

WPA template for undergraduate and graduate psychiatric education

II. Development, functions and evaluation of a psychiatric curriculum

Designing, implementing, and evaluating a medical student or a psychiatry residency curriculum is a complex process. Developing a psychiatric curriculum requires a determination of its key content elements, the sequencing of learning experiences, and making decisions about the time devoted to each element consideration. Once a program has been created, it must be implemented and continually evaluated and reassessed through careful consideration. A well-constructed and quality course of psychiatric training can be available even when resources and length of training are limited.

At the level of medical student education, the process begins with clarifying what does a non-psychiatrist physician need to know about recognizing and treating psychiatric problems, and when to obtain a psychiatric consultation or make a referral. At the level of residency training, constructing a psychiatric curriculum begins with clearly outlining the clinical roles of the practitioners. This in itself presents challenges, as psychiatrists across the globe are faced with varied responsibilities, influenced in part by cultural considerations, medical practice standards, number of students/trainees, length of specialty training, and availability of resources (personnel, clinical facilities, and financial and technological support).

Just as psychiatric curricula have become more structured and refined, various organizations have specified the core competencies required from a physician and the various specialists. Thus, in the United States, the Accreditation Council on General Medical education (ACGME) has outlined six core competencies: patient care, medical knowledge, practice-based learning and

improvement, interpersonal and communication skills, professionalism and systems-based practice. This is in addition to extensive specialty specific competencies. Focusing on specialists, the European Union of Medical Specialties (UEMS) outlines the psychiatrist's main roles as expert/clinical decision-maker, communicator, collaborator, manager, health advocate, scholar and professional (1). The required competencies, according to these organizations, are based on an educational framework, within which practical decisions are made, that allows a consistent approach to the formulation and monitoring of the curriculum's performance.

The kind, depth, and scope of knowledge contained within a psychiatric curriculum is a subject of continued debate and extensive study as the profession evolves. The advantages and limitations of this process and its outcome were delineated by the deliberations of the UEMS Psychiatric Section, an entity comprised by a wide diversity of nations, perspectives and, ultimately, cultures. The Section initially refrained from creating a specific listing of topics to be covered in the residency curriculum, aside from their initial competency framework, citing that such elements "are determined by national conditions" (1). Currently, specific curricular elements are delineated only for some content areas such as emergency psychiatry. Medical schools in some countries do not require more than a rudimentary experience in psychiatry, and training requirements for residents are exceptionally varied, making the international acceptance of even generally approved components of psychiatric education a complicated task.

Consistent with this perspective, we recognize that the training terrain and the form and content of the program will vary, based on where the psychiatric training is taking place. Thus, the initial phase of curriculum development requires looking at what, if any, governing body provides oversight to psychiatric training for medical student and/or resident education in that nation or region. Then, a careful study of the knowledge content requirements will provide the

foundation for discussions about the topics to be covered, and development of appropriate didactic experiences and clinical placements.

The particular knowledge and skill sets needed for a competent practice have been debated in numerous venues in many countries, but all agree that trainees must be exposed not only to an adequate breadth of information to enable work in a variety of practice settings at the completion of training, but also that an appropriate depth of such knowledge will be needed at different stages of training – a primary care or family practitioner may have core knowledge and skills similar to a clinical specialist, but the latter’s depth will be understandably different. Yet, there is no consensus regarding the desired knowledge and skills base for physicians who are not clinical specialists, thus leading to a wide range of medical student requirements in psychiatry. This is of particular concern for primary care clinicians in regions of the world where there are few psychiatrists, since their needs for psychiatric knowledge and skills is necessarily wider than areas where mental health services are more abundant.

A commonality across the globe is the recognition that resident trainees must be able to obtain a history from a patient and appropriately diagnose mental illness. In addition, trainees must have an understanding of disease processes at the root of mental illness, including what is known about etiology and pathogenesis, cultural factors, clinical course, and appropriate treatment interventions. The latter must be also understood and performed from biological, psychological and socio-cultural vantage points. The governing body of a given country or region often outlines specific expectations in regard to this content, yet guidelines for content of psychiatric curriculum do not exist in every country.

