development of methods to modify the progressive augmentation of startle could help individuals to re-establish their psychophysiology to its baseline state. Recalibration may be easier prior to the development of a full-blown clinical disorder.

## CONCLUSION

The progressive emergence of symptoms following traumatic stress exposure is a challenging concept and delayed onset PTSD has long been a controversial notion. However, there is an increasing body of literature demonstrating that a significant proportion of trauma victims do not have their maximal stressor response in the immediate aftermath of the event, but rather this progressively increases with time. In some individuals, the apparent adverse consequences of the stress exposure lie dormant for a long period of time before some intercurrent adversity leads to its manifestation.

Thus, it would appear that trauma exposure initiates a

process of disruption of an individual's internal psychophysiology that is then progressively sensitized and kindled with the repeated exposures to triggers. This pattern of increasing sensitivity to environmental load can also become manifest as hypertension, hyperlipidaemia, and obesity. There is now an established association between cardiovascular disease and PTSD.

Ultimately, major treatment advances in PTSD may arise from considering the broader disruption of these neurobiological systems by their repeated activation. This emphasizes that PTSD is not simply a psychosocial disorder, but one underpinned by a major neurobiological disruption.

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# Mentalization based treatment for borderline personality disorder

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*Mentalizing is the process by which we make sense of each other and ourselves, implicitly and explicitly, in terms of subjective states and mental processes. It is a profoundly social construct in the sense that we are attentive to the mental states of those we are with, physically or psychologically. Given the generality of this definition, most mental disorders will inevitably involve some difficulties with mentalization, but it is the application of the concept to the treatment of borderline personality disorder (BPD), a common psychiatric condition with important implications for public health, that has received the most attention. Patients with BPD show reduced capacities to mentalize, which leads to problems with emotional regulation and difficulties in managing impulsivity, especially in the context of interpersonal interactions. Mentalization based treatment (MBT) is a time-limited treatment which structures interventions that promote the further development of mentalizing. It has been tested in research trials and found to be an effective treatment for BPD when delivered by mental health professionals given limited additional training and with moderate levels of supervision. This supports the general utility of MBT in the treatment of BPD within generic mental health services.*

**Key words:** Mentalization, borderline personality disorder, attachment, psychotherapy

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Borderline personality disorder (BPD) is a complex and serious mental disorder characterized by a pervasive pattern of difficulties with emotion regulation and impulse control, and instability both in relationships and in self-image (1). It represents a serious public health problem, because it is associated with suicide attempts and self harm, both of which are consistent targets of mental health services. Recurrent suicidal behaviour is reported in 69-80% of patients with BPD, and suicide rates are estimated to be up to 10% (2).

BPD is a common condition that is thought to occur globally with a prevalence of 0.2-1.8% in the general population (3). Higher prevalence rates are found in clinical populations. Moran et al (4) found a prevalence rate of 4-6% among primary care attenders, suggesting that people with BPD are more likely to visit their general practitioner. Chanen et al (5) reported a prevalence rate of 11% in adolescent outpatients and 49% in adolescent inpatients. The highest prevalence has been found in people requiring the most intensive level of care, with a rate of 60-80% among patients in forensic services (6,7).

The high prevalence and increased suicide rate in patients with BPD make an unassailable argument that effective treatment needs to be developed and that treatment has to be widely available. Whilst a number of treatments for BPD have been shown to be moderately effective in randomized controlled trials, it remains of considerable concern that most of them require extensive training, making them unavailable to most patients. Mentalization based treatment (MBT) was developed with this in mind. It requires relatively little additional training on top of general mental health training, and has been implemented in research studies by community mental health professionals, primarily nurses, with limited training given modest levels of supervision.

## WHAT IS MENTALIZATION?

The term mentalization grew out of the Ecole Psychosomatique de Paris and to some extent was operationalized by developmental researchers investigating theory of mind (8). It was first used by Fonagy in 1989 (9) in a broader way and has since been developed in relation to understanding a number of mental disorders.

Mentalization, or better mentalizing, is the process by which we make sense of each other and ourselves, implicitly and explicitly, in terms of subjective states and mental processes. It is a profoundly social construct in the sense that we are attentive to the mental states of those we are with, physically or psychologically. Given the generality of this definition, most mental disorders will inevitably involve some difficulties with mentalization. In fact, we can conceive of most mental disorder as the mind misinterpreting its own experience of itself, thus ultimately a disorder of mentalization. However, the key issue is whether the dysfunction is core to the disorder and/or a focus on mentalization is heuristically valid, i.e. provides an appropriate domain for therapeutic intervention.

While mentalizing theory is being applied to a number of disorders (e.g., post-traumatic stress disorder (10), eating disorders (11) and depression (12)), in a number of contexts (e.g., inpatient, partial hospital, and outpatient facilities), and in different groups of patients (e.g., adolescents, families, substance abusers), the treatment method is most clearly organized as a therapy for BPD (13). It is only in this condition that clear empirical support with randomized controlled trials (14,15) is available.

In BPD, a fragile mentalizing capacity vulnerable to social and interpersonal interaction is considered a core feature of the disorder. If a treatment is to be successful, it must either

have mentalization as its focus or at the very least stimulate development of mentalizing as an epiphenomenon.

The failure of adult mental processing in borderline states had been apparent to most clinicians, but none had identified the primary difficulty as a loss of mentalizing arising from early development. The simple basic suggestion we made was that representing self and others as thinking, believing, wishing or desiring did not arrive at age 4 as a consequence of maturation, but rather was a developmental achievement that was profoundly rooted in the quality of early object relations. Its predictable vulnerability to disappearance under stress in borderline conditions was seen as an appropriate focus for psychodynamically oriented psychological intervention, even though concerns had been expressed over many decades about the use of psychodynamic therapy in the treatment of BPD. These began as long ago as 1938, when an American psychoanalyst, Adolph Stern, identified a group of patients, now considered to have had BPD, who did not respond to classical psychoanalytic treatment (16). He later described modifications of psychotherapy for his borderline group that remain relevant today (17).

## THE DEVELOPMENT OF MENTALIZING

Mentalizing theory is rooted in Bowlby's attachment theory and its elaboration by contemporary developmental psychologists, whilst paying attention to constitutional vulnerabilities. There is suggestive evidence that borderline patients have a history of disorganized attachment, which leads to problems in affect regulation, attention and self control (18,19). It is our suggestion that these problems are mediated through a failure to develop a robust mentalizing capacity.

Our understanding of others critically depends on whether as infants our own mental states were adequately understood by caring, attentive, non-threatening adults. The most important cause of disruption in mentalizing is psychological trauma early or late in childhood, which undermines the capacity to think about mental states or the ability to give narrative accounts of one's past relationships. Building on the accumulating evidence from developmental psychopathology, the mentalization theory of BPD first suggests that individuals are constitutionally vulnerable and/or exposed to psychological trauma; second, that both these factors can undermine the development of social/cognitive capacities necessary for mentalization via neglect in early relationships (20), especially where the contingency between their emotional experience and the caregiver's mirroring is non-congruent (21); third, that this results in an hypersensitive attachment system within interpersonal contexts; and fourth, that this leads to the development of an enfeebled ability to represent affect and effortfully control attentional capacity (22).

Given the known continuity of attachment styles over time, residues of attachment problems of childhood might be expected to be apparent in adulthood. The adult attachment literature in relation to BPD has been reviewed by

Levy (23). While the relationship between BPD diagnosis and a specific attachment category is not obvious, there is little doubt that BPD is strongly associated with insecure attachment (only 6-8% of BPD patients are coded as secure). It appears that early attachment insecurity is a relatively stable characteristic of BPD patients, particularly in conjunction with subsequent negative life events (24).

## MENTALIZATION BASED TREATMENT

The focus in treatment of BPD needs to be on stabilizing the sense of self and helping the patient maintain an optimal level of arousal in the context of a well-managed, i.e. not too intense and yet not too detached, attachment relationship between patient and therapist. The patient with BPD is exquisitely sensitive to all interpersonal interactions. So, the therapist needs to be aware that therapy, an interpersonal interaction, inevitably will provoke anxiety related to loss of a sense of self and that the ensuing emotional experiences will rapidly threaten to overwhelm the patient's mental capacities, leading to escalating emotions and inability to accurately understand others' motives. Psychiatrists and other mental health professionals also need to be aware of this sensitivity if they are to avoid iatrogenic interactions with patients with BPD. Inpatient hospital admission, for example, is an intense emotional experience for all patients and, unless carefully managed, will make patients with BPD worse by overstimulating their attachment processes. This overstimulation in treatment may account for the poor long-term outcomes of patients with BPD when unmodified intensive treatments were offered (25).

Patients with BPD have a vulnerability in regulating emotional responses and generating effective strategies for controlling their thoughts and feelings, which challenges their capacity for thinking about their own actions in terms of subtle understandings of their thoughts and feelings. They slip into what superficially could be described as a kind of mindless state, both in relation to others and to themselves. Of course, the story turns out to be more complicated than this, because these incapacities, palpable at certain times, are not always evident. But, at moments of emotional distress, particularly distress triggered by actual or threatened loss, the capacity for mentalization is most likely to apparently evaporate. The question is how this understanding and the clinical observations can usefully be translated into a therapeutic approach that could be helpful given the prevalence and severity of this clinical problem within a public healthcare system.

To this end, we defined some core underpinning techniques to be used in the context of group and individual therapy and labeled them MBT (13,26). Only three important aspects of treatment will be considered here, namely the aim of interventions, the therapeutic stance, and mentalizing the transference.

## Aims of interventions in MBT

The initial task in MBT is to stabilize emotional expression, because without improved control of affect there can be no serious consideration of internal representations. Although the converse is also true, identification and expression of affect are targeted first because they represent an immediate threat to continuity of therapy as well as potentially to the patient's life. Uncontrolled affect leads to impulsivity, and only once this affect is under control is it possible to focus on internal representations and to strengthen the patient's sense of self.

The aim and the actual outcome of an intervention are more important in MBT than the type of intervention itself. The primary aim of any intervention has to be to re-instate mentalizing when it is lost or to help to maintain it in circumstances when it might be lost or is being lost. Any intervention that succeeds in these aims may be used in MBT. As a result of this, MBT takes a more permissive approach to interventions than most other therapies, giving it a plurality in terms of technique which might account for its popularity and appeal to practitioners from different schools as well as the limited amount of training required before practitioners begin using it in their everyday practice. We do not ask that practitioners learn a new model of therapy from the beginning, but that they modify their current practice focusing on mentalizing rather than behaviours, cognitions, or insight. We do, however, ask that they undertake to develop a particular therapeutic stance and implement a series of steps to try to engage the patient in a process of mentalizing, firstly using some generic psychotherapy techniques such as empathy, support and clarification, and then moving on to other interventions specifically designed to "stress" the attachment relationship within controlled conditions, which includes a focus on the patient-therapist relationship through "mentalizing the transference".

## Therapeutic stance

The therapist's mentalizing therapeutic stance should include: a) humility deriving from a sense of "not-knowing"; b) patience in taking time to identify differences in perspectives; c) legitimizing and accepting different perspectives; d) actively questioning the patient about his/her experience – asking for detailed descriptions of experience ("what questions") rather than explanations ("why questions"); e) careful eschewing of the need to understand what makes no sense (i.e., saying explicitly that something is unclear). An important component of this stance is monitoring one's own mentalizing failures as a therapist. In this context, it is important to be aware that the therapist is constantly at risk of losing his/her capacity to mentalize in the face of a non-mentalizing patient. Consequently, we consider therapists' occasional enactments as an acceptable concomitant of the therapeutic alliance, something that simply has to be owned

up to. As with other instances of breaks in mentalizing, such incidents require that the process is "rewound and the incident explored". Hence, in this collaborative patient-therapist relationship, the two partners involved have a joint responsibility to understand mental processes underpinning events both within and without therapy.

## Mentalizing the transference

We caution about the use of transference interpretation in the treatment of BPD because it assumes a level of mentalizing capacity of the patient that he/she often does not possess. This may have led to the suggestion that we "specifically eschew transference interpretation" (27). We do not. In fact we specifically employ transference interpretation, give indicators about when it can be used and carefully define six essential components. But equally we caution practitioners firstly about the commonly stated aim of transference interpretation, namely to provide insight, and secondly about genetic aspects, such as linking current experience to the past, because of their potential iatrogenic effects.

Our first step is the validation of the transference feeling, that is establishing the patient's perspective. Of course this is not the same as agreeing with the patient, but it must be evident to the patient that the therapist has at least understood his/her point of view. The danger of the genetic approach to the transference is that it might implicitly invalidate the patient's experience. The second step is exploration. The events which generated the transference feelings must be identified. The behaviours that the thoughts or feelings are tied to need to be made explicit, sometimes in painful detail. The third step is accepting enactment on the part of the therapist. Most experiences of the patient in the transference are likely to be based on reality, even if on a very partial connection to it. Mostly this means that the therapist has been drawn into the transference and acted in some way consistent with the patient's perception of him/her. It may be easy to attribute this to the patient, but this would be completely unhelpful. On the contrary, the therapist should initially explicitly acknowledge even partial enactments of the transference as inexplicable voluntary actions that he/she accepts agency for, rather than identifying them as a distortion of the patient. Drawing attention to such therapist components may be particularly significant in modeling to the patient that one can accept agency for involuntary acts and that such acts do not invalidate the general attitude which the therapist tries to convey. Only then can distortions be explored. Step four is collaboration in arriving at an interpretation. Transference interpretations must be arrived at in the same spirit of collaboration as any other form of interpretive mentalizing. The metaphor we use in training is that the therapist must imagine sitting side-by-side with the patient, not opposite. They sit side-by-side looking at the patient's thoughts and feelings, where possible both adopting the inquisitive stance. The fifth step is for the therapist to present an alternative per-

spective and the final step is to monitor carefully the patient's reaction as well as one's own.

We suggest these steps are taken in sequence and we talk about mentalizing the transference to distinguish the process from transference interpretation, which is commonly viewed as a technique to provide insight. Mentalizing the transference is a shorthand term for encouraging patients to think about the relationship they are in at the current moment (the therapist relationship) with the aim to focus their attention on another mind, the mind of a therapist, and to assist them in the task of contrasting their own perception of themselves with how they are perceived by another, by the therapist or indeed by members of a therapeutic group.

Whilst we might point to similarities in patterns of relationships in the therapy and in childhood or currently outside of the therapy, the aim of this is not to provide the patients with an explanation (insight) that they might be able to use to control their behaviour pattern, but far more simply to highlight one other puzzling phenomenon that requires thought and contemplation, part of our general therapeutic stance aimed to facilitate the recovery of mentalization which we see as the overall aim of treatment.

## EFFECTIVENESS OF MENTALIZATION BASED TREATMENT

Our initial study of MBT (14) compared its effectiveness in the context of a partial hospital program with routine general psychiatric care for patients with BPD. Treatment took place within a routine clinical service and was implemented by mental health professionals without full psychotherapy training who were offered expert supervision. Results showed that patients in the partial hospital program showed a statistically significant decrease on all measures, in contrast with the control group, which showed limited change or deterioration over the same period. Improvement in depressive symptoms, decrease in suicidal and self-mutilatory acts, reduced inpatient days, and better social and interpersonal function began after 6 months and continued to the end of treatment at 18 months.

The 44 patients who participated in the original study were assessed at 3 month intervals after completion of the trial using the same battery of outcome measures (15). Results demonstrated that patients who had received partial hospital treatment not only maintained their substantial gains, but also showed a statistically significant continued improvement on most measures, in contrast with the control group of patients who showed only limited change during the same period. Because of continued improvement in social and interpersonal function, these findings suggest that longer-term rehabilitative changes were stimulated.

Finally, an attempt was made to assess health care costs associated with partial hospital treatment compared with treatment within general psychiatric services (28). Health care utilization of all patients who participated in the trial was assessed using information from case notes and service

providers. Costs were compared 6 months prior to treatment, during 18 months of treatment, and at 18-month follow-up. No cost differences were found between the groups during pre-treatment or treatment. During the treatment period, the costs of partial hospital treatment were offset by less psychiatric inpatient care and reduced emergency department treatment. The trend for costs to decrease in the experimental group during follow-up was not duplicated in the control group, suggesting that specialist partial hospital treatment for BPD is no more expensive than general psychiatric care and leads to considerable cost savings after the completion of 18-month treatment.

All patients who participated in the partial hospital treatment trial have now been followed up 8 years after initial randomization (29). The primary outcome for this long-term follow-up study was number of suicide attempts. However, in the light of the limited improvement related to social adjustment in follow-along studies, we were concerned to establish whether the social and interpersonal improvements found at the end of 36 months had been maintained and whether additional gains in the area of vocational achievement had been made in either group. Patients treated in the MBT program remained better than those receiving treatment as usual, but, although maintaining their initial gains at the end of treatment, their general social function remained somewhat impaired. Nevertheless, many more were in employment or full time education than the comparison group, and only 14% still met diagnostic criteria for BPD compared to 87% of the patients in the comparison group who were available for interview.

A further randomized controlled trial of MBT in an outpatient setting (MBT-OP) has recently been completed. One hundred thirty-four patients were randomly allocated to MBT-OP or structured clinical management representing best current practice. Substantial improvements were observed in both conditions across all outcome variables. Patients randomized to MBT-OP showed a steeper decline of both self-reported and clinically significant problems, including suicide attempts and hospitalization (30).

Further research studies are underway, including randomized controlled trials on patients with substance use disorders and patients with eating disorders. A partial replication study of the original partial hospital trial has also been completed by an independent group in the Netherlands, showing that good results are achievable within mental health services away from the instigators of the treatment.

## CONCLUSIONS

MBT may not be radically different from other forms of intervention widely practiced by psychotherapists and other mental health professionals in the various contexts in which individuals with BPD are being treated. We claim no originality for the intervention. MBT represents the relatively

unadulterated implementation of a combination of developmental processes readily identified in all our histories: a) the establishment of an intense (attachment) relationship based on attempts to engage the patients in a process of understanding their mental states, and b) the coherent re-presentation of their feelings and thoughts, so that patients are able to identify themselves as thinking and feeling in the context of powerful bonds and high levels of emotional arousal. In turn, the recovery of mentalization helps patients regulate their thoughts and feelings, which then makes relationships and self-regulation a realistic possibility.

Although we would claim to have identified a particular method that makes the delivery of this therapeutic process possible, we make no claims of uniqueness. Many situations can likely bring about symptomatic and personality change by this mechanism and hence our permissiveness of technique. The goal of further research is to identify increasingly effective and cost-effective methods for generating change in this excessively problematic group.

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# The detection and treatment of depression in the physically ill

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*Depression and chronic physical illness are in reciprocal relationship with one another: not only do many chronic illnesses cause higher rates of depression, but depression has been shown to antedate some chronic physical illnesses. Depression associated with physical illness is less well detected than depression occurring on its own, and various ways of improving both the detection and treatment of depression accompanying physical illness are described. This paper is in four parts, the first dealing with the evidence for depression having a special relationship with physical disorders, the second dealing with detection of depression in physically ill patients, the third with the treatment of depression, and the fourth describing the advantages of treating depression among physically ill patients.*

**Key words:** Depression, chronic physical illness, prospective studies, collaborative care, improved detection

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Depression among those with chronic physical illnesses is both a major public health challenge, and likely to be missed by professionals who care for physically sick patients. This is because health professionals are understandably concerned with the physical disorder which is usually the reason for the consultation, and may not be aware of the accompanying depression. However, untreated depression is a cause of much unnecessary suffering, and effective treatment has been shown to decrease disability, prolong survival and increase the quality of life.

## EVIDENCE FOR A SPECIAL RELATIONSHIP

### Incidence and prevalence of depression in those with physical illness

The prevalence of depression is significantly higher in those with physical illnesses both in the USA (1) and internationally (2). The American study compared the one year prevalence of depression in 10,500 patients with chronic disease with 19,460 age matched healthy controls and found that as a group the former were almost three times more likely to be depressed: the odds ratio (OR) was 2.6 (CI 2.31-2.94). Rates for depression were double in diabetes, hypertension, coronary artery disease and heart failure, and three times in end-stage renal failure, chronic obstructive pulmonary disease and cerebro-vascular disease (1). Broadly similar results are reported in the international study of the one year prevalence of depression among 245,400 patients in 60 countries: in this study those with two or more chronic physical disorders experienced a prevalence of depression of 23%, whereas healthy controls only reported depression in 3.2% of cases (2).

Patients with "co-morbid" depression and anxiety disorders – who by definition have a greater number of symptoms than either depression or anxiety disorders on their own – have a stronger relationship with chronic physical diseases than those with either depression or anxiety on their own (3).

### Physical disease causing depression

Two population-based prospective cohort studies found that physical illness was a risk factor for the later development of depression. A study by Patten et al (4) followed up for 2 years 11,859 people who had been free of depression at baseline, and found that 3.5% had developed a new episode of major depressive disorder. Physical illness was a risk factor for the development of such depressive disorder (OR=2.5, CI 1.3-4.6). The risk was similar for a wide range of physical illnesses, namely hypertension, asthma, arthritis and rheumatism, back pain, diabetes, heart disease and chronic bronchitis. In a study by Smit et al (5) in a population of 4,664 who had never had depressive disorder, 2.7% of the population had developed depression after one year. The presence of two of three illnesses (migraine, respiratory or abdominal problems) predicted the later development of depressive disorder (incident RR 2.85) after adjusting for confounders.

In clinical populations, the year after the diagnosis of cancer (6), and after first hospitalisation with a heart attack (7), are associated with a particularly high rate of new onset of depression or anxiety – approximately 20%. There is also consistent evidence for depression being a consequence of coronary heart disease, stroke and HIV/AIDS (8).

There are at least three distinct ways in which a chronic physical disease causes depression.

First, the number of different pains an individual experiences is directly proportional to the prevalence of depression: in the study by Dworkin et al (9), primary care patients with a single pain had no increased risk of depression, those with two pains had double the risk, but those with three or more had five times the risk. Pain in turn causes emotional distress and poor sleep, irrespective of whether pain has a known cause (10).

Second, chronic physical illness carries with it the risk of disability, and this can be very depressing for an adult who has previously been healthy. For example, Prince et al (11) showed that the population attributable fraction of disability

ity or handicap to the prediction of onset of depression among the elderly was no less than 0.69, and similar findings have been reported by Ormel et al (12).

Third, there are physical changes in some diseases which may underlie the development of depression, such as changes in the allostatic load. Allostasis refers to the ability of the body to adapt to stressful conditions. It is a dynamic, adaptive process. Tissue damage, degenerative disease (like arthritis) and life stress all increase allostatic load and can induce inflammatory changes which produce substances such as bradykinin, prostaglandins, cytokines and chemokines. These substances mediate tissue repair and healing, but also act as irritants that result in peripheral sensitization of sensory neurons, which in turn activate central pain pathways (13). In stroke – especially left sided – cerebral ischaemia may favour development of depression, and in degenerative dementias the same processes may account for increased rates of depression.

Other features of physical illness that may lead to depression include disfigurement, the necessity for undergoing stressful investigations, and the fear of impending death.

### **Depression causing physical disease**

A depressive illness can also precede a new episode of physical disease. Systematic reviews of eleven prospective cohort studies in healthy populations showed that depression predicted later development of coronary heart disease in all of them (OR 1.18 to 5.4, median=2.05; for new cardiovascular events, after adjustment for traditional risk factors: OR=1.90, 95% CI=1.48-2.42) (14,15). Three prospective studies have shown that depression is an independent risk factor in stroke (16-18).

In prospective population-based cohort studies, depression has been shown to predict the later development of colorectal cancer (19), back pain (20-22), irritable bowel syndrome (23), multiple sclerosis (24). There is inconsistent evidence that depression may precede the onset of type 2 diabetes (8). Prince et al (8) argue that there is consistent evidence for depression leading to physical ill-health in coronary heart disease and stroke, and depression in pregnancy leading to infant stunting and infant mortality.

