How to Teach Psychiatry to Medical Undergraduates in India?: A Model

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ABSTRACT

Psychiatry is not considered important by most medical students. But knowledge of psychiatry is essential for all doctors as psychiatric problems are prevalent in the population either as part of other physical illnesses or independently. All medical practitioners need skills in communication and forming empathy and the ability to counsel that are learnt in psychiatry. Nearly all medical students feel psychiatry is not scientific enough and psychiatrists are peculiar. We need to make psychiatry interesting, and impart skills and techniques to practice psychiatry at the primary care level and in the process change the misconceptions students have of psychiatry. We present a model to accomplish this.

Key words: Assessment methods, medical undergraduate, psychiatry teaching, syllabus, teaching methods

INTRODUCTION

Most medical students will not become psychiatrists. For these students, the psychiatry lectures and clinical posting will be the only experience of psychiatric practice before they begin to work as doctors. Knowledge of psychiatry is important for all doctors, because prevalence of mental illness ranges from 9.5 to 370 per 1000 population.[1,2] There are about 3500 psychiatrists in India, i.e., <0.5 per 100,000 population.[3] The ideal number required is 1 per 100,000 population.[4] It is also well known that 20% of new consultations to a primary care physician are for somatic symptoms for which no physical cause can be found.[5] Primary care practitioners often fail to recognize psychiatric disorders in patients with physical illness.[6] Similarly, half the psychiatric morbidity is not detected by the treating team in medical and surgical wards.[7] The training that the undergraduate gets will change this situation. Currently, undergraduate students have multiple lacunae in their knowledge of psychiatry.[8]

Skills in communication and the ability to form empathy are fine tuned while learning psychiatry and are essential qualities for a doctor. Encouraging positive mental health and counseling skills to reduce stress and cope with chronic physical health problems are necessary for all doctors to master. Also an increasing need for improved skills by medical graduates in the psychosocial aspects of medical care has been noted.[9]

There is a growing concern in psychiatry about the poor rates of recruitment into the specialty.[10-12] There is no doubt that medical students’ educational experience of psychiatry plays a great role in determining whether they choose a career in psychiatry.[13] It is worrying that students entering medical college with an interest in pursuing a career in psychiatry change their minds during their time in medical college.[14]

What are the factors that discourage medical students
from pursuing a career in psychiatry? It could be the medical student selection process, and wider issues such as the public and professional image of psychiatry, but more importantly it could be to do with the undergraduate exposure to the specialty. Students are discouraged by the view they hold that psychiatry is not medical or scientific enough and the belief that scientific basis of psychiatry and the available evidence base in psychiatry are not robust. They view psychiatry as a worthwhile medical specialty but one of low prestige, low precision and think that most psychiatric patients could be adequately managed by nonphysicians.[13] Another worry is that students are not clear of the psychiatrists role in the multidisciplinary team and they think a medical background is not necessary to practice psychiatry.[16,17] Also, the financial remuneration that the psychiatrist receive may not be considered adequate to make it a viable career option for the modern-day student.

So while planning for undergraduate teaching, we need to remember that this essential training/learning experience not only provides knowledge and skills, but makes psychiatry interesting and removes the stigma of being a psychiatrist. The quality of the teaching, enthusiasm of the clinical teachers, the holistic approach and scientific basis of psychiatry are the parameters that influence the students' attitude toward psychiatry.[18,19]

**METHOD OF SEARCHING THE LITERATURE**

We searched relevant databases (Medline, Google Scholar and PubMed) with the following Mesh terms: “Psychiatry teaching,” “medical undergraduate,” “syllabus,” “teaching methods,” and “assessment methods.” No time limit was instituted. We also searched the PubMed for assessment of knowledge, skills, and attitude about undergraduate medical education. The Government gazettes for guidelines/rules as advised by the Medical Council of India (MCI) were accessed.

**Preparing a syllabus**

The MCI and universities provide syllabuses.[20] The Indian Psychiatric Society has also published excellent guidelines.[21]

**Behavioral sciences**

In most institutions, psychiatry teaching starts in the first term with the behavioral sciences lectures. This series of lectures should include teaching observational and communication skills, learning about human behavior, methods of encouraging positive mental health, identifying stress and coping with it. In institutions where there is no separate department to teach doctor–patient relationship, professional boundaries, and issues related to ethics, these should be included in the mentioned series of lectures. These classes need to be clinically based rather than deal only with theoretical aspects.

**Clinical classes and theory lectures**

The MCI has recommended that all undergraduate students receive 2 weeks’ clinical posting and 20 lectures in psychiatry in the fifth semester and assessment in the form of short notes in paper two of General Medicine.[20] The clinical posting should be parallel to the theory classes. The student is curious and the teacher can make that metamorphose into interest in learning psychiatry. Focus on ensuring the ability to communicate with patient and family, demonstrating symptoms and signs, and doing a mental state examination including the cognitive function assessment.