The depth of curricular time devoted to specific topics also will vary based on the local conditions in a particular region of world where training is taking place. For example, a locale

with a high prevalence of amphetamine abuse, or of domestic and social violence, or natural disasters, may spend more time focusing on these problems and their clinical implications, compared to regions where they are not prevalent.

Once the content of the curriculum is determined, the next step is deciding what teaching formats to use. Didactic teaching through classroom based lectures is a major traditional method for imparting knowledge. With advances in technology, however, reliance on formal on-site lectures may become less critical as lectures are placed on-line for trainees to view at their own pace. This practice occurs already in a number of medical schools in various areas of the world. Similarly, tele-teaching, which permits instruction between two or more sites often, reduces the difficulties imposed by a lack of teachers or instructors in any given setting. In addition, these shifts may allow for time to implement more interactive means of teaching such as problem-based and team-based learning groups.

The phase-appropriate aspects of psychiatric education must be a consideration in the planning, implementation and evaluation of both medical student and resident programs. For example, eliciting an appropriate clinical history is a more fundamental skill than learning how to administer complex medication therapy. Thus, when approaching the timing and amount of material being covered, it makes sense to logically map basic skills first and then layer the knowledge, covering more complex and specialized information as a trainee makes consistent progress.

Once the undergraduate or postgraduate training requirements have been ascertained, teaching resources must be considered, including the number of available faculty and their scope of subspecialty expertise. Fewer faculty may hinder the provision of multiple simultaneous lectures across beginning and advanced training, while a large faculty often permits smaller

group teaching. Where available, programs may choose to televise lectures via the web, while using live teaching for more interactive endeavors. Unfortunately, there are regions of the world where medical libraries are rare and accessing computerized literature searches may be challenging, if not impossible.

Although discrete information from lectures and reading provide basic knowledge, there are abstract levels of understanding and conceptual integration that must also be fostered. Ultimately, trainees are typically educated by the simultaneous and/or subsequent use of various teaching modalities. Struggling trainees at any level may require a more concrete and directive approach, while those with greater levels of learning capabilities or intellectual sophistication may benefit from more self-directed means.

Faculty supervision of the residents' and medical students' clinical work is central to all medical education, and is historically the experience in which integration of knowledge, clinical skills, and attitudes occurs. However, the amount of and opportunities for the use of this modality will vary widely based on available resources. Relying on extensive supervision by senior faculty is a major challenge in areas of the world with a paucity of psychiatrists and/or other mental health professionals.

Group clinical conferences offer yet another teaching approach, and provide better efficiency where faculty resources are sub-optimal. Morbidity and mortality conferences, where cases with undesired outcomes are reviewed, journal clubs, and larger grand rounds all offer non-lecture based educational opportunities. Group conferences also allow the exchange of information in a more active process and promote a higher level of integration of knowledge.

As an example of laying out a curriculum, the Royal College of Psychiatry's Curriculum for residents in the UK has recommended a modular approach to establishing a core curriculum (2).

The core module covers basic essentials in clinical psychiatry such as history taking, diagnosis, and treatment. With successful completion of this model, trainees study modules in specialty areas including: adult, forensic, geriatric, child and adolescent psychiatry (including learning disabilities), and psychotherapy. Finally, trainees study modules on addiction, rehabilitation, and liaison psychiatry. Within the UK's medical system, this process takes place over the course of 6 years. This is in contrast to other localities where training may be as brief as 12 months. Thus, this modular approach may not be feasible or appropriate in every system, and certainly, if used, must be modified to suit the local context. The advantage of this framework, though, is that content and sequence can be determined for any curricular component at either the medical student or resident level, no matter what the desired content.

Once a curriculum course has been mapped, it must be implemented. Available faculty resources and national requirements often dictate the leadership and administrative requirements for training program oversight. National standards, for example, often mandate a specific individual to be the coordinator, a highly desirable practice regardless of requirements. The program director for either students or residents oversees the development and monitoring of the curriculum's implementation. Sufficient faculty to provide on-site teaching as well as assisting in other educational modalities, is necessary since both skills in education are needed for implementation of comprehensive teaching, mentoring, supervision, and professional guidance. When adequate faculty resources are not available, the program director's job becomes even more critical, as developing the needed faculty effort is essential for success in any clinical training program.