The following are among the ways in which depression may cause physical illness. First, increases in pro-inflammatory cytokines in depression and increased adrenocortical reactivity may lead to atherosclerosis, and consequently to an increased risk for both stroke and coronary artery disease. Second, autonomic changes in depression may cause ECG changes which favour development of coronary disease. Third, immune changes that occur during depression may be relevant: they include an increase in white cell counts and a relative increase in neutrophils, increases in measures of immune activation, and a suppression of mitogen-induced lymphocyte proliferation, with a reduction in natural killer (NK) cells (25). Changes in NK cells and T-lymphocytes in

depression may also lead to lowered resistance to AIDS in HIV infections. Menkes and McDonald (26) have argued that exogenous interferons cause both depression and increased pain sensitivity in susceptible individuals, by suppressing tryptophan availability and therefore serotonin synthesis.

### **Consequences of depression accompanying physical disease**

Prince et al (8) argue that there is consistent evidence for depression affecting the outcome of coronary heart disease, stroke and diabetes.

Depression leads to a shorter expectancy of life (27) and therefore treatment might be expected to prolong life. However, the studies required to demonstrate this have not been done, as they would require long follow-up periods accompanied by prolonged treatment of depression, with the control group denied such treatment. Di Matteo et al (28), in a meta-analysis of factors related to non-compliance, found that depressed patients were three times as likely to be non-compliant with treatment recommendations as non-depressed patients, suggesting that there may be real advantages in treating depression among the physically ill. In heart disease, van Melle et al (29) showed a more than double greater risk of death with co-morbid depression.

As the severity of depression increases, the subjective quality of life decreases. One of the reasons for persevering with active treatment for depression is that, even if the outlook for survival is not improved, the quality of survival will be greatly improved. In the large study by Moussavi et al (2), especially low health status scores were found in those with depression co-morbid with physical illness.

### **DETECTION OF DEPRESSION ACCOMPANYING PHYSICAL DISEASE**

Depression among those with physical illnesses is defined in the same way as depression occurring on its own. Thus, standard case finding screening measures such as the PHQ-9 (30) or the Hospital Anxiety and Depression scale (31) are recommended in order to detect depression in all cases.

However, several of the defining symptoms of depression in both the DSM and the ICD classifications can sometimes be produced by the physical disorder rather than depressive illness – for example, poor energy, loss of weight or poor appetite, and sleep disturbance. When psychiatrists interview physically ill patients, they typically report no difficulty in ignoring these symptoms if they consider that the physical disorder may be causing them. Nevertheless, when other health professionals are assessing patients, the presence of these symptoms is likely to cause confusion, if the critical number of symptoms to justify a diagnosis of depression is applied in a rigid fashion.

It has been shown that in the UK general practitioners are very much less likely to detect depression in physically sick patients than they are among physically well patients – the detection rates being 24% and 95% respectively (32).

It is possible to use a reduced set of symptoms that does not include those mentioned above, and still achieve a high degree of agreement with researchers using the full set of nine symptoms. This is fortunate, since many non-psychiatrists have difficulty remembering the full list of symptoms. Zimmerman et al (33) have shown that a set of only five symptoms is sufficient – depressed mood, low interest, worthlessness, poor concentration and thoughts of death. These important findings have been replicated (34).

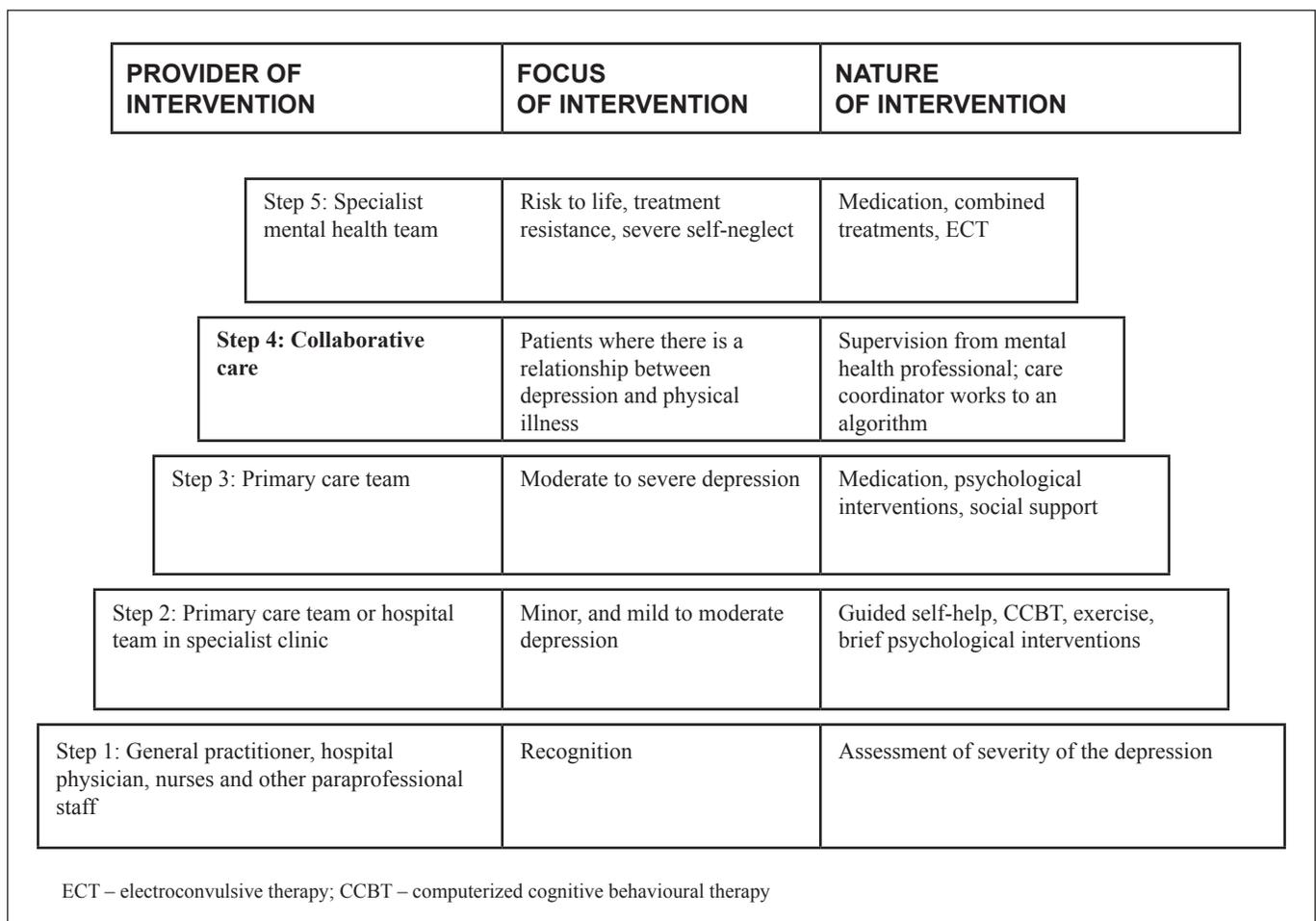
It is likely that if internists and family physicians were encouraged to use this modified scale, the detection rate of depression in chronic physical illness would greatly increase. The criteria are easier to remember, almost equally valid as the longer list, and much less likely to be produced by physical disease. In developing countries, where nurses, assistant medical officers and multi-purpose health workers are often responsible for case finding, and where even medical officers may not be skilled in detection of depression, the proposal has even greater merit.

## TREATMENT OF DEPRESSION ACCOMPANYING PHYSICAL DISEASE

The stepped-care model provides a framework in which to organize the provision of services supporting both patients and carers, and healthcare professionals in identifying and accessing the most effective interventions (Figure 1). The aim of a stepped care programme is to provide the least intrusive, most effective intervention first and to promote the organization and delivery of care in a way which is understandable to patients and carers, as well as professionals.

Gilbody et al (35) define collaborative care as that where the primary care physician maintains overall responsibility for the patient, but where there is a case manager to follow up patients and assess adherence to treatment, and a mental health specialist (psychiatrist or clinical psychologist) providing support and consultation to the physician. They find that not only is there evidence that collaborative care is effective in reducing depressive symptoms in those who are physically ill, but also emerging evidence that such model may be cost effective.

Collaborative care requires: a) a dedicated coordinator of the intervention located in and receiving support from a



**Figure 1** The stepped care model, showing the place of collaborative care

multi-professional team; b) joint determination of the plan of care; c) long-term coordination and follow up; d) coordination of mental and physical health care.

Those with less severe depression may be helped by active monitoring combined with other interventions, including sleep hygiene and structured physical activity programmes. Physical activities must be modified to take account of any physical disabilities, and may take place either individually or in groups, with weekly sessions over a 12 week period. Other treatments based upon cognitive behavioural principles include individually based self-help programmes, and computerized cognitive behavioural therapy (CCBT).

Cognitive behaviour therapy (CBT), or components of it called behavioural activation, are the treatments of choice for those who prefer and have available suitably qualified therapists. These treatments can be delivered either in small groups of patients with similar physical health problems over about 8 weeks, or individually delivered for up to 18 weeks, with additional booster sessions over the next 12 months.

There is no good evidence that one antidepressant is superior to another in the treatment of depression among those with physical illnesses, and perhaps the most important consideration when choosing an antidepressant for these patients is the nature of the treatment being given for the physical illness. It should be recalled that sertraline is the antidepressant of choice in conjunction with  $\beta$ -blockers, and sertraline, mirtazapine, moclobemide or mianserin are drugs of choice in cardiac arrhythmias.

Selective serotonin reuptake inhibitors (SSRIs) are recommended as the first line of drug treatment for the majority of physically ill patients, but should not be used in migraine treated with 5HT<sub>1</sub> agonists (for example, sumatriptan, zolmitriptan), where they increase risk of central nervous system (CNS) toxicity and serotonergic effects, or with ergotamine, where they increase the risk of serotonin syndrome. They are also contra-indicated in Parkinson's disease treated with MAO-B inhibitors such as selegiline or rasagiline, because of increased risk of CNS excitation and hypertension.

Venlafaxine, fluvoxamine, and duloxetine should be avoided in the treatment of cardiac arrhythmias; hypertension treated with  $\beta$ -blockers, methyl-dopa and ACE inhibitors; and migraine treated with 5HT<sub>1</sub> antagonists. In addition, venlafaxine should be avoided when viral infections are being treated with indinavir, because of decreased plasma levels. Trazodone is not recommended in those receiving digoxin for heart failure, since it increases its plasma levels. Mianserin should be avoided in conjunction with drugs used for cancer, including cytotoxic drugs, anti-proliferatives and protein kinase inhibitors, and also in cases of organ transplantation treated with immuno-suppressants. Reboxetine should be avoided in conjunction with thiazide diuretics like bendroflumethiazide, because of the risk of hypokalaemia. It should also be avoided in the treatment of bacterial infections with erythromycin or clarithromycin. Older antidepressants, such as tricyclics and MAO inhibitors, and St. John's wort, should be avoided in physically ill patients,

since they are each associated with a wide range of interactions with other drugs.

## ADVANTAGES OF TREATMENT OF DEPRESSION ACCOMPANYING CHRONIC PHYSICAL DISEASE

While generally reporting beneficial effects on depression, randomized trials have generally failed to show a significant effect of treatment of depression on concomitant heart disease (36,37) or diabetes (38,39). A systematic review of enhanced/collaborative care for depression in the physically ill concluded, on the basis of a meta-analysis, that depression can be treated effectively but there does not appear to be consistent evidence that such treatment improves physical outcomes (40,41).

Treatment for depression does have other beneficial effects on outcomes other than measures of depression. Simon et al (42) showed improvements in social and emotional functioning, and disability in a mixed group of chronic physical disorders in primary care. Mohr et al (43) showed improvements in both disability and fatigue with a CBT intervention for depression in patients with multiple sclerosis. Lin et al (44) showed that treatment of depression in patients with arthritis resulted in improved arthritis-related pain and functional outcomes and better general health status and overall quality of life. von Korff (45) argues that the weight of the evidence suggests that, in addition to reducing depressive symptoms, treatment of depression is effective in reducing functional disability.

As the severity of depression increases, the subjective quality of life decreases. One of the reasons for persevering with active treatment for depression is that even if the outlook for survival is poor, quality of life may still be improved.

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# Are psychiatrists an endangered species? Observations on internal and external challenges to the profession

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*Based on recently voiced concerns about a crisis in psychiatry, six challenges to our profession are identified and discussed. As we approach the revisions of ICD-10 and DSM-IV, the validity of psychiatry's diagnostic definitions and classification systems is increasingly questioned also from inside psychiatry. In addition, confidence in the results of therapeutic intervention studies is waning. A further challenge is the existence of de facto subgroups with opposing ideologies, a situation which is responsible for an unclear role profile of the psychiatrist. Challenges from outside include mounting patient and carer criticism, intrusion of other professions into psychiatry's traditional field of competence, and psychiatry's low status within medicine and in society in general. Studies suggest that the decline of the recruitment into psychiatry, as it is observed in many countries, might be related to problems arising from these challenges. It is unclear whether psychiatry will survive as a unitary medical discipline or whether those segments which are more rewarding, both financially and in status, will break away, leaving the unattractive tasks to carry out by what remains of psychiatry. The demise of the generalist and the rise of the specialist in modern society may contribute to this development. Attempts are underway by professional bodies to define the profile of a "general psychiatrist". Such discussions should be complemented by an analysis of the incentives which contribute to the centrifugal tendencies in psychiatry.*

**Key words:** Future of psychiatry, diagnosis, treatment, user and carer criticism, professional competition

*(World Psychiatry 2010;9:21-28)*

In the 2009 edition of the New Oxford Textbook of Psychiatry, where the discipline presents itself impressively on more than 2000 pages, P. Pichot, Past President of the WPA and a long-time authority on the history of psychiatry, devotes the last few paragraphs of his chapter "History of psychiatry as a medical specialty" to the discussion of a potential crisis in psychiatry. Psychiatry, as he concludes, is threatened by either being incorporated in other medical specialties or being deprived of its medical character (1). In psychiatric journals, the question is being discussed whether and how psychiatry will "survive into the second half of the 21st century" (2), and the presence of "considerable pessimism and a sense of foreboding among psychiatrists" is being described (3). In many countries, a shortage of psychiatrists is reported (4,5). The question has even been asked whether psychiatry should "exist" (6). And we are being advised by our neurological colleagues to abandon the term "mental illness" and replace it by "brain illness" (7).

What is behind such messages? Are they indicating only personal views or local problems? This is improbable. Why should the WPA have recently launched activities and projects on such topics as stigmatization of psychiatry

and psychiatrists, furthering the choice of psychiatry as a career by medical students, and improving the prospect for early careers in psychiatry (8,9)?

So, 200 years after its birth (10), is there something wrong with psychiatry? And, if so, what is it? In order to shed some light on this issue, I have listened around, looked back on my own forty years as a psychiatrist and searched the literature for signs of a crisis, including the literature on professions in general.

Psychiatry as a profession can be looked at with the eyes of the sociology of professions, which analyses the relationship of professions with society at large. In times of crisis, this can usefully supplement the inside views of the professions themselves, which tend to focus on the relationship between a profession and its clients, including the professional value systems defining this relationship (11). From the viewpoint of sociology, professions in general are characterized by: a) ownership of a specialized body of knowledge and skills, which defines the field of competence and the scope of potential clients, including the demarcation from other professions; b) holding a high status in society (both through financial and other rewards); c) being granted autonomy (and thereby power) by society, e.g. in recruiting and excluding members;

d) being obliged, in return for the above, to guarantee high quality standards in providing services (being "professional") and following ethical rules (12,13).

I will discuss here six challenges which are related to the first two of the above criteria: three challenges "from inside", basically referring to the decreasing confidence about the knowledge base of psychiatry and to the lack of a coherent theoretical basis; and three "from outside", including client discontent, competition from other professions, and the negative image of psychiatry. There are certainly other challenges – such as increasing state and insurance interventions, asking for improved quality of care despite growing restrictions – but they mostly concern medicine as a whole and will not be discussed here.

## CHALLENGES FROM INSIDE

### Decreasing confidence about the knowledge base: diagnosis and classification

Disease categories and their classification are the pervasive organizing principle for most aspects of medicine, including psychiatry as a medical specialty. Diagnoses are meant to be used

for making therapeutic decisions, for teaching purposes, for reimbursement, for defining patient populations for research, and for statistical returns. In psychiatry we have the confusing situation of two different internationally used diagnostic systems. In any member state of the World Health Organization (WHO), on discharge of a patient from hospital, a diagnosis from chapter V of the International Classification of Diseases (ICD-10) must be selected. However, for psychiatric research to be published in a high impact factor journal, it is advisable to use the Diagnostic and Statistical Manual (DSM-IV) of the American Psychiatric Association (APA).

The parallelism of these two major diagnostic systems exists since nearly 60 years. In 1949, the sixth revision of the International Classification of Diseases (ICD-6, 14) included for the first time mental disorders (earlier versions covered only mortality). Three years later, the APA launched its own classification system (DSM-I, 15). We have now arrived at ICD-10 (1992) and DSM-IV (1994), and the next revisions of the “big two” are due in a few years (DSM-V in 2013; ICD-11 in 2014). There will thus be still two systems in parallel.

Such parallelism is possible because of the very nature of the definitions of most psychiatric diagnoses: they consist of combinations of phenomenological criteria, such as signs and symptoms and their course over time, combined by expert committees in variable ways into categories of mental disorders, which have been defined and redefined again and again over the last half century. The majority of these diagnostic categories are not validated by biological criteria, as most medical diseases are; however, although they are called “disorders”, they look like medical diagnoses and pretend to represent medical diseases. In fact, they are embedded in top-down classifications, comparable to the early botanic classifications of plants in the 17th and 18th centuries, when experts decided *a priori* about which classification criterion to use, for instance, whether fruiting bodies or the shape of leaves were the essential criterion for classifying plants (16).

The DSM-III approach of creating “operational definitions” (e.g., “2 out of 5 symptoms” of a list must be present) has certainly rendered the process of arriving at a diagnosis more reliable, in the sense that we can be more sure that, if different psychiatrists assess a patient diagnostically, they will, after evaluating symptoms and other criteria, come more often to the same result. But reliability is different from validity. Psychopathological phenomena certainly exist and can be observed and experienced as such. However, psychiatric diagnoses are arbitrarily defined and do not exist in the same sense as psychopathological phenomena do.

This is not new. However, whereas psychiatric diagnostic classification systems and disease definitions have long been criticized, the character of the attacks has changed. Half a century ago, they came mainly from outside psychiatry (e.g., 17,18). Today, while these assaults continue (19), discussions about the validity of psychiatric diagnoses are also getting momentum within our profession (certainly fuelled by the imminent revisions of the “big two”) (20,21). It is no longer just the “usual suspects” who criticize psychiatric diagnosis and classification systems; the discussion has arrived at the heart of our profession.

For instance, psychiatrists talk about the “genetic deconstruction of psychosis” (22), the lack of validity of psychiatric diagnoses despite their utility (23), and the poor diagnostic stability of psychiatric disorders (24). From psychiatric geneticists one hears that they have to use “star war technology on bow and arrow diagnosis”. Recently, a prominent psychiatric researcher commented: “It has been suggested that the debate is political. This is not the case however, as solid scientific evidence pointing to the absence of nosological validity of diagnostic categories that nevertheless invariably are subject to paradoxical psychiatric reification, lies at the heart of the argument” (25).

The sociologist A. Abbott has observed that the control that professions have over their body of knowledge allows them to seize new problems and redefine their scope of interest (26).

With this perspective in mind, it can be argued that, while some psychiatric disorders have some kind of “clinical validity” (e.g., bipolar disorder), the DSM has “fabricated non-validated psychiatric diagnoses out of the general human predicament” (27). Psychiatry “abandoned the island of psychiatric disease and was thus engulfed in the boundless sea of human troubles”, as F. Redlich has put it more than 50 years ago when referring to psychoanalysis (28, quoted in 17). The issue whether we are able to “differentiate between true mental disorders and homeostatic reactions to adverse life events” (29) is more pressing than ever.

All kinds of rescue efforts are under way in relation to these threats to the diagnostic knowledge base of psychiatry, and a plethora of suggestions are being made: to identify “metastructures” (30), to supplement diagnostic categories with dimensional measures (21) or a “cross-diagnostic approach” (31), to use “epistemic iteration” (16), or to provide a “person-centered integrative diagnosis” (32). Recently, a group of psychiatrists has asked for the establishment of a conceptual working group for DSM-V, pointing out that in past DSM revisions conceptual questions were considered only on an *ad-hoc* basis by individual workgroups and the task force (33). Everything seems open.

It has also been proposed to put more emphasis on the clinical utility of diagnosis, such as ease of usage, communication, and treatment planning (34). However, in clinical practice, the selection of medication is only vaguely related to diagnosis (e.g., antidepressants are used across a wide range of conditions) (35), and in community mental health services, diagnoses are mainly used for channelling resources, and different classifications are employed for dealing with clients in everyday work (36).

The threatening bottom line of these discussions is that, if our diagnostic categories have not been valid until now, then research of any type – epidemiological, etiological, pathogenetic, therapeutic, biological, psychological or social – if carried out with these diagnoses as inclusion criterion, is equally invalid.

## Decreasing confidence about the knowledge base: therapeutic interventions

We are living in the era of evidence-based medicine (37). Based on meta-analyses and systematic reviews of carefully selected methodologically sound studies, guidelines for practice are prepared and become prescriptive – we can no longer accept clinical experience alone. But how sure can we really be of our treatment decisions?

When in 2008 a meta-analysis of antidepressant medication studies was published (38), with the main message that in mild and moderate depression antidepressants are no better than placebo, the result went around the world immediately – the special “kick” for the media being that the authors had included in their meta-analysis also those studies which had not been published (but submitted to the US Food and Drug Administration). A related study corroborated these findings (39), leading to some discussion within psychiatry (40). The fact that trials with positive findings are published more often and more quickly than those with negative findings has become a serious concern not only in psychiatry, but in the whole field of medicine (41).

In a different development, the randomized controlled drug trials in schizophrenia had been criticized for their limitations, and “pragmatic” or “real world” trials had been proposed (42). When such real world pragmatic trials were carried out, the superiority of the second over the first generation antipsychotics could not be reproduced (43,44).

It is evident that such results increase uncertainty, even more so because – given the lack of validity of psychiatric diagnoses and the difficulties in obtaining homogeneous samples of patients – they do not imply that the original studies were wrong and the new ones are correct. When attempting to establish evidence-based guidelines for clinical practice, we face an inherent contradiction in the methodology of randomized controlled trials: striving for internal validity leads to highly selected samples, meaning that the results cannot be eas-

ily generalized to the real world, while looking for a high representativeness of the study samples generates methodological biases (45,46). It has been suggested in this context to have two parallel assessments of evidence: the usual evidence of efficacy of intervention studies, and “corroborative” evidence assessing the transferability of results into the real world (47,48). A related issue is that polypharmacy and combinations of treatments are common in clinical practice (49), whereas most evidence is available only for monotherapies.

In addition to these problems, the conflicts of interest arising from the relationship between doctors and industry (50) are creating further doubts. “Ghostwriting” has recently received increased attention as a “credibility” issue, in the scientific community (51) as well as in the media and from politicians (52). If we add concerns about psychotherapeutic interventions and their unintended side effects (53,54), we, our patients and the public must get increasingly insecure about the trustworthiness of the proofs that our professional interventions work appropriately.

### Lack of a coherent theoretical basis

“Ask three psychiatrists and you get four answers”. I have heard this in many variations from politicians and health administrators, as an excuse for doing nothing, whenever I tried to get them to improve psychiatric care and increase resources. Over-valued beliefs and nostrums are not uncommon in medicine, but perhaps nowhere do so many different ideologies flourish as in psychiatry.

It is a truism that psychiatry is split into many directions and sub-directions of thought. Considering that a common knowledge base is a core defining criterion of any profession, this split is a considerable threat to the coherence of our profession. Textbooks usually cover all aspects (55), and integration is freely advocated, but not pursued in any practical way. There are worldwide associations for biological psychiatry, psychotherapy and social psychiatry which all claim better patient care as their main

aim (often with strong relations to or cooperation with neighbouring disciplines and professions). Each approach has its own body of knowledge, conferences and journals. The tone with each other is getting increasingly irritated (56-60), not the least also because of resource implications (61).