In the 20 lectures that are allotted to teaching psychiatry, the focus needs to be on preparing the undergraduates to be able to practice psychiatry at the primary care level. Until the stigma associated with mental illness is attenuated, many patients who require psychiatric help are not going to see a psychiatrist.[22] So the student needs to have the ability to identify and manage common problems such as delirium, substance use (including tobacco use), depression, anxiety, sleep difficulties, suicidal behavior, relationship of mental health to physical health and the psychiatric manifestation of physical illnesses. Other important aspects to focus in the syllabus are counseling skills, imparting bad news, dealing with chronic medical illness, and coping with stress. There needs to be one lecture that focuses on psychopharmacology at the end of which the student should be able to use a few antidepressants, one or two antipsychotics, and benzodiazepines.[23] The knowledge of psychosis may be brief as the ability to identify rather than manage is what a primary care doctor requires. Brief mention of forensic and legal aspects of practicing psychiatry could go a long way in increasing awareness of providing help for the involuntary patient. World Health Organization has identified six specialties of which psychiatry is one, where it is inarguable that disease prevention and health promotion are vital and the curriculum should give proper scope to this. Training in community medicine is a mandatory part of the medical undergraduate curriculum. Therefore, by integrating psychiatry with training in community medicine, undergraduates (future medical practitioners) will be sensitized, familiarized and trained in the preventive, promotive, curative, and rehabilitative aspects of mental healthcare and mental disorders in the community.[24]
**Medical internship**
From 2008, 2 weeks’ psychiatry posting is compulsory during internship.\[23\] Formal teaching during internship is not feasible given the time constraints in most departments, but having a guideline about what the posting should achieve for the intern and the department is beneficial. This way the posting does not end up being a job where the intern fills requisition form and collects reports. Encouraging the intern to participate in hands-on learning experience is the psychiatrist’s task. The teaching till this stage of the undergraduate course focuses more on imparting knowledge, whereas this posting focuses on learning skills. Every intern should work up cases of delirium, substance dependence, depression, anxiety, psychosis and other mood disorders, consultation liaison psychiatry cases to identify abnormal illness behaviour and psychiatric aspects of physical illnesses. This should be both in inpatients and in outpatients. The number of cases to be worked up depends on the availability of patients in the department and the faculty required for supervision. They should be able to observe some child and geriatric cases, psychological testing, and some individual and group therapy (for alcohol dependence) sessions. They have to demonstrate skills to take psychiatric history, do a mental state examination and counsel patients. The counseling skills should include the ability to give a feedback to the patient regarding the diagnosis, prognosis, treatment and follow-up options; psycho education for the family; motivational interviewing and dealing with craving for psychoactive substances, harm reduction, compliance with treatment, imparting bad news, life style changes and dealing with stress. Other skills to be learnt are assessment of risk of suicide and violence, and guiding the caregiver in early intervention/stimulation for mental retardation and techniques for behavioral intervention in children and adults. The ability to pharmacologically manage detoxification for alcohol dependence, using antidepressants and antipsychotics, and using emergency chemical restraint and sedation of agitated or aggressive patient is needed.

**Teaching methods**
The only essential quality that a teacher should have to teach psychiatry is interest in teaching. Everything else can be learnt. The young teacher usually has more up-to-date information, whereas the seasoned teacher has more skill and experience. Most of the lectures will be done by psychiatrists and other mental health professionals such as clinical psychologists or psychiatric social workers. The primary objective as mentioned is to equip the undergraduate to practice psychiatry at the primary care level. The student must know 80% of what is taught and the remaining 20% is desirable to know. For example, in a class on substance use, teaching the use of the CAGE questionnaire is essential and esoteric information about the role of Baclofen is not essential for the undergraduate. This should be kept in mind while preparing for the class. Getting all the teachers to discuss the lesson plan with the senior faculty helps improve the standard. It is beneficial to provide the student with the syllabus so they have a guideline about what is expected of them.