Maintaining a strong curriculum requires frequent and consistent reviews. There are continual advances within both undergraduate medical education as well as postgraduate

psychiatric education, and the content and structure of the curriculum needs to reflect this evolution with regularly scheduled updates. Moreover, educational resources, clinical sites and available faculty often change, and governing bodies may alter the requirements to which training programs must adhere. Each of these changes requires the curriculum to be modified accordingly. Sustained quality also relies on identifying deficiencies and monitoring progress in plans and attempts to remediate them.

Although training directors most often lead program education efforts, maximal involvement of both trainees and faculty in program evaluation is vital, as individual perspectives and experiences may vary considerably (3). A most effective approach is to create a permanent education committee, either for students or residents, chaired by the director, that includes representatives from faculty responsible for major didactic and curricular components. Its main goal is to evaluate and monitor the curriculum. Concerns and proposed changes to the curriculum, including both faculty and student input, should be brought before the committee, and appropriate discussion and debate of the issues should be allowed. When appropriate, new curricular plans can be implemented and evaluated under the direction of the training office.

Effective evaluation of trainee performance requires thoughtful and ongoing feedback. Within both undergraduate and graduate training programs, this process relies on agreed upon outcome measures. Trainees should regularly evaluate didactic and clinical experiences. This feedback provides important information from those who are in training, either medical students or residents, to those evaluating the quality of their education.

Objective measures paired with faculty evaluations of trainees' performance (see sections on Competency assessment in medical student education and Competency based evaluation in residency training) should be used to accurately assess the effectiveness of the curriculum. If

trends in trainees' shortcomings and lack of skills become evident, one or several elements of the curriculum may need strengthening, curriculum content may require adjustment, or the characteristics of clinical rotations might be reevaluated. Quality training involves a cyclic approach to curricular design, evaluation, and change. Some national requirements include specific guidelines regarding the cycles in which programs must undergo such reviews. At a minimum an overall analysis of the curriculum should occur every five years (4). Regular, less formal assessment should occur at a minimum on an annual basis.

As noted earlier, curricular goals differ across the world for both medical students and psychiatric residents. Of equal importance is attention to cultural and political influences on education. These influences may reflect wide geographical differences, as there are regions of the world where the diversity of nations in the region is significant. This requires acknowledging both the cultural context in which training is taking place, as well as the anticipated practice locations of trainees.

Limited resources impede educational efforts on many levels. Without adequate faculty, the most dynamic curriculum will fail. A shortage of faculty limits how much supervision trainees receive. In addition, if faculty members have too many responsibilities, they may not have the time or ability to fully engage in the teaching process. Insufficient resources limits exposure to a wide variety of clinical settings. Some medications are not available in various parts of the world, or a medication may be "available", but its cost may make it completely prohibitive. Striving to incorporate the "latest advances" in the neurosciences is important (5); however, in a location where access to high speed internet or the latest journals and textbooks are not readily available, the ability to carry out a literature review to inform a solid educational content would be crucially compromised.

Healthcare financing plays a substantial role in training. In most parts of the world, however, both lack of payment and/or inadequate numbers of psychiatrists make certain aspects of care, such as psychotherapeutic or psychosocial interviews an uncommon or non-existent part of regular clinical practice. These variations must be taken into account in designing a training program, while at the same time advocating for appropriate financing for patient care and comprehensive training.

As already discussed, the duration of undergraduate medical education and psychiatric residency training varies around the world. Psychiatric residency training programs may range from one to six years. The shorter the training program, the more difficult it is to cover the entire field adequately, and decisions must be made regarding the breadth and depth with which material is covered. It is unreasonable to expect that a trainee will become clinically competent in a single year or two, but this time period may be all that is available. While the resources available may limit the amount of time to be used in training, it also must be acknowledged that this hinders the ability to easily train psychiatrists with equal skills or knowledge across all regions. There may be differences in competency levels of psychiatrists trained in various parts of the world, based simply on these factors. There is no ready solution for this problem, which becomes even more complex if we assume, as we must, that updating education programs is, ultimately, an unending endeavor.

References:

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