After having lived and worked for some time with a specific mind-set, and seeing only restricted groups of patients, it is difficult or impossible to change. This was true also for our forefathers, who developed their concepts in specific settings – for example, E. Kraepelin working mainly with psychotic patients in mental hospitals, and S. Freud working mostly with neurotic ones in private practice, each of them with no or very limited experience of the other setting – and so came up with completely different ideas (62). It is indeed difficult to stay abreast of all aspects of psychiatry, although the professional associations (such as the WPA) regularly organize congresses where all kind of professional knowledge is available.

The danger of splitting or being absorbed by other professions (1) is tellingly illustrated for US psychiatry by the divide between the “two cultures” of biological psychiatry and psychotherapy as described by a neutral scientist from outside (63) and by the mutual stereotypes of “mindless” and “brainless” (64). Guidelines usually stress the combination of both approaches, but reimbursement systems do not favour such integration.

## CHALLENGES FROM OUTSIDE

### Client discontent

While criticism of psychiatry by professionals has been around for a long time (17,18) and still continues today (65), discontent with our profession is being increasingly voiced also by our “clients”, the patients. Whereas criticism within a profession can be regarded as contributing to its dynamic development, discontent of clients with a profession may be detrimental.

Over the last few decades, I have

seen several new terms coming up for our patients. First it was “client”, then “consumer” (implying that one claims one’s right to receive adequate services). Then “user” or “service user” appeared, a term which is difficult to translate from English into many other languages, but seems to be quite common nowadays in the English speaking world, also among professionals and even in government documents. These names in themselves imply a change in the relationship between doctor and patient, with the traditional “asymmetric” paternalistic model being outlived by new, more symmetrical ones (like the “informative”, “interpretative” and “deliberate” models) (66). Also, by replacing the word “patient”, these terms are indicating a distance to medicine. Finally “ex-user”, “ex-patient” and “survivor of psychiatry” came on the scene, indicating complete detachment from psychiatry.

“Discontent” covers a broad spectrum, from the “survivor of psychiatry” concept (67), which implies that psychiatry should not exist *at all*, to other forms of discontent, criticizing psychiatry “*as it is*” (68). Today the Internet allows persons having undergone psychiatric treatment to exchange their experiences. And there are quite a few negative experiences, in addition to positive ones, which are all made public in personal stories worldwide (e.g., 69,70). Topics raised are manifold, and range from diagnosis to pharmacological treatment, from compulsory measures to neglect of quality of life issues. Also family members (in the English speaking world now called “carers”) voice discontent with psychiatry, although often from a different perspective than the users.

Self-help organizations on mental health issues are established everywhere, organized by “clients” (71) and by “carers” (72). Such associations have become relevant not only in terms of “empowerment” and “self-confidence” of their members, which is enacted also in conferences and in creating training and consultancy companies (e.g., 73), but also at the political level, where, depending on the cooperation of health politicians and administrators, they can participate in the planning process.

Many user groups and organizations focus today on the concept of recovery (74), which is increasingly advocated as the guiding principle for mental health policy in many English-speaking countries. Some experts claim this is only a “rhetorical consensus” and point to the need of distinguishing “clinical” vs. “personal” recovery” (75), and recovery as “outcome” vs. recovery as “process”. Also, misunderstandings arise when the word is translated into other languages.

The focus on clients’ needs and inclusion is now supported by documents of international organizations such as the United Nations (76), the European Commission (77), the Council of Europe (78), and the WHO (79). The psychiatric profession has also contributed to this perspective: for instance, guidelines for “better mental health care” have been produced, giving equal importance to “ethics”, “evidence” and “experience”, including the experience of users (80), and the quality of life issue has been taken up (81). But client criticism continues.

### Competition from other professions

As Abbott (26) has observed, professions, in addition to defining their knowledge base and expanding their scope of competence, are watchful against interlopers. In the post-modern era, with its growth of a culture of professional expertise (82), there are more and more “intruders” into the territory which psychiatry claims for itself. And, unwittingly or wittingly, in order to attract patients, they often make use of the stigma associated with being treated by psychiatrists.

On the medical side, it is neurologists, general practitioners and doctors who practice alternative medicine who compete with psychiatrists. For instance, in many countries, the volume of prescription of antidepressants is much larger in general practice than in psychiatry. Neurologists understandably claim organic brain syndromes for themselves, but depending on the reimbursement system they also treat psychiatric patients in many countries.

Psychologists, psychotherapists and clinical social workers constitute further large professional groups who compete with psychiatrists. In Austria there are around 10 times as many officially recognized clinical/health psychologists/psychotherapists as psychiatrists. In the USA, by 1990, 80,000 clinical social workers were active in the psychiatric socio-psychological domain, a quarter of them in private practice (1). Psychologists do not only compete in the psychological and psychotherapeutic sector: in the USA, for instance, according to the APA, since 1995 bills to grant prescribing privileges to psychologists have been considered one hundred times in 23 different states. They have been defeated 96 times, but New Mexico, Louisiana, Wisconsin and Oregon have enacted relevant legislation (83).

There are also more systematic challenges, such as the “Improving Access to Psychological Therapies” programme in England, where 3,600 “psychological therapists” are being trained in cognitive behavioural therapy (84). Also, a government document in England on “New Ways of Working” (85) gives psychiatrists more of a supervising role, while upgrading other professions in the mental health services with regard to direct patient contact. Given the lack of psychiatrists in developing countries, this is exactly proposed for them (86). This proposal creates a dilemma, expressed tellingly by an English psychiatrist as follows: “Psychiatrists must continue to see patients, also in the first line and not just as supervisor. If we, as consultant body, see a small number of cases, while supervising others who are seeing vastly more people than ourselves, it is only a matter of time before we lose respect, credibility and competence” (87).

How do we respond to these developments? How to keep the balance between our own identity and the identity of other professions, in a field where overlap is common and increasing? How can cooperation be organized in a satisfying way? Fundamental issues come up here, such as private enterprise vs. public employment, single handed vs. group practices, responsibility and risk management, as well as hospital vs.

community treatment. Team work warrants special attention (88).

### Negative image

I think of myself as a rather average looking and behaving person. In social contacts with new people outside my professional milieu, it becomes unavoidable after some time to disclose my profession. And I often meet with disbelief: “*You are a psychiatrist!?*”. I am not always sure what people mean by this, but I have come to take it as a compliment. What on earth, do they think a psychiatrist looks like and behaves?

Every psychiatrist knows it and has experienced it: there is something special about our profession, in terms of how people view us. The portrayals of psychiatric treatments in films are rarely positive (89) and a number of stereotypes circulate about us, not least in jokes, such as the “nutty professor”, the “analyst” and the “aloof interrogator” (68,90). Some of these stereotypes might go back to a time when psychiatrists were still mainly working in large mental hospitals, away from normal life, and it was deemed that by this they become strange persons themselves and not very different from their patients (91).

It has been suggested that such image factors may play a role in the decision of medical students not to choose psychiatry as a specialty (92) or for early drop-out from a psychiatric specialty training career (93): doctors who had started a training career as a psychiatrist in England, but had broken it off, agreed most frequently with the statement that psychiatry had a poor public image and that they were not sufficiently respected by doctors in other disciplines.

Concerning patient contacts with psychiatry, a case vignette-based general population study in Germany found that only a minority of interviewees recommended to see a psychiatrist as the first choice (94). Similar results were reported in Austria and Australia (95). Probably people fear that, after having been in contact with us, they might be stigmatized and discriminated, if this becomes known. There is a considerable desire

in the general population for social distance from people with mental disorders (96), and stigma and discrimination are well documented (97). This is known by anyone who develops psychological problems and considers to ask for professional help. Also, people might assume that psychiatrists (in contrast to psychologists and psychotherapists) will treat them mainly with medication, and the majority refuses this: in the Austrian survey, the large majority recommended primarily psychotherapy, even for dementia, where this percentage amounted to 73% (95).

The “stigmatization” of psychiatrists is under-researched (98), if compared to the stigmatization of our patients. There might also be a more complex relationship between these two topics. It has been suggested that the members of the psychiatric profession can simultaneously be stigmatizers, stigma recipients and powerful agents of de-stigmatization (99). With so many open questions, it is understandable that the WPA is currently funding a research project on “stigmatization of psychiatry and psychiatrists” (9).

### WHERE IS PSYCHIATRY GOING AND WHO IS GOING THERE?

According to information received from the WPA Secretariat, there are more than 200,000 certified psychiatrists around the world in WPA's 134 Member Societies. There are regional differences, especially a large divide between developed and developing countries. It is therefore difficult to draw a general picture of a trend for the development of the psychiatric workforce. Factors which influence it are manifold and situations in various countries are very different.

In general, however, a decline of recruitment into the profession seems to take place. And while forecasts in many countries show that the demand for psychiatrists (100), or at least for psychiatric services (101), will grow, above all also in developing countries (86), there are doubts whether we as a profession will be able to meet this demand. The WPA has consequently initiated activities in

order to promote the choice of psychiatry as a career by medical students and to make the specialty more attractive by improving the prospect for early careers in psychiatry (8,9).

In the US, the number of medical students choosing psychiatry as a career had been in decline over more than two decades in a study published in 1995 (102). A 2009 report gives a more optimistic picture, but over 30% of psychiatrists in residency training are international medical graduates (101). In England, in 2008, general psychiatrists were on the “national shortage occupation list” of the Migration Advisory Committee (which facilitates international recruitment) and 80% of trainees sitting on the MRCPsych examination were international medical graduates (100). The Royal College of Psychiatrists in the UK sees “recruitment into psychiatry at a crisis point” (103).

In developing countries, there is definitely a shortage of psychiatrists, with for instance only one psychiatrist for 640,000 population in Pakistan (4). A WPA task force has discussed the “brain drain” from developing to industrialized countries (mainly the US, the UK, Canada and Australia) (104). In addition to other motives, it is quite obvious that a shortage of psychiatrists in industrialized countries facilitates this brain drain.

Some reasons for a decline in recruitment may be only of local relevance, such as changes in the training curriculum, long working hours, unpaid extra hours, low salaries or overload with administration. The divide between the public and the private sector, with the latter getting more and more attractive in many countries, might become increasingly important in the future. In Australia, it seems to be the lack of psychiatrists in the public sector which has led to an influx of psychiatrists from Africa, India and China (105). In Germany, a shortage of psychiatrists working in inpatient settings has developed, partly because the Netherlands and Switzerland offer better working conditions (5).

Recruitment into psychiatry is a complex process, depending on attitudes of medical students, the image of psychiatry, the availability of posts, and other

factors (106). One reason for the decline of recruitment into psychiatry, which comes up again and again (92,93,107), is medical students' and early dropouts' negative perception of the field of psychiatry, relating to lack of intellectual challenge, doubts about the effectiveness of psychiatric treatments, poor opinions of peers and faculty about psychiatry, and low prestige of psychiatry within medicine, while fear of violence might also be an issue (108). In a recent study, UK medical graduates who initially chose psychiatry but did not pursue it as a career, reported low status of psychiatry within the medical disciplines, little or no improvement in many patients and the lack of an evidence base for diagnosis and treatment as important reasons for quitting (93). Some argue that recruitment could be improved by giving psychiatry a clearer neuroscientific identity (56,57,109). But it can also be argued that the opposite might be true (59).

Obviously, the identity of a profession and its status within medicine and in society are important recruitment incentives and disincentives – hence the title of this section, “Where is psychiatry going and who is going there?”, taken from an article in *Academic Medicine* (110) relating recruitment into US psychiatry to its changing jurisdictional boundaries and to the ambiguities of its overarching conceptual framework. But where is psychiatry going?

## THE FUTURE OF PSYCHIATRY

Many would argue that our discipline has gained in status by a tremendous increase of knowledge acquired over the past decades. However, there are indications that psychiatry's diagnostic and therapeutic knowledge base is in a credibility crisis and that the coherence of our discipline is threatened by the existence of *de facto* ideological subgroups. In addition, we are increasingly criticized by our patients and their carers (with the Internet offering new possibilities for that purpose); other professions are more and more claiming segments of our field of competence; and our image in society and in medicine is less positive

than many of us might think. Thus, for an outside observer, many of the criteria which define a profession are in jeopardy.

Nevertheless, some authors are quite confident that psychiatry will survive. P. Pichot, who considers psychiatry as threatened of “being incorporated in other medical specialties or being deprived of its medical character”, concludes – from a long-term historical perspective – that the crisis of psychiatry is “just another transitory episode in its history” (1). And the author of the above mentioned article in *Academic Medicine* (110), after analysing at length the difficulties psychiatry is experiencing, expresses trust that “art is long, life is short, but psychiatry will surely endure”, basing his confidence on the “rich intellectual milieu” and a “controllable life style” which future trainees might be able to expect. But can we just trust in the repetition of history and the potential attractiveness of an intellectual milieu, let alone the promise of a controllable life style (111)?

The conclusion that “art is long, life is short, but psychiatry will surely endure” (110) is followed by a small but decisive postscript showing the author's ambiguity: “It simply isn't clear in what form or with whom that is mostly to occur”. There is no doubt that psychiatry offers services which are needed by society. But it is not clear whether it will do this in the future as a single profession (albeit with sub-specialities, e.g., forensic, child and adolescent, geriatric) and in cooperation with other professions, or whether it (or parts of it) will suffer a more or less “hostile takeover” by other professions.

Within psychiatry, partly as a reaction to the challenges discussed above, a process of “cream skinning” can be observed, with substantial subgroups of our profession concentrating on specific, intellectually and financially more rewarding segments and treatments, which often also imply lower stigma, higher status, better career possibilities in academia, and a more controllable life style, thereby leaving to others less rewarding tasks, such as caring for suicidal and violent patients or for those with persistent

mental disorders or drug and alcohol dependence. A related general process which furthers the centrifugal tendencies in psychiatry is the demise of the generalist and the rise of the specialist in modern society, with the latter usually having more prestige and financial rewards, but often functioning according to the pattern “I have an answer, do you have a question?” – leaving those who need services without orientation.

If psychiatry is to persist as a profession, it needs to have a conceptual centre. What this might be in the future is not clear. The traditional strengths of psychiatry – clinical experience, a comprehensive knowledge of psychopathology and skills of communication with affected persons – might get lost as a common denominator in today's environment of specialization and it has been suggested that a “renaissance of psychopathology” might be necessary (112). Efforts are underway by professional bodies to define the profile of a psychiatrist in terms of a psychiatric generalist (113,114). It is worthwhile to join such discussions on a larger basis. However, they should be supplemented by a thorough and open analysis about the motives why psychiatrists work in specific contexts and propagate specific approaches, i.e. by an analysis of the incentives and interests behind the visible roles psychiatrists play today in different contexts.

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# Psychiatry in crisis? Back to fundamentals

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H. Katschnig's thoughtful and scholarly essay raises important and timely questions about the present state of the psychiatric profession and of psychiatry's *raison d'être* as a medical discipline.

In many parts of the "developed" world, there is a slow but steady decline in the numbers of medical graduates who opt for specialist training in psychiatry. In most of the "developing" world, chronic shortage of psychiatrists continues to work against reducing (not to speak of closing) the "treatment gap" between need for, and supply of, even basic care for the majority of the world's mentally ill. In countries such as the UK, Australia and the United States, public mental health services would face collapse without many immigrant doctors from low- or middle-income countries filling in the vacant positions (1). The public image of psychiatry continues to be tainted by stigmatizing stereotypes which, not uncommonly, are shared by some of our professional *confrères* in other medical disciplines. How deep is the apparent crisis of the discipline and profession, and what are the factors contributing to it?

While agreeing with much of Katschnig's diagnostic assessment, I would argue that the root cause of the problem is not in an inherent regression of the discipline of psychiatry, but in its relative loss of competitive edge when compared with other medical disciplines. The dramatic advances in the basic biological sciences have, in the last couple of decades, transformed whole fields of medicine and surgery, including cancer medicine, cardiology or clinical immunology. General medicine is becoming increasingly "molecular", hence more attractive and intellectually challenging

to young minds. This kind of transformation has not occurred in psychiatry. Hardly any of the recent advances in neuroscience, molecular genetics and genomics has translated into practical clinical tools, disease markers, treatments or novel conceptual paradigms in our understanding of the nature of mental disorders. Notwithstanding hyperbole and periodically appearing false promises of imminent breakthroughs, the gains in real knowledge of the genetic and neural basis of the major mental disorders have been modest, while the looming complexity of the task has become obvious.

Thus, while the theory and practice of psychiatry cannot at present claim to have a firm anchor in either neurobiology or "psychiatric genetics", it has, in recent decades, allowed its true "specialized and not easily accessible body of knowledge and skills" (2) to slip into relative neglect. That body of knowledge and skills includes psychopathology and clinical phenomenology, which have become an esoteric subject for many (if not the majority) of medical students and trainee psychiatrists. Intellectual curiosity, coupled with sound grasp of psychiatric semiotics, is being increasingly replaced in the training of psychiatrists by uncritical counting of DSM-IV diagnostic criteria. While eminently useful for specific purposes of communication, DSM-IV and ICD-10 criteria are no surrogate for clinical acumen. The belief that the adoption of quasi-operational criteria has once and for all resolved the problem of reliability of psychiatric diagnosis may turn out to be illusory, if the validity of symptom and sign ascertainment in actual clinical practice can be shown to be questionable. This trend of alienation of clinical psychiatry from its roots in psychopathology and phenomenology is reinforced by the increasing

dominance of managerialism in the organization and evaluation of psychiatric care, making the daily practice of the profession intellectually and emotionally unrewarding, or simply boring.

While much of Katschnig's overview of the state of the profession, and my added comments, may seem to paint a rather bleak picture of psychiatry in crisis, I remain optimistic about its future. The way forward for us as a profession points to a need to reclaim assertively the solid "knowledge base" of psychopathology which combines the two perspectives of "understanding" and "explaining" (3) the phenomena of mental illness and is capable of dynamically integrating novel concepts, data and technological advances from the ever changing fields of neuroscience, genetics and population epidemiology. Moreover, to quote the late Professor L. Eisenberg (4), psychiatry remains today "the one medical speciality with a persistent interest in the patient as a person in an era increasingly dominated by organ-based medical subspecialities".

What we need is a concerted effort to nurture a new breed of "clinician scientists", able to bring back together those foundational strands of the discipline of psychiatry that in the last decades have drifted apart.

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# Patients must be able to derive maximum benefit from a psychiatrist's medical skills and broad training

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H. Katschnig provides a summary of many of the issues that confront psychiatry and psychiatrists at the beginning of the third millennium. Although there is relatively little discussion of the question posed in the title (“Are psychiatrists an endangered species?”), the author concludes that he finds it difficult to imagine psychiatry disappearing and acknowledges that the specialty needs to develop a positive identity. He ends by stressing that he believes a core issue is that a psychiatrist's therapeutic skills must include biological, psychological and social interventions.

We agree substantially with much of the article, including that it is important that psychiatry develops a clearer definition of its remit and the expertise and training required by its practitioners (1). However, we suspect that part of the current identity problems have arisen from an overly inclusive, often nebulous, and frequently indiscriminate implementation of the dictum that psychiatrists must embrace biological, psychological and social approaches (2). Of course, it is essential that all these domains are taken into account in management, and psychiatrists must have the knowledge and skills to understand which are the most important and appropriate interventions across all these domains – including knowing when specific interventions would be unhelpful or damaging. However, as Katschnig discusses, there is now a wide range of highly trained fellow professionals working in mental health, and for many psychological and social interventions these other professionals may (and often will) be better trained and more experienced than a psychiatrist and will almost always cost less per

unit time for delivering the intervention. Thus, although psychiatrists may like to feel they can or should be able to deliver all domains of therapeutic interventions, is this realistic or sensible? We think it is not. Rather, we need to ask what are the special skills and expertise that psychiatrists can use for the benefit of patients. To put it into management speak: what are a psychiatrist's unique selling points? Surely this must be the core of the psychiatrist's positive identity.

Psychiatrists are medically trained. They are the members of a mental health team that have expertise in diagnosis and management of physical illness. They have training in the biological disciplines of physiology, biochemistry, anatomy, pathology and pharmacology. They have training in diagnostics. Given the importance of identifying the key issues as early as possible and setting the patient along the most appropriate therapeutic path, the psychiatrist can be used effectively to undertake/coordinate the initial diagnostic assessment process, as well as to make appropriate diagnostic reviews if new information arises. The psychiatrist is uniquely placed to take account of physical illness, both as a contributor to the psychiatric picture (for example when thyroid dysfunction contributes to affective disturbance) or as a comorbid condition (such as recognizing heart disease co-occurring with depression) or as an adverse effect of psychiatric treatment (such as type 2 diabetes associated with treatment by antipsychotic medication). Finally, in addition to the psychiatrist's core medical skills, he/she has training in psychological and social issues. Thus, the psychiatrist is uniquely placed to take the “big picture” overview that includes the biological, psychological and social domains within the assessment. Further, the medical training emphasizes pragmatism (i.e., the willingness to use whatever works, rather than close adherence to specific schools of thought) and the need for an evidence base.

Thus, although individual psychiatrists will vary greatly in their background, expertise and interests, the core, unique contributions that they can bring to a mental health team are: a) broad-based diagnostic assessment, b) understanding the interface between physical illness and psychiatric illness, c) understanding the “biological” parts of the bio-psycho-social spectrum (1,3). With the advances in knowledge of the workings of the brain and processes involved in psychiatric illness, including from molecular biology (4) and imaging (5), it can be expected that expertise in biological understanding will become increasingly important for diagnosis and management of mental illness and it will be essential that there are appropriately trained and skilled clinical researchers and practitioners who can ensure that advances in understanding are translated into benefits for patients (1).

Psychiatry is a “broad church” and accommodates an enormous range of views. Indeed, the bio-psycho-social model itself can be thought of as a rather poorly-defined concept that allowed practitioners with almost any view of psychiatry to “sign up” and then practise whatever they want (2). Perhaps we now need to bite the bullet and move to a clearer definition of the remit of psychiatry in the 21st century, with a focus on the special contributions that can be made by psychiatrists to the care of patients with mental illness. This must be clearly justifiable on the basis of evidence and cost-effectiveness.

We conclude by using the analogy introduced in Katschnig's titular question (“Are psychiatrists an endangered species?”). It is our view that psychiatry is currently at risk of going on the endangered species list. There are many species competing within the same habitat. If psychiatrists do not pass on their optimal qualities to the future generations of psychiatrists they will – and indeed should – become extinct. There is only a point in having psychiatrists if

they provide a cost-effective advantage to patients. We believe very strongly that patients can derive major advantages from psychiatric contributions to care and that they would be disadvantaged and put at risk without such contributions (1).

Perhaps we are entering a period of intense natural selection from which are likely to emerge medical practitioners that specialize in psychiatric illness and use their medical and biological expertise and diagnostic skills effectively

within the context of an appreciation of the psychosocial factors and available treatment modalities. It seems to us that Reil would recognize such physicians as worthy members of the medical specialty of psychiatry that he described two centuries ago (6).

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# The golden years of psychiatry are in the future

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My ideas about H. Katschnig's paper are deeply influenced by my training and practice in the United States. Though I have no problem with his statements about our current challenges, I have a different vision of the future.

Robins and Guze (1) proposed almost forty years ago a group of validators for schizophrenia and other psychiatric diagnoses, which were a crucial basis for the establishment of diagnostic criteria for use in psychiatric research (2). These criteria have been modified for clinical use in DSM-III, DSM-IV, DSM-IV-R, and now in preparation for DSM-V. None of them has been rejected on the basis of new research, but they have been modified because of new findings. This is not different from the ongoing diagnostic processes in other branches of medicine. I personally believe that the painstaking process of transferring research to better diagnoses will continue to receive severe criticism, specially by those less interested in diagnosis research. Those interested can always go back to each diagnosis and propose new research projects that should produce new diagnostic approaches based on clinical facts.