Although traditionally lectures impart information and knowledge didactically, it is good to use role-play and to demonstrate skills while teaching communication skills. Other general good teaching practices, e.g., asking questions, giving opportunities for the students to ask question, etc., should be paid attention to. Appropriate use of audiovisual aids remarkably improves the impact of the class. Using videos to describe clinical features improves learning and retention of the material taught. Every class should end with a reading/reference list that is brief, easily available, and provides information for the undergraduate (e.g., the chapter on psychiatry in the Oxford Text Book of Medicine). In the clinical posting we have found that our teaching and student participation in the clinical posting are better when a batch of 10-15 students are posted together rather than having just two or three students posted at a time. This way even if a few students are absent, the enthusiasm of the teacher does not wane and the student has a peer group to help learn and discuss. The downside of this is overcrowding, especially in the outpatient clinic. This can be countered by getting a few students to sit with each consultant. When the students are seeing patients in the ward, instructions on who should talk to the patient should be made clear and the rest should observe. The teacher should demonstrate signs and symptoms. This is done by interviewing the patient in front of the students, getting the student to interview the patient, and then correcting and suggesting better ways of asking questions and interpreting answers by paying attention to the nonverbal communication. Another method is to get students to role-play and this is known to be as effective as using simulated patients.\[26,27\] Demonstrating subtle signs, for example, the facial features and posture that suggest depression, goes a long way in emphasizing to the student that psychiatric diagnosis is not arbitrary but a precise science. Adaptation of the objective structured clinical examination (OSCE) to teaching OSCE helps in improving focused history-taking skills, mental state examination skills, and the doctor–patient relationship skills.\[28\] Other teaching methods such as micro-seminars and problem-based learning are very suitable to teaching psychiatry. In problem-based learning, the emphasis is on active learning using a problem (e.g., hearing voices, over-frequent hand washing, and unusual fatigue) as a stimulus and a starting point for the learning process.
Collecting feedback from students following both theory and clinical classes is vital in planning future classes and bringing about improvement in teaching methods. The teacher by his personal appearance and manner works toward removing the stigma regarding psychiatry and psychiatrists.

Assessment methods
The aim of assessment methods are to measure academic achievement, set standards, identify student problems, allow self-assessment, demonstrate the effectiveness of the course and teachers, and drive approaches to learning. The three key domains in assessment are knowledge, skills, and attitudes. Traditionally, knowledge has primarily been focused in assessments. It is also important to assess skills and attitudes.[29]

Knowledge
Conventionally, long and short answers have been used to assess the knowledge of the student. Currently they have been dropped from examinations due to logistic and pedagogical problems in most of the countries. Long essays have low reliability and validity compared to short answer questions.[30] Multiple choice questions (MCQs) are more reliable, because of the large number of items that can be easily tested and marked. These can be adapted to test knowledge as applied to problem solving or clinical reasoning. One of the main concerns with MCQs is that many of them get rewarded by guessing rather than knowing the answer.[31] In order to overcome this issue, authors have attempted to develop extended matching items/questions (EMIs or EMQs), where the candidate is required to select one or more answers from a large list of potential options and the options can be correct for more than one question; so the number of options are not reduced by each successive question. Thus guessing and cueing are reduced. The EMIs or EMQs have been found to test the knowledge in a superior and more reliable way than MCQs.[32]

Modified essay questions are based on case history and are presented in stages as it evolves in a case presentation. The main aim of this method is to put the student in a circumscribed position to enable the examiner to compare his or her performance with a standard. The advantages of this is that questions can be formulated to allow the candidate to be examined about previously well-defined areas of practical experience, examiner unreliability is reduced to negligible proportions (because most of the correct answers are predetermined), and it tests the candidate’s index of awareness which is very important in detecting early symptoms of a disorder.[33] The sections can be framed to cover a much wider, yet more clearly defined field and can be used to assess attitudes as well as recall factual information. However, the main disadvantage is that it is time consuming and involves more number of people unlike MCQs.

Skills
Detailed evaluation of a student on long and short case presentations has been the general norm in most of the institutions worldwide. It has drawbacks such as not being content specific and not being valid because it assesses “what the student knows” rather than demonstration of the ability to elicit and assess clinical signs and symptoms which is more important.[13] It is better to use more appropriate, structured, reliable, and valid methods of skill assessment such as OSCE, objective structured long examination review (OSLER), and modified objective structured long examination review (MOSLER). OSCE is a timed examination in which students move from one station to the next to demonstrate some combination of history taking, physical/mental state examination, counseling, or other aspect of patient management. At each station, students’ performances are rated on checklists and global rating scales. It provides reliability through standardization. It also incorporates a structured assessment format, which allows the nature of problems and the level of difficulty to be standardized for all students.[34,35] MOSLER has been shown to be superior to the traditional long case and OSLER. Candidates complete a circuit of four stations, three populated with real patients and one with a simulated patient, and are asked to carry out specified tasks in front of examiners before engaging in a structured discussion of their findings and specified clinical topic. Each station lasts 20 min.

Attitudes
A new scale to measure medical students’ attitudes toward psychiatry (ATP). ATP-30 items has been found to be useful.[36] This assessment is useful when administered at the beginning and end of the posting to plan syllabus and improve teaching methods.