There is no perfect match between patients' clinical characteristics and therapeutic responses, so that progress is still predicated on new ideas and new under-

standing. Much research has shown that psychotherapy enhances somatic treatments, and patients with the same diagnosis may respond in a different fashion to the same treatments. I and many others think that most and probably all patients need verbal interventions, and the separation between psychotherapy and medication therapy is mostly artificial. I personally agree that we need "mega-trials" with participation of expert psychopharmacotherapists and psychotherapists as well as rigorous experimental design and measurement. In the meantime, we need to judiciously use the best information available, noting that a nihilistic position is not tenable. As in all medicine, we have to experiment with the best therapies available looking for the best results possible.

H. Katschnig's writing confirms that we all share a large tent that has a place for almost any kind of thinking about psychiatric disorders. A cross-sectional review of psychiatry reveals that unrelated and even opposite ideas seem to have some representation in our field. I am glad that medical inductivism has progressively penetrated psychiatry in the last fifty years, gradually replacing other approaches. Inductive thinking has provided approaches that bring psychiatry square in the field of medicine. What about those who refuse to follow the inductive way of thinking and put forth ideas minimally validated by rigorous research? In my opinion, they should be

treated according to the verifiable value of their ideas.

The route to a psychiatrist office is tortuous and full of side roads leading away from the office (3). Delay of treatment often ranges from 6 to 8 years for mood disorders and 9 to 23 years for anxiety disorders. Most patients with psychiatric disorders do not see a mental health professional, and a minimal number see a psychiatrist (4). The issue of psychologists being allowed to prescribe has never been predicated on their demonstrated training, ability or performance. It has been created by the desire of some to increase their practice. The problem will not die as long as there are enthusiastic lobbyists and willing legislators (5). Their main obstacle is their lack of training, experience or knowledge to practice medicine.

As I visit many locations in the United States and talk with my colleagues about their own activities, the message I get is that we are seeing all the patients we can, and there is an excess of willing patients who have not had access to psychiatrists. We clearly need more psychiatrists and better opportunities for offering easy access to our offices.

The National Comorbidity Survey Replication (3) studied patients with anxiety, mood, impulse control, and substance disorders. Of 12-month cases, 41.1% received some treatment in the last 12 months, including 12.3% treated by a psychiatrist, 16.0% treated

by a non-psychiatrist mental health specialist, 22.8% treated by a general medical provider, 8.1% treated by a human services provider, and 6.8% treated by a complementary and alternative medical provider. The chances are high that this situation will not be changed without strategies that increase the general public's education about mental illnesses and their treatment, accompanied by programs that increase access to quality psychiatric care, and programs that promote the integration of psychiatry with other specialties (4). Better information and formal integration seem the best alternatives to the current disarray in referrals.

The history of psychiatry is one of progressive recognition by organized medicine, by planners of services, by legislators, by families, and more gradually, by the public. After many years of isolation in state hospitals, psychiatry is now in community hospitals and almost all the centers of medical care in the United States. At national, state and local levels, psychiatry is part of efforts to improve medicine and enhance access to quality services. In our country, new legislation is providing equal payment for psychiatric services. This legislation has often been possible through the cooperation of many key leaders who have personal insight about the effect of mental illness in their families.

As of December of 2008, there were 4,751 resident physicians on duty in accredited psychiatric programs in the United States (6). We should and are actually developing more slots for psychiatric training, but psychiatry continues to attract a solid number of the best among young physicians.

Having been intimately involved with psychiatry since I was in medical school, the identity of "psychiatrist" has accompanied me for decades. So far, I have not had an opportunity to regret such situation, or to receive disparaging comments because of a profession that I practice with a feeling of high honor and distinction.

Psychiatry has been gaining greatly in scientific standing, solid knowledge in diagnosis, better strategies for evaluation of treatment, standing among medical orga-

nizations, respect by those who know us and use our services, and programs that better serve our patients our communities. Pessimism about psychiatry's future is not warranted by the facts. To the contrary, the golden years of psychiatry are in the future.

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# Bridging a cultural divide within medicine: a role for psychiatrists?

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In wealthier countries there are currently more psychiatrists than surgeons, and the gap is increasing. A recent President of the UK Royal College of Surgeons has commented that there will be little need for most types of surgeon in ten years, as much of their work will be done less invasively and more effectively by interventional radiologists. There is no prospect of such an outcome with respect to psychiatry for the foreseeable future. As a profession our ultimate aim should be for our expertise and that of our colleagues in other disciplines to evolve to deliver or support interventions that are both less invasive and more effective than those currently in use.

One of the criticisms levied at psychiatry by other doctors is that our evidence base is weak and the prognosis of severe mental illness is poor. But surely this is a case of the "pot calling the kettle black". The science underpinning much of medical practice is weak. The difference may be in the false confidence other doctors have in the utility of their treatments, and the false modesty we psychiatrists have in the effectiveness of our own (1). Take the treatment of cardiac arrhythmias for example, for which ablation of an aberrant pathway in cardiac muscle may be

offered, which whilst highly effective for most, carries a risk of serious complications including stroke, heart attack or death in a small percentage. Or consider the fact that prognosis for first diagnosis of diabetes in an adult is worse than the prognosis for first diagnosis of schizophrenia. Does this information help to put our diagnoses more in perspective?

I agree with Katschnig that as a profession we must embrace a biopsychosocial approach, but it is a challenge to psychiatric teachers, managers and purchasers of psychiatric services to protect this necessary holistic approach. Attempts by neuropsychiatrists or psychopharmacologists to claim superiority over social psychiatrists or psychotherapists, and vice versa, are ultimately damaging to our profession and our patients. But some psychiatrists who are focusing on highly specialist aspects of brain research, or some tertiary specialists providing evidence-based technical interventions, may need to leave broader biopsychosocial practice to other colleagues.

In my view Katschnig's conclusion didn't go far enough. I would like to see psychiatry strengthen its alliances within medicine, and at the same time, strengthen its alliances with patient and advocacy organizations and its understanding and support of the recovery paradigm.

Within medicine this means foster-

ing a greater awareness of the link between mental and physical health and the recognition that all of our bodily systems are affected to some extent by dysfunction in another part. There are some fascinating and unexpected challenges to our understanding of cause and effect. For example, it is well known that heart attacks are more common in people who are depressed, but why is it that recovery from depression does not appear to reduce the risk of myocardial infarction (2)?

These examples explain why I believe that psychiatry should be reintegrated into medicine. This in itself would do much to destigmatize mental illness and psychiatry within the medical profession.

At the same time, however, we would be failing in our responsibility if we did not retain and develop our partnerships in the community. This would also enhance our contribution to the wider medical field, where there remains a lim-

ited understanding of the importance of personal relationships and environment to good health. A failure to develop ourselves as social psychiatrists would distance us from service users, carers and colleagues in related disciplines. It is imperative that we are able to work in the context of people's lives and alongside colleagues with more focused skills. And whilst some of our knowledge and skills are shared by other disciplines, none have our medical background and understanding of the link between mental and physical illness.

Several years ago C.P. Snow (3) wrote about the "two cultures", drawing attention to the gulf between the sciences and the humanities. What he argued for was an infusion across the barriers. This would help counter the ignorance of the arts-educated elite, but also the simplistic belief that everything could be explained through natural science. An example is the discredited argument that

poor people have poverty in their genes, which was widely believed at the time of the eugenics movement in the early 20th century.

As psychiatrists we must resist all such attempts at biological reductionism and do everything we can to bridge the two cultures. Psychiatry needs to continue to attract talented young doctors who bring scientific understanding to the medical profession, but who also bring an understanding of the humanities and of life itself.

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# Psychiatry is alive and well

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More than 30 years ago, E. Fuller Torrey published "The death of psychiatry" (1). He predicted psychiatry's demise on the basis that disorders of the brain would be subsumed under the neurological specialty and problems of the mind would be taken over by the psychology professions. As we enter the 21st century, the specialty of psychiatry is not only alive but is thriving. It is thriving because of the excitement generated by scientific discoveries of the brain, the practical and growing applications for psychopharmacology, the emerging new science on genetics and mental health, as well as a renewed interest in psychosocial interventions and psychotherapies.

The most profound reason for the survival and success of the profession of psychiatry, however, relates to the continuing mysteries of mental illness and

the fear of mental illness in individuals and the community at large. Stigma, the pervasive issue that affects patients and providers alike, paradoxically benefits psychiatry and helps the survival of this medical specialty. Essentially, no one wants our patients except us. The acutely psychotic, the demented, the morbidly and suicidally depressed, the paranoid and manic, the personality disordered are not welcomed by other medical specialties or even other mental health disciplines, which compete with us but prefer to treat less disturbed or ill individuals.

The issues for a successful psychiatric practice and the survival of the profession have much less to do with referrals than with adequacy of reimbursement for the difficult work entailed in diagnosis and treatment for the seriously mentally ill. Paying for quality psychiatric treatment is a challenge everywhere, especially since the majority of our patients are poor (or eventually become poor). The epidemiology and need clearly are present but the financing is inadequate.

In response to this economic challenge, subspecialization is growing.

The new subspecializations in psychiatry that, I believe, are a strength and a source of optimism for the future of the field underscore the adaptive nature of psychiatric practice. A decade ago, I wrote a small article on the future of the profession, entitled "In the year 2099" (2). I made a number of predictions, including a projection that psychiatry itself would become an expanded specialty, certified in one of four major specialties of practice – neuroscience, medical psychiatry, psychotherapy, and social psychiatry – with subspecialties in geriatrics, adult, substance abuse, developmental disabilities, and forensics. And, since the brain would be a continuing frontier of learning and research in 2099, many more physicians would consider themselves psychiatric specialists than today.

Another example of coping and adaptation by psychiatrists is the experience in Washington, DC, of the federal employees' health benefits program in the early 1980s. For many years, psychiatrists enjoyed excellent insurance coverage through the insurance held by federal employees and

dependents, but in 1980, because of budgetary constraints, these benefits were cut back. Inpatient care was limited to 60 days per year and outpatient visits to 30 per year. The unlimited benefit and large number of federal employees who availed themselves of it had made Washington, DC, a destination for psychiatric practice and the highest proportion of psychiatrists per population in the United States in private practice. As a result of this cutback, I made the prediction that 100-200 psychiatrists in the Washington, DC, area would have to move to find enough patients to continue their practice. At the end of the first year we studied, there was a net gain of ten psychiatrists despite these dire predictions.

A survey of the membership of the

Washington Psychiatric Society (3) illuminated the reasons for survival (even growth) of the profession despite a financial recession due to the cutback in insurance. What we found was the psychiatrists rapidly found other work in community, forensic, and health care settings; they lowered their fees and were able to receive payment out of pocket from patients where insurance had paid before; and managed to survive by taking on part-time salaried positions and adjusting their private clinical practice. The prediction of the death of psychiatry in Washington, DC, was greatly exaggerated.

This is not to make light of the challenges on which H. Katschnig elaborates in his excellent essay, but we need not despair. Our technologies may be

“halfway”, that is, we help individuals and communities be better but not well, and most of our illnesses are chronic and relapsing. Our successes, however, increase the demand for our specialty services and now we just have to find a way to get paid adequately for the quality that we bring to the task.

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# Psychiatry: a specialized profession or a medical specialty?

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The paper by Heinz Katschnig is a thoughtful description of the challenges faced by psychiatrists worldwide, providing an interesting opportunity to reflect upon what the profession really means. The dilemma may be put through the following question: if psychiatry (and psychiatrists) are the solution, which is in fact the problem? The “eliminative procedure” should lead us to question what would happen if the psychiatric profession disappears. Would health of the populations deteriorate? Would people suffer more? Would anyone notice that we do not have psychiatrists anymore?

All these are hard questions. They are hard to pose and hard to answer. A profession is an institutionalized response to a social demand. A demand is not simply a need or a wish. It is a need or a wish consciously perceived by people and for whose satisfaction they are willing to pay, i.e., to provide practitioners with honor (honoraria), money, prestige, power or love.

It is important to stress that the perceived need or desire lies in the people and not in the providers of the services (1). One of the most unfortunate developments of post-modernist societies consists in the development of expertocracies, that is, groups of experts who believe that progress and advancement rely exclusively on their own needs and interests. Sometimes, this development leads to ignore the original demand which created the expertise. Experts are concerned with the improvement of their knowledge base, refer to their peers for approval and acceptance and contend to know the real needs of people without confronting changing realities. The typical paternalism of the medical profession, characterized by beneficence without autonomy, is a rough form of expertocratic thinking based on the idea that “doctors know best”.

The fact that psychiatrists are criticized is a warning that the profession should review the fundamentals of its alleged power and influence on human affairs. As many other knowledge-based professions, the cognitive side of this knowledge has been considered the basis of professional pow-

er for psychiatrists. However, in terms of specialized information, current psychiatry could be subsumed under neurology, psychology, social work, or policy making. Searching for power in the knowledge base is not appropriate, or it has not been appropriate considering the results. The fashionable “evidence-based” practice does not apply to many psychiatric practices in diagnosis, treatment, or prevention. The many aspects of a seemingly heterogeneous profession, ranging from Bohemian speculation to hardcore empirical research, do not find a reasonable harmonization within individual practice of psychiatrists. In order to honor all the heterogeneous discourses constituting the historical knowledge base, they should resemble “Renaissance men” and this is seldom the case, particularly in an era of state-controlled or market-driven practice (2).

If anything, what needs to be done is to reformulate the actual demand for a profession comprising so many disparate discourses and so different practices. This reformulation can only be done on the basis of a dispassionate analysis of what people really demand and what current health care systems permit. However, the defense of the psychiatric profession nowadays cannot be based exclusively on the knowledge base, contested by other professions and

limited by laws, regulations, and pressure groups within society.

As a proposal, I strongly believe that what people may really appreciate, and thus may justify an expert role of the kind psychiatrists might be able to provide, is not so much “evidence-based” practice as “value-based” integration of discourses and knowledge (3). The psychiatrist could represent that kind of general harmonizer of information that uses it in a prudent form and can be a counselor, a therapist and a health promoter without colliding with physicians, psychologists, lawyers, or social workers. From competition to integration, going through the

intermediate stage of cooperation, psychiatrists could be the systemic organizers of health care and research and not insist to remain one among many medical specialties which, by necessity, could render its claims irrelevant.

Psychiatry should become a *specialized profession*, solving the problems of integrality of approach and human relevance that no other prudent expert could provide. This, of course, might mean reorienting teaching, training, and practice, but is based on a perception of real demand and a response to the challenges now being uncovered and discussed (4).

## Medicine, affect and mental health services

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History suggests grounds for both optimism and caution about the future of psychiatry (1).

Katschnig demonstrates that public mistrust of psychiatrists reflects the perception of the profession as excessively reliant on the biomedical model. Given uncertainties regarding psychiatric knowledge, this is not entirely unreasonable. What the public may fail to understand is that alternative points of view may have even less evidence in support (2,3) and that the differences between psychiatry and the rest of medicine are less marked than some might wish to believe.

Katschnig also demonstrates that suspicion is founded on the profession's close association with the pharmaceutical industry. The public fears that limitations in our intellectual horizons, coupled with interest in personal gain, may act against patients' best interests

(4). What may be more difficult to see is the harm done when psychiatric assessment or treatment is not made available or is delayed (3).

According to Jaspers, the ideal psychiatrist combines scepticism with existential faith and a powerful personality (5). The importance of eclecticism in clinical practice has been underscored recently (6). It is a travesty of the truth that we all adhere to a narrow biomedical model. However, this is more of an overvalued idea than a delusion, because a number of the profession adopt such a view. Kendler (7) has summarised evidence showing that similar phenomena in health and disease may be partially explained by different models/perspectives. Reductionism, whether biological, psychological or social, is intellectually untenable and practically potentially destructive (1,3,8).

The 17th century philosopher Spinoza argued that matter and spirit are two aspects of one universal substance (9). We may paraphrase: wood and string are essential to make a violin and physics may help understand how sound is produced, but it is of no particular relevance in creating or enjoying Beethoven's Kreutzer sonata. Our contemporary philosopher of mind John Searle makes a similar argument in the light of neuroscience (10). These matters may be of limited concern

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to neurologists but of much relevance to psychiatrists.

Some psychiatrists are more interested in biology and some in meaning, but both are essential in understanding patients (8). Affect, conceived as feelings, emotions and agitations (11) and manifested in consciousness, behaviour and relationships in family and society, is the distinctive core of psychiatry. Evolutionary theory helps us understand this (12,13). The ability to understand affect in biological (as well as social and psychological) ways in both health and disease is what distinguishes the specialty from sister disciplines, especially cognitive and behavioural psychology and social work. If psychiatry were to disappear, it would have to be reinvented. However, it is imperative that all national psychiatric societies and training programmes ensure the training and practice of psychiatrists across the biological, social and psychological domains, including engaging patients as teachers (8,14,15). We know that the WPA is supporting this (16).

Evidence suggests that, where patients exercise choice, they are more likely to perceive treatment in positive terms and commit to it (17). The concern of psychiatrists should not be whether patients choose other professions but whether to do so is safe and effective (3,8). There is some very preliminary evidence, for

example, suggesting that perhaps nurses may prescribe more safely than junior doctors in uncomplicated cases of dementia (18).

Paradoxically, moves to allow non-medical prescribing, such as have occurred for nurses in the UK recently, could be welcomed, as long as this occurs safely (3,18,19), because they remove envy as a source of stigma against psychiatrists. The ability of other professions to prescribe will always be more limited. A more important worry for psychiatrists should be, as is the case in the English National Health Service, that patients have restricted access to us when they might need and prefer to see us rather than other mental health professionals (3).

Non-specialist health workers can deliver safely and effectively treatments for mental disorders within a functioning primary care system (20). However, collaborative care models, in which specialists play diverse roles of capacity building, consultation, supervision, quality assurance and providing referral pathways, enhance the effectiveness and sustainability of such nonspecialist health worker-led care programs (21). Psychiatrists may be on stronger professional grounds in the future by focusing training more on developing new team leadership and facilitation skills (19,22).

H. Katschnig has cast our relationships with other professions entirely in competitive terms. However, professionalism in psychiatry is enhanced by effective collaboration with others (1). An example of pioneering inter-professional collaboration between mental health professionals at the institutional level is the National Collaborating Centre for Mental Health, run jointly by the British Psychological Society and the Royal College of Psychiatrists and involving extensively other relevant stakeholders, including patients and carers (1).

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# Psychiatry as a medical specialty: challenges and opportunities

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The question of the identity of psychiatry as a medical profession has been the subject of much discussion in this first decade of the new century. Technological advances in detecting brain signals via magnetoencephalography, magnetic resonance imaging, positron emission tomography and other methods, and advances in psychiatric therapy also increased the need to define the specialty and its specific diagnostic and therapeutic methods.

It must be emphasized that psychiatry is an integral part of medicine. As

G. Gabbard put it in 1999, psychiatrists occupy a “unique niche” among the medical specialties, in that they are “the integrator par excellence of the biological and psychosocial in both diagnosis and treatment” (1). The psychiatrist is thus the physician best qualified to disentangle the often complex relationship between biological, psychological, and social factors in both somatic and mental disorders. While next to this idea of the psychiatrist as a “biopsychosocial generalist” further differentiations and specializations are advisable in order to cope with the growing diagnostic and therapeutic complexities of the field, it is important that the identity of the profession and its integrative strength are further advanced.

Certain topics in contemporary psychiatry take center stage on the background of this ongoing discussion about the identity of psychiatry and the psychiatrist. In Europe, with its increasing political unification, psychiatry is becoming increasingly "Europeanized". The Union of European Medical Specialists defined the core competencies of a psychiatrist in 2005 (2) and now offers a certification of psychiatry specialist training programs. National psychiatric societies are beginning to develop a more internationally oriented view, such as the German Association for Psychiatry and Psychotherapy (DGPPN), which has hosted several assemblies and discussions of presidents of other European psychiatric societies in a Forum of European Leaders during its annual congress in Berlin since 2007. In the past two years, the European Psychiatric Association (EPA) has been exploring new opportunities, for example by venturing on an international program to develop a European Guidance with the objective to improve the quality of mental health care and minimize health care gaps in Europe by providing evidence-based information and advice. In addition, the development of international guidelines is an important aspect of finding common ground in psychiatry on a European or even a global level, exemplified by the ADAPTE collaboration (3), which promotes the development and use of international guidelines through the adaptation of existing guidelines.

The WPA promotes international collaboration and research in mental health care. Two new international research programmes dealing with the important questions of how to recruit more young medical doctors into psychiatry, and how to overcome the stigmatization of psychiatry and psychiatrists, were initiated by the WPA in 2009 and have recently begun their work (4,5). Recruiting the young medical workforce into psychiatry and retaining them is of central importance for the specialty, and national psychiatric societies such as the DGPPN have begun initiatives including funding medical students' participation in the annual congress and a mentee programme with expert guidance of young colleagues into psychiatry.

While extensive research has been conducted concerning medical students' attitudes towards psychiatry and the stigma and public image of people with mental illnesses, there is a lack of literature addressing the stigma of psychiatrists and psychiatry as a medical specialty. A further neglected aspect is the self-stigmatization of psychiatrists. As Katschnig mentions, these issues are currently being addressed by the WPA.

Young medical doctors are often attracted into psychiatry because the integrative work between "mind" and "brain" lies at the heart of the specialty. Research in this area is advancing at an astonishing pace and not only involves imaging studies, but also the conceptualization of mental disorders and the development of an integrative theory of psychiatry as one of the major scientific challenges of the future. In this context, the current scientific discussions in the framework of developing DSM-V and ICD-11 play an important role, as they touch on central aspects of psychiatry as a medical specialty. Some of these major conceptual issues include the question of adding risk syndromes, the question whether dimensional in addition to categorical assessments are warranted, whether neurobiological foundations of the pathophysiology of mental disorders are sufficiently known to warrant their inclusion in diagnostic criteria, whether new categories for overarching symptom clusters (such as a "psychosis" cluster) may be useful, or how to operationally redefine course and outcome specifiers. Considering the globalization of psychiatric research, with increasing numbers of international studies, a harmonization of criteria in the two classification systems would be highly desirable.

Psychiatric research and the conceptualization of mental disorders are important topics beyond the operationalization of classification systems. Psychopathology is one of the core competencies of a psychiatrist, and this needs to be refocused, as N. Andreasen rightly pointed out (6). Recent trends in the neurosciences support this view, as it becomes increasingly clear that the brain utilizes different functional modules to subserve its normal functions, and that the distur-

bance of such modules may be viewed as the root of mental disorders (7), as already proposed by the late Kraepelin (8).

But beyond such research issues that may well extend into the next decades, there is a pressing need to improve mental health care in the near future. Integrated care is of increasing importance. However, the need for delegation of psychiatric competencies to other non-medical professionals cannot be equivalent with a substitution of psychiatrists in these areas, which should be avoided (9). Mental health care research needs to gain more support by funding agencies besides that for neuroscientific and pharmacological research. Moreover, evidence-based research in psychotherapy is clearly a hitherto neglected field of research. Thus, coordinated and integrated progress in all these aspects of mental health care will hopefully be fueled from several sides and should lead to reduced stigmatization, better health care and improved outcome for patients with mental disorders. National and international psychiatric societies play a central part in this endeavor, since integrating research and care of the body and the mind has been the central tenet of psychiatry in the last century.

Psychiatry seems to be well on its way to achieving this integration and successfully facing the challenges from inside and outside as an integral part of medicine in the 21st century. Psychiatrists are not in danger if they actively face these challenges.

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# Psychiatrists shall prevail

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H. Katschnig has to be commended for presenting a very thorough assessment of the challenges facing psychiatry. My answer to his question as to whether psychiatrists are an endangered species is an unqualified no. This answer is not some Panglossian fantasy. Psychiatry has been firmly embedded as a specialty in medicine for more than 200 years. In the course of its history there have been repeated Jeremiad prophecies on its demise. To paraphrase Mark Twain, the rumours of the death of psychiatry have been greatly exaggerated.

The need for psychiatrists is great. The World Health Organization estimates that at any given time 450 million people suffer from some form of mental or brain disorder (1). Twenty to 30% of medical patients suffer from a psychiatric disorder and physical diseases are prolonged by psychological factors.

Katschnig couched the problems in terms of challenges. This is a positive approach, since challenges are a call for action. As psychiatrists we have to take arms against this sea of troubles. The strategies are varied and most will need a long-term consistent and coordinated approach.

Of the five characteristics of a profession mentioned by Katschnig, only three can be regarded as essential: the ownership of a specialized body of skills and knowledge, an obligation to guarantee high quality standards of services, and ethical conduct. Autonomy in determining standards for accepting or excluding members and being accorded a high status in society are the products of the preceding three.

Political scandals, the degradation of the environment in the name of progress, the perceived failure of the globalization

of trade to help the disadvantaged and the economic crisis that cast doubts on the establishment's ability to manage the economy all act in synergy to fuel the rise of populist sentiments in South America, Europe and North America. The very nature of populism is anti-elitism. In this context professionals are viewed as elites with special status and powers who deprive the sovereign people of their rights, identity and voice. Thus, professionals are made convenient scapegoats for local personal concerns.

Medical journals give preference to the publication of positive results. The media prefer to disseminate bad news. After all, bad news has more currency than good news. In the current *zeitgeist*, it is not surprising to see that all professional groups, including psychiatrists, are under attack. These are painful times and some professionals may try to compromise by diluting their ethical standards or disavow their specialized body of knowledge. This is not only a shortsighted but also a counterproductive approach, which should not be taken by psychiatrists, otherwise we will lose our professional status irretrievably. This is the time to hold steady to the essential properties of our profession, since populism is a political storm that will pass with time. In the meantime, we have to live to fight another day.

The majority of the psychiatric diagnostic categories are not validated by objective tests. This is a severe limitation, but it should not preclude us from making the most stringent use of phenomenological information. It is rather unfair and simplistic to label the DSM and the ICD as top-down exercises. The categories in both systems are the product of decades of careful observations and documentation by clinicians. They are in turn subject to field studies and further research and refined accordingly.

The disorders included in the DSM and the ICD are not dogmatic. They are subject to the Popperian test of falsifiability.

The number of scientists engaging in research in genetics, neurosciences and psychopharmacology is impressive. We see the beginnings of the uncovering of the neurobiological and genetic basis of some psychiatric disorders. There is increased knowledge of the mechanisms by which psychological and social factors interact with genetic, biochemical and structural ones. Whilst it is difficult to predict the nature of the next paradigm shift, this is unlikely to lead to the demise of psychiatry. The discovery of the *Helicobacter pylori* has not led to decline of surgeons specializing in gastroenterology. The invention of the endoscopy has caused the physicians and surgeons to develop their own expertise. There is always some degree of overlap between different medical specialties in terms of the patients they treat. The paradigm shift in psychiatric disorder need not be a zero sum game between the neurologists and the psychiatrists. There is enough work for all.

There is no shortage of critics of modern medicine. The eminent social philosopher of medicine T. McKeown (2) contended that medical intervention had little effect on mortality rates and minor consequences for morbidity. The social polemicist I. Illich (3) declared that "the medical establishment has become a major threat to health. The disabling impact of professional control of medicine has reached the proportion of an epidemic". The studies on the mechanism of heart attacks suggested that increasingly popular aggressive treatments like bypass surgery, angioplasty and the insertions of stents might be useless, as well as dangerous.

It is, therefore, not surprising that doubts have been raised on the effectiveness of psychotropic medications. These criticisms should not cause psychiatrists to retreat into a state of frozen helplessness.

ness. The reality lays in the fact that psychotropic medications have helped to improve the lives of many psychiatric patients. Research on new pharmacological interventions will continue. Clinicians should continue to adhere to good practice in psychopharmacology by establishing proper diagnosis, identifying medication-responsive target

symptoms, monitoring effectiveness and avoiding the use of polypharmacy.

I will conclude this commentary by paraphrasing W. Faulkner: we psychiatrists will not merely endure; we will prevail, because we have a spirit that is capable of compassion, sacrifice and endurance.

## Psychiatry and the psychiatrist have a great future

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Reminiscent of Szasz (1), Katschnig argues that psychiatry is under threat, either of not standing up to scrutiny as a medical discipline or of being highjacked by non-medical professionals. I believe that: a) psychiatry is going through what other disciplines have gone through in the past, coming out much stronger; b) psychiatry and the psychiatrists are not threatened, and c) it is up to psychiatry to confront stigma.

Despite the apparent parallelism between DSM and ICD, there has been an increasing though incomplete convergence between successive versions of the two classifications. They have been demonstrated to serve the purpose of specific descriptions of disorders on the basis of which appropriate interventions are determined and carried out.

There are numerous historical examples suggesting that we should not despise the little we know at any given time. The rudimentary 17/18th century botanic classification has over the years evolved into the complex classifications of today. What Hippocrates said about epilepsy more than 2,000 years ago was authenticated only in recent times and the same applies to Alzheimer's disease and many other physical disorders, thanks to the ever increasing technology.

We are not always able to differentiate between true mental disorders and homeostatic reactions to adverse life events. This is more pressing than ever, but applies to both mental and physical

conditions, e.g. cardiovascular diseases, immunological disorders, diabetes, etc., in relation to stress.

The sociological paradigms of professional autonomy (2) cannot wholly apply to any single medical discipline, given the unlimited availability and access to information, the right and demand to know by patients and their relatives, the increasingly popular shifting to non-physicians of tasks traditionally undertaken by physicians (3), and the ever increasing choice for alternative medicine practiced by non-physicians.

Psychoanalysis as practiced by S. Freud and his contemporaries, unmodified electroconvulsive therapy, routine carotid angiogram for stroke etc., have all been replaced by the more evidence-based approaches practiced today, which may in turn be obsolete in the near future. This is all evidence for increasing confidence about the dynamic knowledge base for therapeutic interventions. Concerning ethical issues, psychiatry has not subjected itself to conflict of interest more than other medical disciplines, especially in relation to the pharmaceutical industry.

The World Health Organization's definition of health provides a coherent multidisciplinary theoretical basis for all branches of medicine. The increasing sub-specialization in psychiatry mirrors the same increase in all other medical disciplines, reflecting increase in knowledge base. New terms have been introduced to both psychiatry and physical medicine. "Survivor user" has been introduced by anti-psychiatry pressure groups. "Client" has the positive connotation that the pa-

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tient has a role to play in getting better. The term "consumer", used in all medical disciplines, is appropriate in that it emphasizes that all medical services should be in the best interest of the patient.

Unable to meet all the demands, all disciplines of medicine, without giving up on efforts to increase their human resource base, have sought the inputs of related but non-medical professionals who come under different names, e.g. clinical psychologists in psychiatry, and physiotherapists, EEG and laboratory technicians in physical medicine. It is true that psychiatry is one of the disciplines most affected, but the WPA is making attempts to address the matter. More in psychiatry but also in some other areas of physical medicine, stigma is an impediment which has to be confronted, just as happened in the case of HIV/AIDS. The WPA is at the forefront in this effort (4,5). These challenges are opportunities to improve.

I cannot say more about the future of psychiatry than Kraepelin did nearly 100 years ago: "The nature of most mental disorder is now obscured. But no one will deny that further research will uncover new facts in so young a science as ours; in this respect the diseases produced by syphilis are an object lesson. It is logical to assume that we shall succeed in uncovering the causes of many other types of insanity that can be prevented – perhaps even cured – though at present we have not the slightest clue" (6). One hundred years down the line, we know exponentially much more, and we continue to make almost daily discoveries.

Psychiatric disorders and in particu-

lar depression are fast creeping to the top of the leading causes of disease burden, overtaking communicable diseases, metabolic diseases, cancers and cardiovascular diseases (7). The knowledge base has been enhanced by the exponentially increasing technology (genotype/phenotype matching, imaging, etc.) and concerted multidisciplinary efforts.

Psychiatry has a future. The psychiatrist has a secure place in that future.

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# Hypomania: a transcultural perspective

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*This study examined the transcultural robustness of a screening instrument for hypomania, the Hypomania Checklist-32, first revised version (HCL-32 R1). It was carried out in 2606 patients from twelve countries in five geographic regions (Northern, Southern and Eastern Europe, South America and East Asia). In addition, GAMIAN Europe contributed data from its members. Exploratory and confirmatory factor analyses were used to examine the transregional stability of the measurement properties of the HCL-32 R1, including the influence of sex and age as covariates. Across cultures, a two-factor structure was confirmed: the first factor (F1) reflected the more positive aspects of hypomania (being more active, elated, self-confident, and cognitively enhanced); the second factor (F2) reflected the more negative aspects (being irritable, impulsive, careless, more substance use). The measurement properties of the HCL-32 R1 were largely invariant across cultures. Only few items showed transcultural differences in their relation to hypomania as measured by the test. F2 was higher among men and in more severe manic syndromes; F1 was highest in North and East Europe and lowest in South America. The scores decreased slightly with age. The frequency of the 32 items showed remarkable similarities across geographic areas, with two exceptions: South Europeans had lower symptom frequencies in general and East Europeans higher rates of substance use. These findings support the international applicability of the HCL-32 R1 as a screening instrument for hypomania.*

**Key words:** Hypomania, HCL-32 R1, transcultural robustness

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Worldwide studies across cultures are extremely important to define internationally valid diagnoses of mental disorders based on stable core symptoms. Large studies carried out worldwide on schizophrenia and depression (1-3) have shown stability of core symptom clusters across cultures, with some variation. To our knowledge, there is no comparable study on hypomania or mania.

Bipolar disorder is underdiagnosed. The criteria provided in current diagnostic manuals overdiagnose pure depression at the expense of bipolarity, and several variables may lead to a misdiagnosis of bipolar disorder in unstructured interview situations (4,5). Self-assessment instruments for hypomania, such as the Mood Disorder Questionnaire (MDQ, 6), the Hypomania Checklist-20 (HCL-20, 7) and the Hypomania Checklist-32 (HCL-32, 8), can be helpful in detecting hypomania and have been shown to be applicable and reliable. This paper presents patient data across cultures collected by clinicians with the HCL-32 R1 (R1=first revised version).

Exploratory factor analyses (EFAs) of small clinical or non-clinical samples from different countries have consistently found a two-factor structure of hypomania as assessed by the HCL-32 R1 (9-16). Holtmann et al (17) found a three-factor structure in a non-clinical sample of German adolescents, while Rybakowski et al (18) found four factors in a sample of Polish patients.

The present study extends those analyses by examining whether a two-factor solution is also appropriate for a larger

pooled sample combining data from 12 different countries. We aimed to answer the following questions: a) Does the HCL-32 measure manifestations of hypomania consistently across cultures (“measurement invariance”)? b) Are there cross-cultural differences in the factor levels and/or in the effects of covariates (sex, age) on factors and items?

## METHODS

Seventeen independent samples of patients with mood disorders from 12 countries, allocated to five geographic regions (Northern Europe, Southern Europe, Eastern Europe, South America, and East Asia), comprising 2606 patients, were studied with the HCL-32 R1 (Table 1). Most data were collected spontaneously by clinical researchers in the field of mood disorders. The sample was enriched by the data collected by GAMIAN Europe (n = 457), an international patient advocacy organization. The bulk of the data came from Northern and Southern Europe; a large group (over 600) were from East Asia and 423 from Brazil; the smallest group (about 200 patients) were from Eastern Europe.

The HCL-32 R1 is the revised version of the original HCL-32 (8), from which one difficult question (Q4) was omitted without any loss of information. The HCL-32 begins by assessing the current compared to the usual mood state; it then presents 32 symptoms of hypomania for self-checking (yes/no); finally the impact on social roles and the

**Table 1** Sample characteristics by country and region

Region	Country	N	Gender	Age	Diagnoses	
			(% females) <sup>a</sup>	(mean±SD) <sup>b</sup>	% UP <sup>c</sup>	% BP <sup>c</sup>
N-Europe	Belgium	38	55.3	47.3±9.55	2.6	84.2
	Germany	132	65.2	50.4±14.71	0.0	25.8
	Netherlands	73	58.9	47.6±9.45	0.0	97.3
	Sweden	429	59.0	50.2±16.55	24.0	72.3
	Total	672	60.0	49.8±15.28	15.5	66.5
S-Europe	Italy	336	64.0	45.3±12.96	32.4	62.2
	Portugal	85	60.0	41.9±13.24	4.7	77.7
	Spain	266	63.5	43.7±11.79	21.8	54.5
	Total	687	63.3	44.3±12.59	24.9	61.1
E-Europe	Croatia	99	39.4	47.0±8.93	38.4	13.1
	Russia <sup>d</sup>	94	43.6	42.7±13.65	-	-
	Total	193	41.5	44.9±11.63	19.7	6.7
S-America	Brasil <sup>e</sup>	423	63.8	44.1±11.88	9.9	19.2
	Total	423	63.8	44.1±11.88	9.9	19.2
E-Asia	China	357	51.5	36.3±13.26	29.7	70.3
	Taiwan	274	50.7	34.3±11.66	19.0	81.0
	Total	631	51.2	35.4±12.61	25.0	75.0
Grand total		2606	58.0	43.6±14.13	19.7	55.0

<sup>a</sup> 11 missing cases (sex distributions among countries as well as regions are significantly different by  $\chi^2$  test)

<sup>b</sup> 14 missing cases (age distributions among countries as well as regions are significantly different by Kruskal-Wallis test)

<sup>c</sup> Percentages of unipolars (UP) and bipolar (BP) do not sum to 100% because of missing diagnostic data

<sup>d</sup> No diagnostic information available

<sup>e</sup> Diagnostic information available only for 123 subjects

duration of highs are assessed. Compared to the MDQ, the HCL-32 has been shown to have higher sensitivity but lower specificity for bipolar disorder (12,18).

The clinical diagnoses of depression, mania and bipolar disorder were based on DSM-IV criteria, but subjects were not assessed in a standardized way across countries, which serves to increase the ecological validity of the results.

The data were pooled in Zurich. An EFA was conducted for all geographical groups separately and together, using tetrachoric correlations calculated for the 32 dichotomous items and an oblique factor rotation (geomin). Item allocation to a specific factor was based on its loading on that factor (i.e.,  $\geq 0.4$ ). The decision on how many factors to retain was based on several criteria: the Kaiser criterion (factors with eigenvalue  $>1.0$ ), the scree plot, and Horn's parallel test, but mostly on the coherence and interpretability of the factors. Subscale scores for each factor were obtained by adding up the items of the corresponding factor. A total score was calculated by summing all 32 items. The reliability of HCL-32 total and subscale scores was assessed using Cronbach's alpha.

Subsequent confirmatory factor analysis (CFA) used multi-group combined with MIMIC ("multiple indicators, multiple causes") models. This tested the effects of several covariates (sex, age) on the factors and on the single items in the multiple groups (geographical regions).

To test the assumption of measurement invariance, i.e. that the HCL-32 R1 measures hypomania consistently across geographical regions, a series of models were tested statistically, stepwise. The first model served as a reference and allowed

the free estimation of factor loadings and item thresholds in each geographical region. This model was then compared by  $\chi^2$  test to a more restricted one assuming that factor loadings and thresholds are equal across geographical groups. If that model fits the data as well as the reference model, there is a tentative assumption of measurement invariance. If the equality across groups is not given for some of the loadings or thresholds, "partial measurement invariance" can be still assumed, as long as the number of non-invariant items is limited. The next model (MIMIC) added covariate effects. The influence of the covariates (sex, age) was modelled by direct connections between the covariates and the factors, as well as direct connections to each single item. All models were estimated using the mean- and variance-adjusted weighted least square estimator WLSMV, as available and recommended for binary data in the Mplus 5.1 program.

There were between 30 and 80 missing cases for each HCL-32 R1 item, except for the last two, for which about 240 cases were missing (these two items had not been assessed in one of the Italian samples). Missing data for the HCL-32 R1 items were handled by multiple imputation, using the user-written program "ice" available in Stata 10.1. Five imputed data sets were produced and used to estimate the CFA models in Mplus. Mplus estimates parameters for each imputed data set and then combines them into a single point estimate and a standard error.

Several fit statistics are available for assessing the fit of CFA models to the data. We considered the comparative fit index (CFI, 19), the Tucker-Lewis index (TLI, 20), the root mean square error of approximation (RMSEA, 21), and the weight-

ed root mean square residual (WRMR). The following cut-off values have been found to be consistent with good model fit: CFI  $\geq 0.95$ , TLI  $\geq 0.95$ , RMSEA  $\leq 0.06$ , and WRMR  $\leq 1.0$ .

The relationship between the sum scores of the two factors and the total HCL-32 R1 score was visualized by locally weighted scatterplot smoothing (“lowess”). For every data point, lowess uses a linear regression of the y-variable on the x-variable(s) to predict the next point to be plotted. The regression is performed for the data point in question plus some nearby points, whereby the central data point is given the most weight. This procedure is applied to all data points.

Frequencies were compared across groups using  $\chi^2$  tests. Kruskal-Wallis tests were applied to continuous variables. All computations were done in Stata 10.1 and in Mplus 5.1.

## RESULTS

The merged data set comprised 2606 depressed patients. The overall mean age was  $44 \pm 14.13$  years (range 15-88 years) and 58% of the patients were women. There was some heterogeneity across samples. Both samples from Eastern Europe had fewer women, and Asian patients were on average

10 years younger than patients from the other samples (Table 1). For purposes of further analysis, we split the data set into five groups from different geographical regions, labelled N-Europe, S-Europe, E-Europe, S-America, E-Asia. The missing data on sex (11 cases) and age (14 cases, 3 overlaps) led to a slightly reduced total sample size of  $n=2584$  available for those CFA analyses using sex and age as covariates.

Initially, a factor analysis could not be performed in the merged sample due to a colinearity problem in the data. The tetrachoric correlation matrix showed that the two items “I’m more interested in sex, and/or have increased sexual desire” and “I am more flirtatious and/or am sexually more active” correlated very highly ( $r=0.85$ ). When the two items were unified, factor models became computable. We therefore conducted all analyses using this unified variable, and the number of total items was thereby reduced to 31.

The ensuing EFA revealed two factors (Table 2). Factor 1 (F1) consisted of 19 items and was labelled “active/elated”; factor 2 (F2) consisted of 12 items and was labelled “irritable/risk-taking”. The first factor reflects the sunny, positive side of hypomania, the second one the dark, negative side, including increased consumption of coffee, tobacco, alcohol and drugs. Together, the two factors accounted for 52.6%

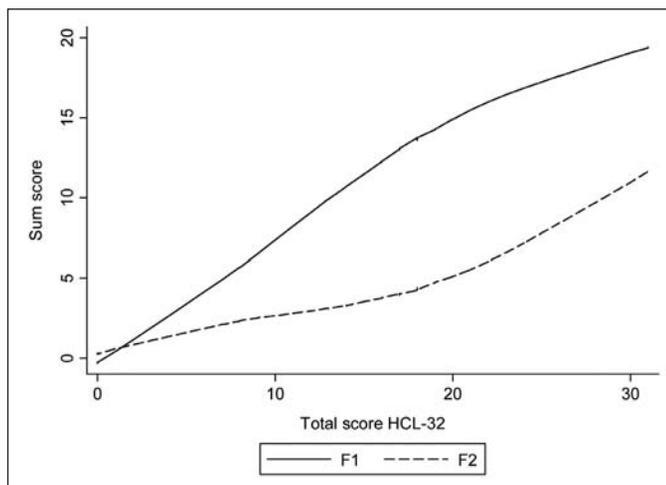
**Table 2** Item loadings for the two factors of the Hypomania Checklist-32, first revised version (HCL-32 R1) from the exploratory factor analysis (EFA) and the initial confirmatory factor analysis (CFA)

Item	EFA		CFA	
	F1	F2	F1	F2
Needs less sleep	0.46	0.31	0.44	0.29
Has more energy, is more active	0.87	-0.08	0.84	
Is more self-confident	0.84	-0.14	0.88	-0.22
Enjoys work more	0.66	-0.17	0.69	-0.24
Is more sociable, goes out more	0.75	0.00	0.75	
Travels more	0.52	0.12	0.55	
Drives faster, takes more risks when driving	0.19	0.56		0.67
Spends more/too much money	0.30	0.58	0.25	0.57
Takes more risks in daily life	0.37	0.53	0.33	0.51
Is physically more active	0.74	-0.10	0.77	-0.16
Makes more plans	0.79	0.01	0.78	
Has more ideas, is more creative	0.86	-0.01	0.85	
Is less shy or inhibited	0.64	0.15	0.68	
Dresses more colourfully or extravagantly	0.49	0.26	0.48	0.22
Meets more people	0.67	0.12	0.71	
Flirts more, has more sex	0.58	0.21	0.58	0.16
Talks more	0.67	0.25	0.67	0.19
Thinks faster	0.69	0.22	0.76	
Makes more jokes or puns	0.67	0.11	0.70	
Is more easily distracted	0.01	0.66		0.64
Engages in lots of new things	0.56	0.28	0.55	0.24
Thoughts jump from topic to topic	0.21	0.66	0.16	0.65
Does things more quickly/easily	0.78	-0.01	0.77	
Is more impatient and irritable	-0.13	0.82	-0.20	0.85
Tends to bug other people	-0.01	0.78	-0.08	0.80
Gets into more quarrels	-0.01	0.79		0.75
Mood is higher, more optimistic	0.82	-0.16	0.86	-0.23
Drinks more coffee	0.04	0.47		0.48
Smokes more cigarettes	-0.02	0.60		0.57
Drinks more alcohol	0.13	0.59		0.64
Takes more drugs or medicines	-0.32	0.64	-0.38	0.68

Items belonging to F1 are shaded

**Table 3** Age and Hypomania Checklist-32, first revised version (HCL-32 R1) scores (mean ± SD) by region and gender

	N-Europe		S-Europe		E-Europe		S-America		E-Asia		p(M)	p(F)
	M	F	M	F	M	F	M	F	M	F		
N	265	403	247	435	111	80	153	270	308	323		
Age	49.4±14.6	50.1±15.7	43.5±12.4	44.8±12.7	45.1±12.1	44.7±11.2	43.6±11.2	44.5±12.2	33.5±12.0	37.2±12.9	0.0001	0.0001
HCL-32 total score	17.8±5.9	16.4±6.1	15.7±8.0	14.2±8.1	17.7±6.4	18.2±7.4	16.3±5.9	16.6±6.2	16.1±6.7	14.9±6.7	0.01	0.0001
F1 score	13.7±4.2	13.2±4.4	11.6±5.5	10.9±5.7	11.9±5.4	12.3±5.5	11.3±5.2	11.8±5.1	11.9±5.2	11.3±5.3	0.0001	0.0001
F2 score	4.2±2.9	3.3±2.8	4.6±3.4	4.1±3.1	5.7±3.2	5.8±3.5	5.0±2.9	4.9±2.8	4.2±2.8	3.6±2.7	0.0001	0.0001



**Figure 1** Relationship between factor sum scores and total score of the Hypomania Checklist-32, first revised version (HCL-32 R1). Factor 1 (F1) is “active/elated”, Factor 2 (F2) is “risk-taking/irritable”

of the total variance. The reliability (Cronbach’s alpha) was 0.89 for F1, 0.80 for F2, and 0.88 for the total scale. The two factors inter-correlated with  $r=0.16$  ( $p<0.001$ ). The item loadings on the two factors are given in Table 2, under the heading EFA. Table 2 also shows the primary loadings of the initial CFA, and those secondary loadings (“cross-loadings”) that had to be allowed in order for the model to show a good fit to the data.

Men tended to score higher than women on F2 and on the total score, whereas there was no gender difference in F1. Patients from N-Europe and E-Europe were highest on the total score, those from N-Europe highest on F1 and those from E-Europe highest on F2 (Table 3). A plot of the factor sum scores vs. the total score demonstrated that F2 is

more strongly correlated with greater severity of the hypomanic syndrome (Figure 1).

EFA’s conducted separately for each geographical group yielded almost identical factor structures for all groups. It was thus concluded that the same factors underlay the test items in all regions.

Using factor structure, factor loadings and item thresholds as indicators, the HCL-32 as a whole proved to be largely measurement invariant across the geographical regions studied. Nevertheless, four individual items showed non-invariant primary loadings (Tables 4 and 5). “Overspending” was clearly more strongly related to F2 in S-America as compared to the other regions. However, the factor loading of 1.54 for S-America exceeds the theoretical maximum loading of 1, indicating that this effect is not trustworthy. In S-Europe, “faster thinking” was less strongly related to F1 than in other regions. Finally, in the East Asian sample, there were relatively lower factor loadings for the items “jumping thoughts” (F2) and “higher mood” (F1). In N-Europe, sex-related measurement non-invariance was found: women were much more likely to “dress colourfully or extravagantly” than men at the same level of hypomania. Finally, in E-Asia, there was a markedly less strong relation between “smoking” and F2 in women than in men, again at the same level of hypomania.

Some items which loaded on more than one factor (i.e., cross-loadings) were also not measurement invariant. These are listed in Table 6 and demonstrate two types of non-invariance. Firstly, two of these items showed transcultural variance (see Table 2): in S-America, “overspending” (an F2 item) was much more weakly related to F1 than in other regions, suggesting that it is perceived to have less positive aspects. In E-Asia, “jumping thoughts” (an F2 item) was much more closely related to F1 than in other regions, suggesting that this symptom is perceived to be less negative in that

**Table 4** Transcultural population differences in the Hypomania Checklist-32, first revised version (HCL-32 R1)

Factor	N-Europe (n=672)		S-Europe (n=687)		E-Europe (n=193)		S-America (n=423)		E-Asia (n=631)	
	Regression coefficient <sup>b</sup>	Level <sup>a</sup>	Regression coefficient <sup>b</sup>	Level <sup>a</sup>	Regression coefficient <sup>b</sup>	Level <sup>a</sup>	Regression coefficient <sup>b</sup>	Level <sup>a</sup>	Regression coefficient <sup>b</sup>	Level <sup>a</sup>
F1	Female sex: -0.157* Age: -0.016***	-0.820***	Age: -0.007*	n.s.	Age: -0.019*	-1.146***	Age: -0.008*	-0.463*	Age: -0.019***	
F2	Female sex: -0.278*** Age: -0.016***	n.s.	Age: -0.010**	n.s.	n.s.	n.s.	Age: -0.014**	n.s.	Age: -0.018***	

<sup>a</sup> Factor levels are expressed as standardized deviation from a reference group, in this case N-Europe

<sup>b</sup> Factor loadings are unstandardized primary loadings; regression coefficients are Y-standardized

\* $p<0.05$ , \*\* $p<0.01$ , \*\*\* $p<0.001$ , n.s. – non-significant

**Table 5** Transcultural measurement invariance in the Hypomania Checklist-32, first revised version (HCL-32 R1)

Items	N-Europe (n=672)		S-Europe (n=687)	E-Europe (n=193)	S-America (n=423)	E-Asia (n=631)	
	Primary loading <sup>a</sup>	Covariate effects <sup>a</sup>	Primary loading <sup>a</sup>	Primary loading <sup>a</sup>	Primary loading <sup>a</sup>	Primary loading <sup>a</sup>	Covariate effects <sup>a</sup>
Needs less sleep	0.46		0.46	0.46	0.46	0.46	
Has more energy, is more active <sup>d</sup>	1.00		1.00	1.00	1.00	1.00	
Is more self-confident	1.06		1.06	1.06	1.06	1.06	
Enjoys work more	0.69		0.69	0.69	0.69	0.69	
Is more sociable, goes out more	0.88		0.88	0.88	0.88	0.88	
Travels more	0.69		0.69	0.69	0.69	0.69	
Drives faster, takes more risks when driving	0.70		0.70	0.70	0.70	0.70	
Spends more/too much money	0.63		0.63	0.63	<b>1.54<sup>b</sup></b>	0.63	
Takes more risks in daily life	0.60		0.60	0.60	0.60	0.60	
Is more physically active	0.79		0.79	0.79	0.79	0.79	
Makes more plans	0.97		0.97	0.97	0.97	0.97	
Has more ideas, is more creative	1.08		1.08	1.08	1.08	1.08	
Is less shy or inhibited	0.83		0.83	0.83	0.83	0.83	
Dresses more colourfully or extravagantly	0.51	0.72*	0.51	0.51	0.51	0.51	
Meets more people	0.83		0.83	0.83	0.83	0.83	
Flirts more, has more sex	0.72		0.72	0.72	0.72	0.72	
Talks more	0.75		0.75	0.75	0.75	0.75	
Thinks faster	0.88		<b>0.56<sup>b</sup></b>	0.88	0.88	0.88	
Makes more jokes or puns	0.77		0.77	0.77	0.77	0.77	
Is more easily distracted	0.94		0.94	0.94	0.94	0.94	
Engages in lots of new things	0.57		0.57	0.57	0.57	0.57	
Thoughts jump from topic to topic	0.71		0.71	0.71	0.71	<b>0.66<sup>b</sup></b>	
Does things more quickly/easily	0.76		0.76	0.76	0.76	0.76	
Is more impatient and irritable <sup>c</sup>	1.00		1.00	1.00	1.00	1.00	
Tends to bug other people	0.91		0.91	0.91	0.91	0.91	
Gets into more quarrels	0.94		0.94	0.94	0.94	0.94	
Mood is higher, more optimistic	0.99		0.99	0.99	0.99	<b>0.87<sup>c</sup></b>	
Drinks more coffee	0.47		0.47	0.47	0.47	0.47	
Smokes more cigarettes	0.69		0.69	0.69	0.69	0.69	-1.089*
Drinks more alcohol	0.78		0.78	0.78	0.78	0.78	
Takes more drugs or medicines	0.85		0.85	0.85	0.85	0.85	

<sup>a</sup> Factor loadings are unstandardized primary loadings; regression coefficients are Y-standardized

<sup>b</sup> Factor loadings in bold are non-invariant across groups, i.e., differ from the corresponding loadings in the other groups

<sup>c</sup> These are marker items whose factor loadings are fixed to 1 in all groups in order to pass their metric on to their corresponding factor (energy→F1, impatient→F2)

\*p<0.001

Shaded items belong to F1, the other items to F2

culture. Secondly, some additional region-specific cross-loadings which had to be allowed are, by definition, non-invariant, since they are not computed for other regions: the items affected were “having more energy”, “driving faster and taking more risks when driving”, “thinking faster”, “getting into more quarrels” and “distractibility” (Table 6).

CFA showed that the level of F1 (“active/elated”) was highest in N-Europe and E-Europe and lowest in S-America, the difference exceeding one SD. The other regions took intermediate positions. There were no statistically significant differences in the level of F2 (“irritable/risk-taking”) (Table 4).

Except for E-Europe, there were consistent effects of the covariate “age” on the level of the latent traits F1 and F2. In summary, however, the decrease per life-year was on average only about 0.015 SD. Effects of the covariate “sex” were only found in N-Europe, with a 0.2-0.3 SD decrease in both factors F1 and F2 in women compared to men (Table 4).

The item profiles (i.e., item frequencies) across geograph-

ical regions for the items of F1 (Figure 2) and F2 (Figure 3) are of special clinical interest. They show generally high inter-regional similarities in F1 and F2. Only two exceptions were observed: S-European patients had generally lower symptom frequencies and E-European patients had higher rates of drug use.

Importantly, fit indexes for this model were consistent with good fit. The following values were obtained:  $\chi^2=1635.30$  (df=701), CFI=0.94, TLI=0.97, RMSEA=0.051, WRMR=2.76. It can be concluded that the model provides a reasonable description of the data.

## DISCUSSION

This is the first detailed report on hypomanic symptoms collected in 12 countries across the world by investigators using the HCL-32.

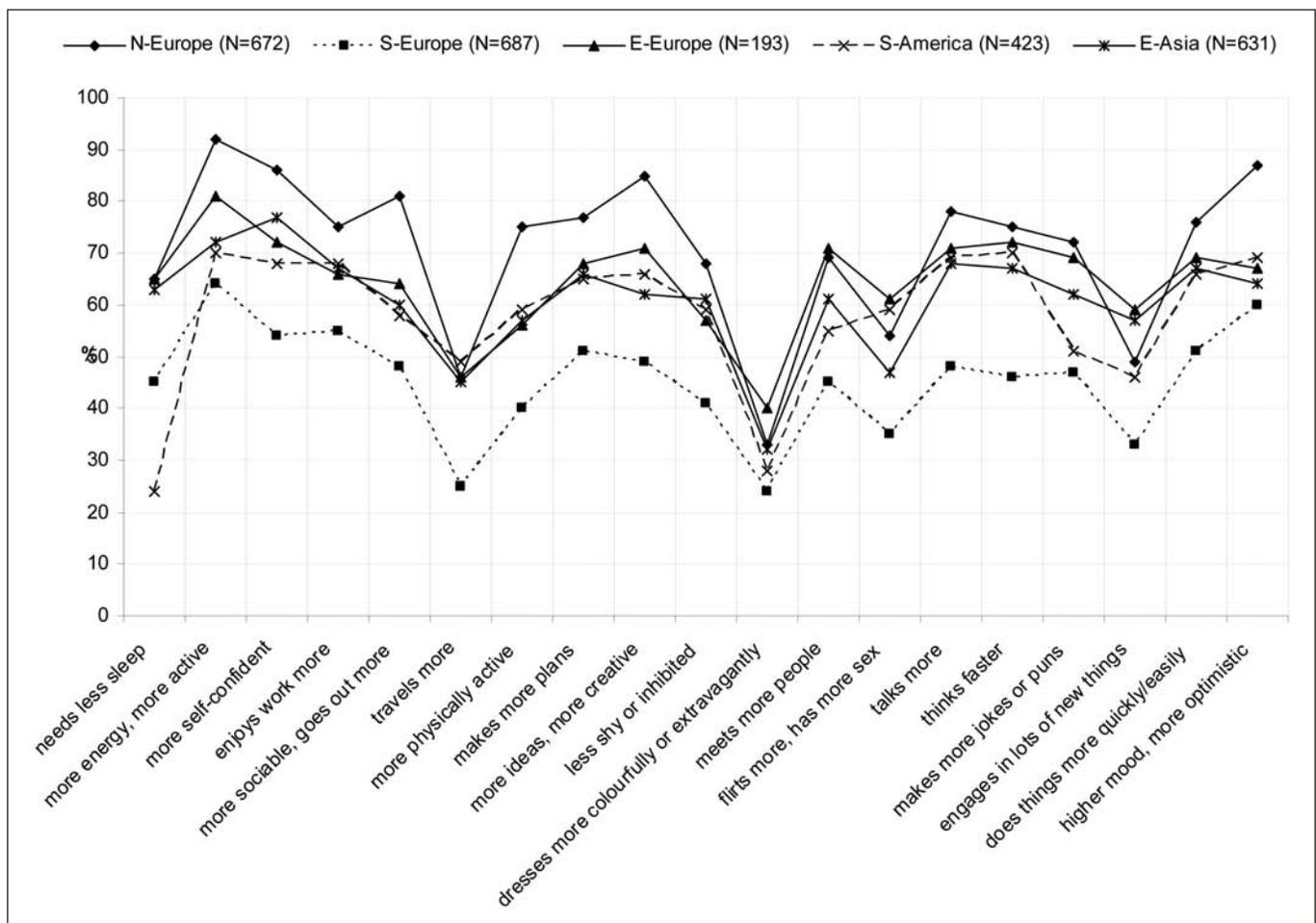
The main findings are the extensive evidence of the trans-

**Table 6** Transculturally non-invariant secondary (cross-) loadings in the Hypomania Checklist-32, first revised version (HCL-32 R1)

Item	Item belongs to factor...	Secondary loading on factor...	N-Europe	S-Europe	E-Europe	S-America	E-Asia
Has more energy, is more active <sup>a</sup>	F1	F2		<b>-0.11</b>			
Drives faster, takes more risks driving <sup>a</sup>	F2	F1		<b>0.14</b>			
Spends more/too much money	F2	F1	0.32	0.32	0.32	<b>0.07</b>	0.32
Thinks faster <sup>a</sup>	F1	F2		<b>0.48</b>			
Is more easily distracted <sup>a</sup>	F2	F1	<b>-0.26</b>			<b>0.55</b>	
Thoughts jump from topic to topic	F2	F1	0.07	0.07	0.07	0.07	<b>0.40</b>
Gets into more quarrels <sup>a</sup>	F2	F1		<b>-0.15</b>			

<sup>a</sup> Unique region-specific cross-loading

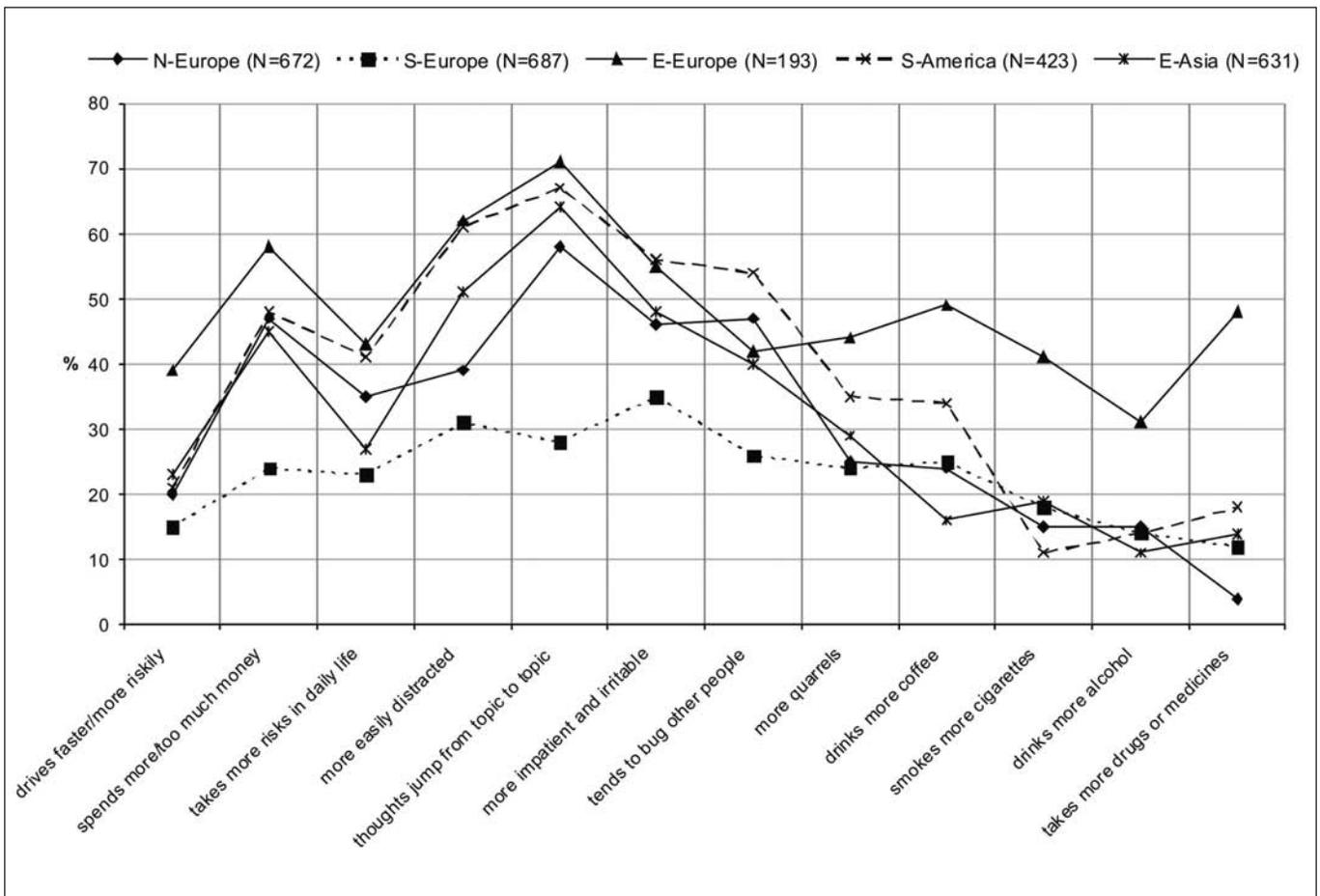
Deviant secondary loadings are printed in bold



**Figure 2** Item profile of Factor 1 (active/elated) by region

cultural stability of hypomania (analysed by CFA) and the replication of the two-factor solution in patients with mood disorders, compatible with previous exploratory factor analyses (12-14,22,23). The two-factor structure had also been found in normal adults (10). In addition, normal adolescents and young adults in romantic love had been compared to controls and found to score high on factor 1, but not on factor 2, of the HCL-32 (9). Thus, it is tempting to assume that the first factor (elated, energetic, self-confident, extra-

verted, cognitively speeded up) may to some extent represent normal “highs”, while factor 2 (risk-taking, irritable, impatient, cognitively fragmented, drug-taking) may be more characteristic of psychopathological conditions. Taken together, these findings suggest that human beings have a basic capacity to develop a range of positive affect, from normal high mood via dimensional transitions to hypomanic and manic states. This would be comparable to the human capacity to become anxious and sad/depressed.



**Figure 3** Item profile of Factor 2 (risk-taking/irritable) by region

The HCL-32 R1 proved to a remarkable degree to be transculturally stable: only four items showed variability in primary factor loadings and each was restricted to one geographical region. All the remaining primary loadings and item thresholds were cross-culturally invariant. There was one other type of difference, related to sex: at similar levels of hypomania, women in Northern Europe reported more often dressing more colourfully and extravagantly during hypomania than men. Furthermore, women in East Asia were much less likely to smoke cigarettes than men at comparable severity of hypomania.

Despite the replication of the two-factor solution, the need to allow substantial cross-loading in the CFA shows that the HCL-32 R1 items do not neatly segregate into two groups defining the two factors. There is substantial overlap in the mapping of items to factors. About half of all items feed, to varying extents, into both the positive, sunny, and the negative, dark side of hypomania. This also means that, while the two factors have relatively clear positive and negative connotations, many items do not. They may capture both the more pleasant as well as the more disturbing aspects of hypomanic states. This might especially be the case for symptoms about which the individual feels ambivalent or whose

appraisal differs among individuals (e.g., “taking more risks” can be pleasurable sensation-seeking but may also include the potential for serious harm; and “spending more or too much money” can also change valence depending on whether the individual focuses on “more” or “too much”).

There were major transcultural differences with regard to the level of the two factors of hypomania, but the results obtained by the traditional method of summing scores differed somewhat from those obtained by the CFA. For example, Northern and Eastern European patients showed the highest level of the positive aspect of hypomania, while patients from South America had the lowest levels according to the CFA, but not according to F1 sum scores. It is not entirely clear what caused these differences, but the CFA results are assumed to be more reliable because potential confounders, such as age or gender ratio differences between samples, are accounted for in the analyses. Hypomania slightly decreases with age (increasing age was almost ubiquitously associated with declining levels of both factors). In addition, females from Northern Europe manifested lower levels of hypomania in F1 and F2 than men. Both the age and sex effects seem small and might be clinically of little importance.

The most pressing issue is now to replicate our results by an independent study. Although the sample size in this study was satisfactory, it is very likely that, at a certain point in modelling, the goodness-of-fit of the analysis can be further improved only by modelling the idiosyncrasies of the data which, by their very nature, will not generalize to other samples. Replication is therefore crucial in order to distinguish those results that are robust across samples from those that are unique to a given sample. We can expect that our results will be tested soon by the independent BRIDGE diagnostic study on about 5600 depressed patients from Europe, North Africa and the Near and Far East (24-26).

In conclusion, in a merged sample of 2606 depressed patients from different geographical regions, the HCL-32 R1 was largely measurement invariant, indicating its suitability for use in different cultures to assess a lifetime history of hypomanic symptoms. It measured hypomania in a stable way across five cultural and geographical regions in Europe, South America and East Asia. Further research is needed to investigate whether the cultural robustness of the HCL-32 R1 can be replicated and extends to other cultures. However, the current evidence suggests that the HCL 32 R1 can be reliably used in different cultural contexts for identifying bipolarity in depressed patients.

## Acknowledgements

This paper is dedicated to F. Benazzi, whose untimely death in September 2009 has shocked and saddened us all. He will be sorely missed, both as a friend and as a tireless and highly original contributor to the field of psychiatry.

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# The prevalence and profile of non-affective psychosis in the Nigerian Survey of Mental Health and Wellbeing

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*This study aimed to estimate the prevalence and correlates of non-affective psychosis among adult Nigerians. It was part of the Nigerian Survey of Mental Health and Wellbeing and was conducted in 8 out of the 22 states in Nigeria, representing about 22% of the national population. Face-to-face interviews with adults aged 18 years and over were administered using the WHO Composite International Diagnostic Interview, version 3 (CIDI.3). Clinical re-appraisal was conducted by clinicians on a subsample of respondents. The CIDI.3 was found to have acceptable agreement with clinician-administered assessments, with kappa values ranging between 0.52 to 0.72, respectively, for narrowly-defined and broad categories of non-affective psychosis. The lifetime prevalence of non-affective psychosis was 2.1%, with visual hallucinations being the most commonly reported symptom and delusions of reference the least. Non-affective psychosis was significantly more common among urban dwellers. Persons with non-affective psychosis were at elevated risk to report both lifetime and 12-month comorbid DSM-IV disorders as well as to experience impairment in basic and instrumental role functioning. Only a minority had received any treatment.*

**Key words:** Non-affective psychosis, Nigeria, community survey, comorbidity, disability

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Evidence has accumulated in the past few decades that psychotic disorders occur more commonly in the community than previously thought. Studies using endorsement to any item on screening questionnaires have reported estimates of psychosis ranging from 11 to 28% (1-4). Even though there is some evidence that this variability may represent different levels of the same phenotype (4), there is nevertheless substantial lowering of these rates when more rigorous clinical assessments and more restricted definitions of non-affective psychosis are used (1,2). Thus, with clinical review of screening responses or clinical reappraisal interviews following initial screening, rates between 0.5% and 2.8% have been found for non-affective psychosis, often when the DSM-IV criteria have been applied (1-3).

Epidemiological studies of psychosis in the community have been facilitated by the advent of lay-administered interview schedules. However, the validity of the items for the identification of psychosis in such schedules has been questioned (5). While the common experience has been a high rate of false positives (5,6), there has also been a suggestion of false negatives (6), in particular when comparison has been made with identification of cases by key informants (7). The Composite International Diagnostic Interview (CIDI) has been a commonly used tool for this purpose (2,5-7). Recent evidence suggests that its latest version 3.0, providing for clinical review of open-ended questions that accompany the psychosis screening items, has improved validity (1).

We used this version of the CIDI (8), complemented with a clinical reappraisal study, to determine the prevalence of non-affective psychosis in the Nigerian community, the socio-demographic profile of persons with experience of psychosis, and the associated comorbidity as well as disability. Our aim was to provide information about community occurrence of psychosis in both urban and rural areas.

## METHODS

The Nigerian Survey of Mental Health and Wellbeing is a community based survey of the prevalence, impact, and antecedents of mental disorders that was conducted between 2001 and 2003 (9,10). It used a four-stage area probability sampling of households to select respondents aged 18 years and over. The section of the survey including a psychosis screen and a clinical reappraisal study was conducted in the Yoruba-speaking areas of Nigeria, consisting of eight states in the south-western and north-central regions (Lagos, Ogun, Osun, Oyo, Ondo, Ekiti, Kogi and Kwara). These states account for about 22% of the Nigerian population (approximately, 25 million people).

In the first stage of the sampling, using an ordered list of all primary sampling units (PSUs) stratified on the basis of states and size, 40 of these PSUs were systematically selected with probability proportional to size. Each PSU was a local government area, a geographic unit with a defined administrative and political structure. In the second stage, four enumeration areas (EAs) were systematically selected from each PSU. EAs are geographic entities including between 50 and 70 housing units.

All selected EAs were visited by research interviewers prior to the interview phase of the survey and an enumeration and listing of all the household units contained therein was conducted. These lists were entered into a centralized computer data file, thus creating a sample in which the probability of any individual household being selected to participate in the survey was equal for every household within an EA. In the final stage of the selection, interviewers obtained a full listing of all residents in the household from an informant. After identifying household residents who were aged 18 years or over and were fluent in the language of the study,

Yoruba, a probability procedure was used to select one respondent to be interviewed. The Kish table selection method was used to select one eligible person as the respondent (11). Only one such person was selected per household. When the primary respondent was either unavailable following repeated calls (five calls were made) or refused to participate, no replacement was made within the household.

On the basis of this selection procedure, face-to-face interviews were carried out on 4,984 respondents. The response rate for this section of the survey was 79.9%. Respondents were informed about the study and provided consent, mostly verbal but sometimes signed, before interviews were conducted. The survey was approved by the University of Ibadan/University College Hospital, Ibadan Joint Ethical Review Board.

Diagnostic assessment was done with the CIDI 3.0 (8). Of the two components of the interview, Part 1 (covering a core set of diagnoses) was carried out with all respondents, while Part 2 (comprising the psychosis screen and covering several correlates of mental disorders, including disability) was carried out with Part 1 respondents who met criteria for any of a selection of mental disorders and with a probability sample of others.

The psychosis screen (administered to about 84% of Part 1 respondents) enquires about the lifetime occurrence of six symptoms (visual hallucinations, auditory hallucinations, thought insertion, thought control, delusions of reference, and delusions of persecution), with yes-no response options. Any positive response was followed by questions asking the respondent to describe the instances of the symptom and to provide their own interpretation of the experience. These responses were recorded verbatim. Follow-up questions also asked about age of onset, persistence, 12-month occurrence and probes about possible organic etiology (especially alcohol or drugs). These verbatim records as well as responses to the subsequent questions were then reviewed by one of the researchers, who assigned a rating of probable, possible, or unlikely to meet DSM criterion for the symptom. Only responses rated as probable or possible were included in this analysis.

Clinical reappraisal face-to-face interviews were conducted using the Structured Clinical Interview for DSM-IV (SCID, 12) by two senior residents in psychiatry who had received a structured training in the use of the instrument prior to field work. The clinical reappraisal interviews were conducted on 56 respondents randomly selected from among screen positives and screen negatives. All interviews were jointly reviewed and diagnostic assignment was based on consensus between the interviewers and the supervisor.

Several other mental disorders were assessed in the Nigerian Survey on Mental Health and Wellbeing. In this report, we present data concerning comorbidity of non-affective psychosis with any anxiety disorders (panic disorder, generalized anxiety disorder, agoraphobia without panic disorder, specific phobia, social phobia, post-traumatic stress disorder, obsessive-compulsive disorder), any mood disorders

(major depressive disorder, dysthymia, bipolar disorder), any impulse control disorder (oppositional-defiant disorder, conduct disorder, attention-deficit/hyperactivity disorder), and any substance use disorders (alcohol and drug abuse and dependence). DSM-IV organic exclusion rules were applied to all diagnoses, and so were hierarchy rules, except in the case of substance use disorders, where abuse is defined with or without dependence.

We determined the relationship of non-affective psychosis to functional role limitations or disability using the World Health Organization Disability Assessment Schedule (WHO-DAS, 13). The instrument permits the assessment of three domains of basic activity (cognition, mobility and self-care) and performance of instrumental roles (days totally out of role and days with reduced quality of productive role performance). Impairment was rated as present for a "yes" response to the summary items for basic activity or a score  $\geq 90$ th position on the percentile distributions of the sample on items for the two instrumental roles. These ratings were made over the previous 30 days.

Persons with a 12-month episode of non-affective psychosis were asked if they had consulted any care provider for the experience. Care provider could be any mental health specialist, any general health provider, or alternative/complementary health practitioners (spiritual or traditional healers).

We examined the association between non-affective psychosis and socio-demographic variables of age, sex, marital status, education, residence. Residence was classified as rural (less than 12,000 households), semi-urban (12,000-20,000 households) and urban (greater than 20,000 households).

In order to take account of the stratified multistage sampling procedure and the associated clustering, weights have been derived and applied to the rates presented in this report. The first weighting adjusts for the probability of selection within households and for non-response. Also, post-stratification to the target sex and age range were made to adjust for differences between the sample and the total Nigerian population (according to 2000 United Nations projections). The weight so derived, termed "Part 1 weight", was normalized to reset the sum of weights back to the original sample size of 4,984.

A second weight, termed "Part 2 weight", was also derived and applied to a probability sub-sample of the survey sample who completed the long form of the interview or Part 2. The Part 2 weight is a product of Part 1 weight as well as the empirical probability of selection into the group with the long interview. This probability varied according to the presence or absence of selected diagnostic symptoms. Thus, all persons who endorsed a set of diagnostic symptoms in the Part 1 of the interview were selected into Part 2 with certainty (i.e., probability=1.0). All others were randomly selected into Part 2 with a constant probability of 25%. The weight was then normalized to reset the sum of weights back to the sample size of 1,682. The section on psychosis was administered to 1,419 of these.

The analysis has taken account of the complex sample

design and weighting. Thus, we used the jackknife repeated measures implemented with the Stata statistical package (14) to estimate standard errors for proportions. Demographic correlates were explored with logistic regression analysis (15) and the estimates of standard errors of the odds ratio (ORs) obtained were made with Stata. All of the confidence intervals reported are adjusted for design effects.

## RESULTS

The CIDI screen showed acceptable agreement with clinician-administered assessments for the detection of non-affective psychosis. For a broadly-defined non-affective psychosis (any psychosis), it had a sensitivity of 90% and a specificity of 93%. When a narrowly-defined non-affective psychosis group (consisting of schizophrenia and schizophreniform psychosis) was the focus, the respective values were 83% and 86%. The positive predictive value was .75 for broad non-affective psychosis and .42 for narrow non-affective psychosis, while the respective kappa values were .72 and .52. Analysis of the three false positives showed that two were thought to have manic ideas that were not considered delusional and one was assessed as a case of organic psychotic reaction. The single case of false negative was one of delusional disorder.

As shown in Table 1, the lifetime estimate of any psychotic experience was 2.1%. Visual hallucinations were the most commonly reported symptom (1.2%), while delusions of reference were the least (0.2%). The estimated 12-month prevalence of any psychotic symptom was 1.1%.

Table 2 shows relevant clinical details of the lifetime cases. The mean age of first occurrence was 25.8 years, with the mean age of onset being earlier in males compared to females, even though this difference was not statistically significant. Older cohorts reported later age of onset, and this

**Table 1** Prevalence of symptoms of non-affective psychosis (n=1419)

	Males, % (SE)	Females, % (SE)	Total, % (SE)
Visual hallucinations	1.9 (0.7)	0.5 (0.2)	1.2 (0.3)*
Auditory hallucinations	0.9 (0.5)	0.8 (0.3)	0.9 (0.3)
Thought insertion	0.6 (0.5)	0.2 (0.1)	0.4 (0.3)
Thought control	0.8 (0.5)	0.3 (0.1)	0.6 (0.2)
Delusions of reference	0.4 (0.4)	0.07 (0.06)	0.2 (0.2)
Persecutory delusions	0.5 (0.4)	0.2 (0.1)	0.4 (0.2)
Any psychosis	3.0 (0.9)	1.2 (0.4)	2.1 (0.5)*

\*Significant difference between males and females,  $p < 0.05$

was significant for the entire group, but not significant when the sexes were considered separately. Most people who reported psychotic symptoms had experienced them on multiple occasions. A mean lifetime episodes of about 22 and a mean of about 5 in the prior 12 months were reported by lifetime and 12-month cases, respectively. No gender difference was found for mean number of episodes, either lifetime or 12-month. There was a significant association with age for lifetime episodes for the entire group. However, the pattern was not linear in either direction. Indeed, the highest mean values for both lifetime and 12-month periods tended to be found in the cohort aged 20-44 years.

Compared to females, males were more likely to have experienced lifetime non-affective psychosis (OR=2.5; 95% CI 1.2-5.3). There was a non-significant increased likelihood of a lifetime experience of non-affective psychosis in persons who had never married (OR=1.5; 95% CI 0.5-4.4) or had separated or divorced (OR=1.6; 95% CI 0.5-5.0) when compared to those who were in marriage. Compared to rural dwellers, there was a significantly elevated risk of reporting lifetime non-affective psychosis by persons living in semi-urban (OR=6.4; 95% CI 1.3-32.3) and urban (OR=4.3; 95% CI 1.1-17.5) communities.

**Table 2** Clinical history of non-affective psychosis by age and sex

	Cohorts	Males (n=23)		Females (n=16)		Total (n=39)	
		N	Mean (SE)	N	Mean (SE)	N	Mean (SE)
Mean age of onset (years)	18-29	8	15 (2.10)	2	14 (5.00)	10	14.8 (1.82)
	30-44	4	20.75 (5.29)	7	23.57 (3.25)	11	23.27 (2.69)
	44-59	5	27.0 (5.55)	4	31 (8.20)	9	29.0 (4.48)
	60+	6	36.67 (8.91)	3	40 (8.66)	9	37.78 (6.29)
	All ages	23	24.26 (3.23)	16	28.19 (3.32)	39	25.77 (2.33)
			F=3.00, $p=0.04$		F=2.06, $p=0.16$		F=5.76, $p=0.003$
Mean number of 12 month episodes	18-29	2	3.5 (2.50)	0	-	2	3.5 (2.50)
	30-44	0	-	2	16.5 (3.50)	2	16.5 (3.5)
	44-59	3	3.67 (0.88)	3	3 (1.00)	6	3.33 (0.61)
	60+	2	2.5 (0.50)	1	3 (0.00)	3	2.67 (0.33)
	All ages	7	3.29 (0.68)	6	7.5 (3.02)	13	5.23 (1.50)
			F=0.20, $p=0.83$		F=11.95, $p=0.03$		F=18.45, $p<0.001$
Mean number of lifetime episodes	18-29	8	8.0 (1.57)	2	9.5 (6.5)	10	18.2 (6.36)
	30-44	4	9.25 (2.17)	7	21.14 (6.73)	11	28.64 (6.32)
	44-59	5	12.4 (3.36)	4	13.25 (6.34)	9	17.89 (5.10)
	60+	6	21.67 (8.31)	3	11.33 (4.67)	9	22.00 (6.55)
	All ages	23	12.74 (2.51)	16	15.88 (3.52)	39	21.95 (3.05)
			F=1.80, $p=0.18$		F=0.56, $p=0.65$		F=0.70, $p=0.56$

**Table 3** Comorbidity of lifetime non-affective psychosis with other DSM-IV disorders (n=1419)

	Lifetime comorbidity		12-month comorbidity	
	% (SE)	OR (95% CI)	% (SE)	OR (95% CI)
Any mood disorder	12.7 (5.5)	4.8 (1.7-13.4)*	4.8 (3.8)	5.2 (0.8-34.1)
Any anxiety disorder	15.0 (7.1)	3.1 (1.0-10.1)*	2.8 (1.6)	3.1 (0.8-12.5)
Any impulse control disorder	1.2 (1.3)	5.6 (0.4-77.4)	0 (0)	0 (0)
Any substance use disorder	7.8 (4.1)	2.1 (0.6-7.5)	8.3 (7.4)	9.3 (1.0-84.6)*
Any disorder	25.1 (1.7)	2.7 (1.0-7.6)*	2.2 (3.5)	2.4 (0.6-9.5)

\*Significant at the 0.5 level, two-sided test, after controlling for age and sex

**Table 4** Association of non-affective psychosis with impairments in basic and instrumental functioning assessed in the WHO Disability Schedule (n=1419)

	Percent with impairment (SE)	OR (95% CI)
<i>Basic functioning</i>		
Cognition	8.2 (3.9)	4.8 (1.7-13.9)*
Mobility	1.5 (1.1)	0.4 (0.1-2.2)
Self care	1.0 (1.0)	1.6 (0.2-16.8)
Social activities	4.2 (3.5)	4.3 (0.8-22.5)
<i>Instrumental functioning</i>		
Days out of role	19.2 (6.0)	2.4 (1.1-5.2)*
Productive role performance	12.4 (4.4)	1.5 (0.7-3.2)

\*Significant at the 0.5 level, two-sided test, after controlling for age and sex

Lifetime non-affective psychosis increased the likelihood of lifetime occurrence of other mental disorders (Table 3). The odds for comorbid lifetime mental disorders ranged from 2.12 for any substance use disorder to 5.6 for impulse disorder. The same pattern was noticed among 12-month cases of non-affective psychosis but, due to small numbers, the association was only significant for substance use disorders.

Persons with lifetime non-affective psychosis had evidence of impairment in various areas of functioning in the 30 days prior to assessment (Table 4). Specifically, they were more likely to have impairment of cognition and self care as well as that of instrumental functioning (days out of role), even though statistical significance was achieved only for cognition and days out of role.

Only 2 (15%) of the 13 persons who had experienced non-affective psychosis in the prior 12 months reported any treatment for emotional disorder in that period. Both had made multiple contacts with general practitioners and complementary alternate health providers. None had received treatment from mental health specialist services.

## DISCUSSION

In this study of a representative community sample in Nigeria, we found a lifetime prevalence of 2.1% and a 12-month estimate of 1.1% of non-affective psychosis. Males had significantly higher lifetime rates than females. Visual hallucinations were the most common psychotic experiences. Although an earlier age of onset was reported by

males than females, the difference was not statistically significant. Lifetime psychotic experience was more commonly reported by persons who had never been married or those who had separated or divorced. There was a significant association with urbanicity, with higher rates being found among semi-urban and urban dwellers compared to persons residing in rural areas. Most people with psychotic symptoms had experienced them on multiple occasions, with lifetime average of 22 episodes and a 12-month average of 5.

Persons with psychotic experiences were more likely to have experienced other comorbid mental disorders such as mood, anxiety, impulse control, and substance use disorders. Psychotic experience was associated with significant disability. Persons with lifetime experience were more likely to be among those classified as highly impaired based on a score above the cut-off point on the WHO-DAS scale for days out of role. They were also more likely to be impaired in the areas of cognition and social activities. In spite of this profile of comorbidity and disability, most of the persons identified in this survey had not received any form of formal care, either orthodox or traditional.

Widely varying estimates have been reported for psychotic symptoms in community surveys. Van Os et al (4) reported a prevalence of 4.2% for narrowly-defined psychotic symptoms and 17.5% for broadly-defined symptoms. Psychotic symptoms are notoriously difficult to assess with structured interviews. While the common experience has been that of low specificity and high false positives, some workers have also reported the problem of high false negatives. For example, clinical re-interview of persons who endorsed CIDI psychotic items in a general population study using the SCID found post-test probabilities to range between 5.1 and 26.5% for the individual CIDI items (5). On the other hand, Kebede et al (7), reporting on a survey conducted in rural Ethiopia, found that the CIDI identified fewer cases of schizophrenia than the use of key informants in the community, and Perala et al (6) observed that a reliance on CIDI screening questions alone would have resulted in the identification of only 26.5% of psychotic disorders in their community survey. One may surmise from these observations that the performance of CIDI could be affected by the form of the psychotic disorder (acute or chronic, for example) or by cultural factors relating to whether psychotic symptoms would be endorsed by respondents in interviews conducted by lay persons.

However, these authors used the earlier versions of the

CIDI. The CIDI 3.0 screening questions used in the current study have undergone considerable revision to reduce the problem of false positives (8). As described by Kessler et al (1), this section of the instrument begins by encouraging respondents to think carefully about their answers to the questions and specifying that the intent of the questions is to elicit the presence of "unusual experiences". An important difference between these questions and those in the original CIDI is that they have undergone modification to capture the way psychotic symptoms are commonly experienced in the community (1). The difference between the earlier and current versions of the CIDI is substantial. Thus, while 28.4% of respondents endorsed one or more psychotic symptoms in the National Comorbidity Survey, in which the older version of the CIDI was used, only 9.1% did so in the National Comorbidity Survey Replication with the use of version 3.0 (1,2).

Our estimate of 2.1% for lifetime prevalence of psychosis is similar to the 1.5% following preliminary review of CIDI open-ended responses reported in the National Comorbidity Survey Replication by Kessler et al (1). However, these authors found that, following clinical reappraisal interviews using SCID, the lifetime prevalence of non-affective psychosis was 0.5%, suggesting that, even with the preliminary review of the open-ended responses and reclassification based on that review, there was still a substantial level of false positives. However, in the sample here reported, clinical reappraisal study of a random selection of screen positives and screen negatives suggests that the screening questions have acceptable screening properties for their use in this setting. Our lifetime prevalence estimate falls within the range of 0.85-2.37% reported by Ochoa et al (3), who had used the same version of CIDI followed by a clinical reappraisal interview with SCID, and close to the 1.94% reported for non-affective psychosis by Perala et al (6) using multiple sources of information.

The finding that visual hallucinations were the most commonly reported symptom, especially among men, is surprising, given that this symptom is not often associated with non-organic psychosis in clinical settings. However, this finding is similar to that reported in the National Comorbidity Survey Replication, where the CIDI screening item for visual hallucinations had the highest rate of endorsement (1). In that survey, even though a high proportion (25.4%) of the experience of visual hallucinations was classified as odd but not psychotic, about one-third of the 6.3% screen positives were classified as either probable or possible cases of non-affective psychosis, thus giving a prevalence of over 2%, an estimate that is much higher than reported here. It would appear that, at least in the community, visual hallucinations are not an uncommon experience for persons with non-affective psychosis.

Even though the relative rarity of psychosis in this community study has resulted in a small number of cases and consequent poor statistical power for analytic exploration, the correlates of psychosis that we found are in accord with those of previous reports (1,6,16-18). Persons with psycho-

sis were more likely to be male and less likely to be married. An interesting observation is the clear association with urbanicity. A somewhat similar observation had been made in Ethiopia (16), even though that study was conducted in a relatively narrower geographic spread than the present one. We have not explored whether this association is with urban upbringing or with urban adult residence, so we are unable to speculate whether this association reflects developmental mechanisms or reversed causation. Nevertheless, the association is of interest, because the form and import of urbanicity must be different between a developing sub-Saharan African country and Western European countries where such finding has been previously reported (3,19,20).

Lifetime psychotic experience was also associated with an increased likelihood of other mental and substance use disorders, either occurring over a lifetime or in the prior 12-months. Persons with lifetime psychosis were more likely to report functional role limitations and disability, especially in regard to inability to perform usual role and disability in cognition and social roles. These correlates, very similar to those reported by Kessler et al (1), are important not only in showing the level of disability among these community cases but also in providing a validation for the ascertainment procedure used in this report. Nevertheless, we think that, for reasons stated below, our estimate was probably very conservative.

Epidemiological studies of psychosis in a developing country face a dilemma. As shown in this report, a considerable proportion of persons with lifetime experience of psychosis do not seek formal care, either because of inaccessibility of service or because of stigma (21). Yet, it is possible that a household survey, such as we employed here, may capture those at the milder end of the psychosis spectrum. On the other hand, studies at service points, such as those carried out in better resourced settings (22), would provide a very skewed profile in a developing country setting. At those points, it is conceivable that those with behavioural problems, especially those of aggression and violence, will predominate, with consequent undercounting and unrepresentative clinical profile. The study by Kebede et al in Ethiopia (7), where key informants identified more cases of schizophrenia than did CIDI interviews, would tend to suggest that non-response and denial of symptoms might have played a part in reducing the sensitivity of the CIDI in that setting. It would therefore appear that case identification in a developing country setting would be strengthened by a combination of strategies (6). These may include identification from various service points (including spiritual and traditional healing homes) to assess persons with more disturbed behaviour, use of key informants to pick cases of overt behavioural problems that may not have led to treatment seeking (such as those with predominantly negative symptoms), as well as household surveys to help identify cases with covert or overt symptoms (such as the positive symptoms elicited by the CIDI) who may have not sought treatment.

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# Personality disorder: a new global perspective

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*Personality disorder is now being accepted as an important condition in mainstream psychiatry across the world. Although it often remains unrecognized in ordinary practice, research studies have shown it is common, creates considerable morbidity, is associated with high costs to services and to society, and interferes, usually negatively, with progress in the treatment of other mental disorders. We now have evidence that personality disorder, as currently classified, affects around 6% of the world population, and the differences between countries show no consistent variation. We are also getting increasing evidence that some treatments, mainly psychological, are of value in this group of disorders. What is now needed is a new classification that is of greater value to clinicians, and the WPA Section on Personality Disorders is currently undertaking this task.*

**Key words:** Personality disorder, classification, treatment, comorbidity, epidemiology

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In the last 50 years, personality disorder has achieved a level of understanding and, indeed, respectability that now allows it to be considered as an equal partner with other mental disorders. Before the 1960s, personality disorder, with the possible exception of the antisocial group, was considered an unreliable and imprecise diagnosis with little or no clinical value. Since then, however, and particularly since the introduction of DSM-III in 1980, there has been increasing recognition that personality disorder, despite many imperfections in its classification, can be described and rated reliably. Personality disorder has been shown to have an important influence on the outcome of other mental disorders when present as a comorbid condition, and it may benefit from specific treatment. This article discusses these findings from a global perspective, as this has particular relevance to low-income countries in which personality disorder has until recently been seldom studied.

## EPIDEMIOLOGY

Although national morbidity studies of mental illness have now become more frequent in developed countries, they do not often record personality disorder. One of the main reasons for this is the difficulty in conducting assessments of personality disorder, especially with lay interviewers. As a consequence, there are only a handful of such studies of the literature (1-3). However, with the increasing use of short screening assessments for personality disorder (4,5), it is possible to conduct such assessments with lay interviewers and provide valuable data.

Three major studies of the epidemiology of personality disorder have now been published in the last five years. The results are summarized in Table 1. By far the largest of these studies was conducted across 10 different countries, including six low- or middle-income countries. This study is par-

**Table 1** Study methods and prevalence of personality disorder from recently published epidemiological studies

Author, year (ref.)	Country	Method	Prevalence (%)	Screening instrument
Huang et al, 2009 (6)	Western Europe (WE), Colombia (C), Lebanon (L), Mexico (M), Nigeria (N), People's Republic of China (PRC), South Africa (SA), United States (US)	Household surveys Multiple imputation used to predict personality disorder scores using a three part simulation procedure. Rates of personality disorder calculated as means of multiple imputation prevalence estimates (n=21,162)	WE: 2.4 C: 7.9 L: 6.2 M: 6.1 N: 2.7 PRC: 4.1 SA: 6.8 US: 7.6	33-item screening questions from the International Personality Disorder Examination (IPDE)
Coid et al, 2006 (3)	England, Wales, Scotland	Survey of a stratified sample of 15,000 households (n=628)	4.4	Screening questionnaire of SCID-II
Grant et al, 2004 (7)	United States of America	Random sample (National Epidemiologic Survey on Alcohol and Related Conditions) (n=43,093)	14.8	Alcohol Use Disorder and Associated Disabilities Interview Schedule, DSM-IV Version

ticularly significant because it demonstrates that personality disorders are no less prevalent outside Europe, North America and Australia, where all previous data have been collected. The study is also important because it shows that problems in social functioning among people with personality disorder are clinically significant, even when the impact of other comorbid mental health problems has been controlled for (6).

## **HOW COMORBID PERSONALITY DISORDER INFLUENCES OTHER MENTAL DISORDERS**

As the identification of personality pathology has become increasingly robust, it has become possible to turn our attention to how this group of disorders affect other mental disorders, such as affective and psychotic disorders, more commonly identified and treated within mental health settings. Although the community prevalence of personality disorder appears to range from 3 to 10%, it is, as would be expected, much higher in secondary care settings (8,9). As such, it would be expected to impact on psychopathology, outcome and service provision. The research undertaken to date, although limited in a similar fashion to the epidemiological data, would broadly support this view.

The best studied association is between depressive disorders and personality status. More than 60 studies have looked at the correlation between personality disorder and depression and, when combined using a meta-analytic approach, they confirm that people with a personality disorder are approximately twice as likely not to recover from a depressive episode as those with no personality disorder (unpublished data). This data is very similar to initial findings of poorer outcome in depression when personality pathology is present (10). Studies do not make it clear whether this poorer outcome is due to the lack of treatments directed at the personality pathology or if personality disorder acts as a diathesis in these conditions (11).

The findings in psychotic mental illness are far less clear. This field of research is less well developed and even the prevalence of personality pathology ranges from 4.5 to 100%. This huge variation appears to be related to the country of the study, the care provided and the tools used to measure personality (12). It is not clear that personality measures in psychosis are reliable (13). Outcomes in this group are also poorly studied (14), although there are peripheral indicators that personality disorder in this group often shows itself in terms of violence (15), crime (16), and hospital re-admission (17).

Other research has examined the interactions of personality pathology and major mental illness within community and secondary care settings. This also supports the probability of poorer outcomes in personality disordered patients who are, by and large, treated for affective and psychotic disorders. Two-year outcomes in an Australian cohort showed the personality facet of neuroticism to be one of the

few correlates predictive of poor outcome in those with mental illnesses (18). Cross-sectional data has also suggested personality disorder, particularly its severity, to be associated with both higher social needs and greater social dysfunction in patients in a secondary care setting in England (19).

Studies such as these suggest that personality dysfunction has a negative effect on function and outcome, but remains relatively undertreated. Why is this? The answer to this question is potentially multifaceted, although clinicians' attitudes toward this difficult to manage group are important. For more than two decades, there has been the suggestion that mental health clinicians do not like patients with personality disorders (20), and recent evidence suggests that clinicians perceive patients with personality disorders as more difficult, despite the objective evidence failing to support such a view (21). These attitudes may adversely affect delivery of health care provision and as such make it more difficult for patients with personality disorder and comorbid mental disorders to access and receive appropriate management for either disorder.

It therefore appears that people with personality disorder and comorbid personality disorder have poorer outcomes, function less well in society and are stigmatized by clinicians in secondary services, reducing the odds they will receive optimum care. This is a combination which is potentially expensive when considering the delivery of health and social care services.

## **COST OF PERSONALITY DISORDER**

As part of a recent report on the economic burden of mental health problems in England, the King's Fund estimated the health and social care service costs of all people with personality disorder who are in contact with their general practitioners at £704 million per year (22). When productivity losses were included, the cost rose to £7.9 billion per year. Soeteman et al (23) used a similar approach to calculate the cost of personality disorder by using data from health and social care contacts for people attending specialist personality disorder services. They calculated the total burden of personality disorder in the Netherlands to be £11,126 per patient.

These studies can be considered a useful starting point, but they do not provide an estimate of the total economic burden of personality disorder, because both of them used information on people who were in contact with services. Whilst service attenders provide useful opportunistic samples for research purposes, they are not representative of the personality disorder population as a whole. Indeed, we know that many of those with personality disorder are unknown to services (24), reject treatment rather than seek it (25), or are in contact with services but have a different primary diagnosis (26). Thus, to date, the true cost of personality disorder remains unknown, but it is certainly substantial, falling to many service providing sectors (health, social ser-

vices, criminal justice) as well as to the economy more widely (inability to work and premature death).

## EVIDENCE OF TREATMENT EFFECTIVENESS

Most of the research conducted into the treatment of personality disorder has focused on those with borderline personality disorder. Systematic reviews of previously published randomized trials have concluded that too few studies have been conducted to draw clear conclusions about the treatment of this form of personality disorder, but they have highlighted the limited, if any, impact of pharmacological treatments and the promising, if still unclear, benefits of complex psychosocial interventions such as dialectical behaviour therapy (27,28).

The treatment of people with borderline personality disorder has also been reviewed as part of the development of national guidelines. Following the publication of the American Psychiatric Association's guidelines in 2001 (29), the National Institute for Clinical Excellence in England (NICE) published new treatment guidelines for borderline and antisocial personality disorder (30,31). The evidence base led to three main conclusions: a) psychotropic drugs are of no proven value in the long term in these personality disorders, and their adverse effects normally preclude their use except for short periods and in crisis; b) if other treatments (mainly psychological) are to be given, they need to be administered using a structured team approach for borderline personality disorder and using cognitive therapeutic approaches (particularly group management) in antisocial personality disorder; c) in antisocial personality disorder, interventions that reward are better than those that punish.

Information on which to base treatment discussions for people with other forms of personality disorder is even more scant. Recent trials by Svartberg et al (32) and Emmelkamp et al (33) are noteworthy because they examined the impact of psychological treatments among people with cluster C personality disorders. Findings from these two trials disagree, with Emmelkamp et al demonstrating greater improvement among those offered 20 sessions of cognitive therapy compared to psychodynamic psychotherapy, while Svartberg et al found similar treatment outcomes among those receiving these two interventions.

For other forms of personality disorder in which the patients are treatment resisting (Type R) (i.e., they do not want their personalities to change), as opposed to treatment seeking (Type S) (25), it may be better to try and adapt the environment to the personality and this can be done systematically in the form of nidotherapy (34,35). This has received support in a recent randomized trial (36).

Most of the putative successful treatments for personality disorder are time consuming and resource intensive, and need to be buttressed by a good theoretical base and therapeutic commitment. These conclusions match those of an expert panel on the management of people with personality

disorder (37), which also suggested that there is no "quick fix" in the treatment of these disorders, and that in most countries the resources are not likely to be available to treat them in this way.

While research for treatment of personality disorder that goes beyond the previous focus on borderline personality disorder is to be welcomed, findings from other studies show that in clinical practice people offered treatment usually meet diagnostic criteria for several categories of personality disorders (38,39). Such findings add weight to the case for re-classifying personality disorder to ensure that the system used has clinical utility.

## NEED FOR A NEW CLASSIFICATION

If we accept the epidemiological figures, 3-10% of the adult inhabitants in the countries of the world have a personality disorder. However, only a minority of these (probably one in 20) has a severe personality disorder (40) and it is the people in this group who cause the most disruption to services and to society.

For the most severe personality disorders, the existing classification is unhelpful. It takes no account of severity and it generates the frequent comorbidity of several personality disorders across different clusters (41), as well as the frequent use of the term "personality disorder not otherwise specified", which, when often used more than any specific personality category, is a mark of dissatisfaction with the existing classification (42).

The WPA Section on Personality Disorders is currently examining new ways of classifying personality disorder in ICD-11. As well as making suggestions over the classification of severity discussed above, the Section is considering revising the descriptions of the major personality disorder groupings. These would be fewer, overlap less and, we hope, possess greater clinical utility.

There is surprising consistency over the number and descriptions of the main dimensions of personality disorder in studies carried out with both psychiatric patients and normal populations. Three or four dimensions are uniformly reported (43-46), in addition to the well-known five-factor model (47) that has been suggested for the core descriptions of DSM-V personality disorders (48).

The first dimension is an externalizing potentially aggressive and hostile factor that incorporates borderline, antisocial, narcissistic, histrionic (cluster B in DSM-IV) and often paranoid personality disorder traits. Some studies report a separation of a factor incorporating callousness, lack of remorse and criminal behaviour (psychopathy), while others find a single broad factor. The second dimension is generally an internalizing factor consisting of neurotic, inhibited and avoidant, incorporating anxious, behaviour. This was once called asthenia, but is now best summarized as avoidant and dependent personality disorder traits (part of cluster C) in DSM-IV. The third dimension comprises schizoid symp-

toms: introversion and social indifference, aloofness and restricted expression of affect. In some studies these characteristics overlap with eccentric and odd behaviour and/or paranoid personality disorder symptoms, and an additional factor, peculiarity, has been suggested to make up a six-factor model (49). The fourth factor comprises obsessiveness, compulsivity and perfectionism and, although these are currently part of the cluster C grouping, the empirical data suggests they can be separated. In some studies this forms part of the internalizing factor, but most investigations report that obsessive compulsive personality disorder symptoms split off as a coherent and relatively independent set of behaviours.

While there is currently little evidence to support the validity of these factors, they almost certainly provide a better description of the range of personality abnormality than the current classifications. They can also be adapted to a developmental perspective that will allow personality disturbance to be identified long before the current cut-off age of 18 that is intrinsic to both DSM-IV and ICD-10 (50). Their importance will rest on whether they provide a more useful framework for organizing and explaining the complexity of clinical experience in personality disorders as well as predicting outcome and guiding decisions about treatment (51). A new classification that does not improve clinical utility will be a failed classification.

There seems little to lose. A recent survey reported that three quarters of personality disorder experts thought the current DSM-IV system should be replaced (42). Using four (or possibly more) overlapping factors seems preferable to continuing to act as though the ten current personality disorders are separate, when they have repeatedly been found not to be.

The next step will be to derive better structured clinical interviews that address these factors well, and this should generate competent research which can explore whether knowledge about aetiology, prognosis and treatment is enhanced by using the new classification.

The DSM-IV polythetic diagnoses describe poorly specified psychopathology and so it is natural that they fail to identify criteria that could correspond to the “core features” of each personality disorder diagnosis. The lack of clearly identified core features and a “vote-counting” approach to personality disorder diagnosis (i.e., list the number of symptoms that were met by a given subject, see if it is greater than a usually arbitrary cut-off value, and then make the diagnosis) prevented clinicians from making differential diagnoses within the axis II classification. The legacy is a diagnostic system that dissatisfies both the researcher and the clinician, being neither simple, accurate or useful. Thus, although it has promoted a huge, but widely scattered, amount of research on the aetiology, psychopathology, course and treatment of personality disorders, there are now good reasons to consider the DSM-IV approach completely out of date.

The WPA Section on Personality Disorders is currently considering revising the descriptions of the major personal-

ity disorder groupings in a way that not only makes good clinical sense but also enables separation from other disorders with which they are frequently confused, such as attention-deficit/hyperactivity disorder (ADHD) (52). It will not be an easy task, and in reaching our conclusions we hope to have empirical evidence from as many field trials as possible, not just in highly developed countries, as a robust classification should travel well (53), and to use these data rather than relying on the uncertain support of consensus committee opinion, as previous classifications have unfortunately been forced to do.

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## Reports of my death from a brain cancer have not been evidence-based (at least so far)

At the WPA Florence 2009 Congress, it has been quite interesting to be greeted by a number of colleagues saying “I’m glad to see you, I heard that you were severely ill and died of brain cancer”.

Well I’m not dead yet, and, to my knowledge, never had a “brain cancer”. I had meningioma that was successfully removed and have not had any physical symptoms since then. The neurosurgeon’s conclusion was: “you are like new”. I do not live with a sand-clock and I am pursuing long-term projects. However, one of my resolutions of “becoming like new” following the opening of my cranium is to keep my mind open and speak my mind up. In this regard I wish to illuminate some quick-sand experiences that we as self-proclaimed experts on human behavior may share. They are our own responses when dealing with a friend or colleague who is supposedly severely ill and may be dying.

One of the two extremes that I encountered were colleagues who expressed over-concern and over-empathy. They would rub my arm with a concerned expression, saying “So, are you OK? Do you really feel fine? I understand your condition”. That started to remind me of Bill Clinton’s “I feel your pain”. But he was a politician, a gifted communicator who addressed groups in real distress.

If I replied “I am fine”, these colleagues continued to insist that this could not be so – they heard differently and insisted to continue with the “hyper-empathy”. The most efficient way for me to get out of this situation was to actually tell them the uninteresting details and complain about the quasi-empathy. They disappeared within a couple of minutes.

On the other extreme were people who pretended not to notice me and went by me gazing at a far away target. Some of them later shifted to the other extreme and apologetically called with “hyper-empathy”.

Interestingly, the frequency of these two behaviors increased when the American media were flooded with re-

ports that Ted Kennedy, the beloved US senator, had a brain tumor. Until then, I did not know that the Senator from Massachusetts may have any direct personal impact on me, but then I started getting phone calls inquiring how I was doing with “my brain tumor”.

When I called an “old” friend (84 years old, 30 years friendship) on the phone, her response was “Err” followed by a long silence. I asked her what was the “Err”. She said “I heard you had a brain cancer and died, all my friends are dead or dying, where are you calling from?”. Well, I am still writing this communication.

The message? Psychiatrists look at thy self. We behave like any other human. At least we should be aware of this and attempt to rectify it and control it when warranted.

Pretension that “all is as usual” may sometimes be better than avoidance of potentially embarrassing situations, or pretension of empathy that the (possibly oversensitive) receiver will perceive as insincere, especially if it comes from somebody who was never regarded as a person who really cared.

The removal of my intracranial space-occupant was apparently peaceful, but the social and professional aftermaths encouraged further reflections. The subjective experience turned out to be part of my lifelong continuing medical education, though with no formal credits.

I would encourage colleagues to share with me (biobehav@buffalo.edu) their subjective experiences and observations that may be generalized. Hopefully we will organize an open session in one of our future meetings. The aim will be an operational contribution towards enhanced camaraderie as well as behavioral and relational change.

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# The Action Plan 2010 of the WPA Early Career Psychiatrists Council

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The commitment of the WPA leadership toward early career psychiatrists was clear from the beginning of this triennium. In fact, the fourth institutional goal of the WPA Action Plan 2008-2011 was "to promote the professional development of early career psychiatrists worldwide" (1). A series of initiatives was defined by the President, Prof. Mario Maj, to pursue this goal: a) launching, in collaboration with a network of centers of excellence, a programme of one-year fellowships for young psychiatrists from low-income countries, who will commit themselves to apply in their country of origin what they have learnt; b) organizing a series of workshops on leadership and professional skills for young psychiatrists; c) facilitating the participation of young psychiatrists in WPA congresses and other scientific meetings; d) stimulating the participation of young psychiatrists in the activities of WPA Scientific Sections; e) joining and assisting Member Societies in the development and implementation of programmes for young psychiatrists (1). A further initiative was to create an Early Career Psychiatrists Council, which should collaborate with the President and the Executive Committee to pursue the above-mentioned goals.

The members of the WPA Early Career Psychiatrists Council have been appointed by WPA Member Societies and subdivided into the following five geographic areas: Europe I, which includes Northern, Southern and Western Europe; Europe II, which includes Central and Eastern Europe; Asia/Australasia; Africa and Middle East; Americas.

The Early Career Psychiatrists Council has actively started its work. The first activity of the Council was to elect a coordinator for each of the five geographic areas. Andrea Fiorillo from Italy has

been elected for Europe I, Zuzana Lattova from Czech Republic for Europe II, Prachi Brahmhatt from Australia for Asia/Australasia, Hussien El Kholy from Egypt for Africa and Middle East, and Felipe Picon from Brazil for Americas.

On December 18, 2009 the five coordinators had a teleconference with the WPA President in order to discuss and finalize the Action Plan of the Council, taking into account the several interesting ideas which emerged during the five teleconferences that the WPA President had with the members of each area in October 2009.

According to the WPA normative instruments, the Early Career Psychiatrists Council is expected to: a) upgrade communication concerning early career psychiatrists between WPA Member Societies and WPA governance; b) identify and address problems concerning early career psychiatrists; c) promote the participation of early career psychiatrists in the various sectorial activities of the WPA; d) contribute to the design of activities to promote the professional development of early career psychiatrists.

In this paper we will briefly describe the Action Plan for 2010 of the WPA Early Career Psychiatrists Council, which consists of the following nine activities.

## **WPA website**

The Early Career Psychiatrists Council will develop its own section in the WPA website. The five area coordinators will interact with the other Council members and will agree about the contents to be posted in this section of the website. One of the five area coordinators will be responsible for the website and will actively interact with the WPA Secretariat.

## **WPA News**

The Early Career Psychiatrists Council will have at its disposal up to two pages

in each issue of WPA News, which is the official quarterly news bulletin of WPA. This will give the possibility to convey information about the Council activities to all Member Societies and Scientific Sections.

## **World Psychiatry**

The Early Career Psychiatrists Council has the possibility to submit papers to the WPA official journal, in particular under the sections Mental Health Policy Papers and WPA News. Collaboration activities already started among the members of the Council in order to produce good quality papers for the journal.

## **Papers/documents on psychiatric education and other issues**

All members of the Council agreed upon the importance to produce papers and/or documents on psychiatric education and issues related to early career psychiatrists' issues and activities.

Europe I and II agreed to produce a joint paper on training in psychotherapy in different European countries. Europe I will subsequently write a paper on what happens to early career psychiatrists after training, the so-called "transition phase". Europe II, Africa/Middle East and Americas will produce papers or documents on psychiatric education in their regions. The Asia/Australasia area is interested in the issue of stigmatization of people with mental disorders and of psychiatrists, and will be in contact with the WPA Section on Stigma and Mental Illness (2). Finally, Africa/Middle East will produce a paper on choosing psychiatry as a career and will consider writing a paper/document on nurses' training on mental health issues.

## **Participation in the WPA programme on depression in persons with physical diseases**

The WPA has recently started a programme aiming to raise the awareness of the prevalence and prognostic impli-

cations of depression in persons with physical diseases (3). Three books are being produced, dealing respectively with depression and diabetes, depression and cancer, and depression and heart disease, and three corresponding sets of slides will be developed, which will be translated in several languages and posted on the WPA website. The Early Career Psychiatrists Council will contribute in the translation/adaptation of the slides in different languages.

### Section for the general public of the WPA website

The Early Career Psychiatrists Council will participate in the development of a section for the general public of the WPA website. Input will be received by the WPA Secretary General and the WPA Secretary for Education.

### Participation in WPA scientific meetings

In the years 2010 and 2011, the Early Career Psychiatrists Council will contribute to the WPA Regional and International Meetings, in particular those taking place in St. Petersburg in June 2010, in Cairo in January 2011, and in Beijing in September 2010.

The Council will actively contribute to the 15th World Congress of Psychiatrists, which will take place in Buenos Aires in September 2011, with proposals of symposia and workshops. An Assembly of the Council will also be organized on that occasion.

### Participation in WPA Scientific Sections

Council members and all early career psychiatrists are welcome to join the WPA Scientific Sections. The Council

will probably have an official representative in one or more Sections.

### WPA fellowships, research projects, train-the-trainers workshops

All early career psychiatrists are welcome to apply for WPA fellowships and for participation in WPA train-the-trainers workshops, and to submit research projects to the WPA for financial support. More information on this subject can be found on the WPA website.

### References

1. Maj M. The WPA Action Plan 2008-2011. *World Psychiatry* 2008;7:129-30.
2. Stuart H. Fighting the stigma caused by mental disorders: past perspectives, present activities, and future directions. *World Psychiatry* 2008;7:185-8.
3. Maj M. The WPA Action Plan is in progress. *World Psychiatry* 2009;8:65-6.

# The WPA Regional Meeting in Abuja, Nigeria, 22-24 October 2009

## OYE GUREJE

Convener of the Meeting

The WPA Regional Meeting held in Abuja, Nigeria on 22-24 October 2009 attracted 309 delegates from 19 countries. Held in collaboration with the African Association of Psychiatrists and Allied Professionals (AAPAP) and the World Health Organization (WHO), and hosted by the Association of Psychiatrists in Nigeria (APN), the theme of the meeting, "Scaling up and reaching down – addressing unmet need for service", was chosen to reflect a major focus of current attention among stakeholders in global mental health, including both the WHO and the WPA.

The meeting was declared open by the Nigerian President, who was represented by the Minister of Health, Prof. B. Osotimehin. In his opening address, the President informed the audience that a

revised mental health policy and draft mental health legislation for Nigeria were going through a process of stakeholder consultations and was hopeful that these documents would soon begin to receive official attention. The WPA President, Prof. M. Maj, highlighted the items in the WPA triennium plan with salience for the region. These included the focus on policy engagement to extend mental health service, development of educational programmes for young psychiatrists, and attention to populations with special needs, including those with recent experience of disaster. Dr. S. Saxena, from the Department of Mental Health and Substance Abuse of the WHO, assured the audience of the importance attached to service scale-up in the region, as attested to by the identification of several countries in need of focused support in the Organization's mhGAP document.

O. Gureje, the meeting convener, set the meeting in the context of several decades of growth of academic psychiatry in Nigeria. He reminded participants that the first formal meeting of psychiatrists from across the world to be held in sub-Saharan Africa was convened in Nigeria by the late Prof. A. Lambo in November 1961. Dr. F. Njenga, the outgoing President of AAPAP, traced the history of the development of the Association and noted that, in a relatively short period of its existence, it has established credibility as a professional organization.

The meeting had a full complement of scientific programmes, including plenary lectures, key lectures, symposia, and free papers reporting new research. Specific attention was given to several components of the WPA Action Plan 2008-2011 (1-2). These included a symposium on successful experiences in our field – with examples of mental health

reform (Uganda), cultural therapy (Jamaica), and a mental health/HIV initiative (in several African countries) – and a forum discussion focusing on the roles of professional societies in health care reforms. The symposium in which updates of the revision process of the ICD and DSM were provided by Drs. D. Regier and S. Saxena was of particular interest to many participants. Two special workshops were held during the meeting: one on communicating with children and adults with intellectual disabilities (by Prof. S. Hollins) and the other on the United Nations Interagency Standing Committee Guidelines on responding to conflicts and disasters (by Dr. J. Nakku and colleagues).

Two pre- and post-meeting events are worthy of note. A study group, sponsored by the International Association for Child and Adolescent Psychiatrists and Allied Professionals, was conducted for three days prior to the commencement of the meeting. Directed by Prof. B. Robertson, it had Prof. M. Belfer as a member of the faculty. Another workshop for young psychiatrists on professional and leadership skills, directed by Prof. N. Sartorius, was organized to follow the main meeting. Other members of the faculty were Profs. G. Thornicroft, S. Seedat, and O. Gureje.

A presentation was made by Prof. N. Sartorius in honor of Prof. A. Lambo, the first Nigerian psychiatrist who later became the Deputy Director-General of the WHO, at the conference dinner. It traced the development and execution of the International Pilot Study of Schizophrenia, a pioneering multi-country collaborative project of the WHO in which both Profs. Sartorius and Lambo as well as another participant at the meet-

ing, Prof. M. Olatawura, were involved. Backed with black-and-white photos taken during the project's execution, the presentation provided young members of the audience with a historical excursion to the distant past of psychiatric epidemiology. A formal change of leadership of the AAPAP was also witnessed at the dinner when Dr. F. Njenga, the out-going President, handed over the

ceremonial chain of office to Prof. O. Gureje as the new President.

## References

1. Maj M. The WPA Action Plan 2008-2011. *World Psychiatry* 2008;7:129-30.
2. Maj M. The WPA Action Plan is in progress. *World Psychiatry* 2009;8:65-6.

## WPA research fellowships

As part of its Action Plan 2008-2011, the WPA has launched a programme of research fellowships for early-career psychiatrists from low- or lower-middle income countries, in collaboration with internationally recognized centers of excellence in psychiatry. Several calls for applications have already been posted on the WPA website, and the selection of some fellows has already been made.

Ninety-four applications were received by the deadline of June 30, 2009 for a fellowship at the Department of Psychiatry & Western Psychiatric Institute and Clinic, University of Pittsburgh Medical Center, Pittsburgh, PA, USA. The selection was made by Profs. D. Kupfer, E. Frank and M. Maj. The selected fellow is Dr. T.T. Bella, from Nigeria. Her fellowship started on January 1, 2010. She will spend one year in Pittsburgh conducting research in the field of mood disorders.

Fifty-nine applications were received by the deadline of September 30, 2009 for a fellowship at the University of Maryland School of Medicine, Baltimore, MD, USA. The selection was

made by Profs. A. Bellack and M. Maj. The selected fellow is Dr. Yu-Tao Xi-ang, from China. His fellowship started on January 1, 2010. He will spend one year in Baltimore conducting research on psychosocial issues, with an emphasis on schizophrenia and other serious mental illness.

Forty-eight applications were received by the deadline of September 30, 2009 for a fellowship at the Case Western Reserve School of Medicine in Cleveland, OH, USA. The selection was made by Profs. J. Calabrese and M. Maj. The selected fellow is Dr. Jun Chen from China. His fellowship will start on February 1, 2010. He will spend one year in Cleveland conducting research in the field of phenomenology and therapeutics of bipolar disorder.

Each fellow will receive a subsidy of 30,000 Euros plus coverage of travel expenses. The fellows have committed themselves to report to the WPA about the results of their activity, and to apply in their country of origin what they have learned.

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