SUMMARY
Students’ interest and enthusiasm to learn psychiatry will increase when they are examined in that subject and have to score marks. The MCI is trying to ensure that this happens. In the meantime, discussions with the department of medicine to try and include psychiatry clinical and theory test to provide a small percentage of internal assessment marks will go a long way in improving the eagerness to learn psychiatry. Most medical students will not become psychiatrists, and the psychiatry lectures and clinical posting will be the only experience of psychiatric practice before
they begin to work as doctors. Preparing a syllabus that specifies what is taught in different semesters of the course is important. The focus should be on imparting knowledge, clinical skills, including psychosocial aspects. Teaching methods that incorporate videos and other audiovisual aids in didactic lectures, role-play, simulated patients, and teaching OSCE improve learning. Assessment methods need to become focused, objective, and reliable. It should assess not only knowledge but also skills. Table 1 summarizes the aspects to focus on while preparing a syllabus, different teaching and assessment methods. The task before us is to impart knowledge and arouse interest, as well as to remove the stigma against psychiatry and psychiatrists. This would also be the way toward increasing recruitment to psychiatry.

Table 1: The medical undergraduate psychiatry teaching and assessment model

| Aspects to be focused on | Different stages of UG course | Points to keep in mind |
|--------------------------|-------------------------------|-----------------------|
| Preparing a syllabus     | Behavioral sciences           | • Observational and communication skills  
|                          |                               | • Learning about human behavior  
|                          |                               | • Methods of encouraging positive mental health  
|                          |                               | • Identifying stress and coping with it  
| Clinical classes         |                               | • Ability to communicate with patient and family  
|                          |                               | • Demonstrating symptoms and signs  
| Theory classes           |                               | • Doing a mental state examination including the cognitive function assessment  
|                          | Delirium, substance use (including tobacco use), depression, anxiety, sleep difficulties, suicidal behavior, relationship of mental health to physical health, and the psychiatric manifestation of physical illnesses | • Other important aspects: counseling skills, imparting bad news, dealing with chronic medical illness and coping with stress  
|                          | One lecture on psychopharmacology | • The knowledge of psychosis may be brief  
|                          |                               | • Brief mention of forensic and legal aspects of practicing psychiatry  
| Internship               |                               | • Demonstrate skills to take psychiatric history, do a mental state examination and counsel patients  
|                          |                               | • The counseling skills should include ability to give a feedback to the patient regarding the diagnosis, prognosis, treatment and follow up options, psycho education for the family, motivational interviewing and dealing with craving for psychoactive substances, harm reduction, compliance with treatment, imparting bad news, life style changes and dealing with stress  
|                          |                               | • Other skills to be learnt are assessment of risk of suicide and violence, guiding the care giver in stimulation for mental retardation and techniques for behavioral intervention in children and adults  
|                          |                               | • The ability to pharmacologically manage detoxification for alcohol dependence, using anti-depressants, anti-psychotics and using emergency chemical restraint and sedation of agitated or aggressive patient is needed  
|                          |                               | • Maintain Log book  
| Teaching methods         | Theory                        | • Lectures are important but it is good to use role play and to demonstrate skills while teaching communication skills and clinical features  
|                          |                               | • Other general good teaching practices like asking questions, giving opportunities for the students to ask question, etc., should be paid attention to  
|                          |                               | • Appropriate use of audio visual aids remarkably improves the impact of the class. Using videos to describe clinical features improves learning and retention of the material taught. Every class should end with a reading/reference list which is brief, easily available, and provides information for the undergraduate  
| Clinical classes         |                               | • The teacher should demonstrate signs and symptoms. This is done by interviewing the patient in front of the students, getting the student to interview the patient and then correcting and suggesting better ways of asking questions and interpreting answers by paying attention to the nonverbal communication  
|                          |                               | • Another method is to get students to role play and this is known to be as effective as using simulated patients  
|                          |                               | • Demonstrating subtle signs for example the facial features and posture which suggest depression goes a long way in emphasizing to the student that psychiatric diagnosis is not arbitrary but a precise science  
|                          |                               | • Adaptation of the OSCE to teaching OSCE helps in improving focused history-taking skills, mental state examination skills, and the doctor–patient relationship skills  
|                          |                               | • Other teaching methods like micro seminars and problem based learning are very suitable to teaching psychiatry.  
| Assessment               | Knowledge                     | Short answers, MCQs, EMIs, MEQs  
|                          | Skills                        | OSCE, OSLER and MOSLER 

OSCE – Objective structured clinical examination; MCQs – Multiple choice questions; EMIs – Extended matching items; MEQs – Modified essay questions; OSLER – Objective structured long examination review; MOSLER – Modified objective structured long examination review
REFERENCES

1. Surya NC. Mental morbidity in Pondicherry. Transaction-4. Bangalore: All India Institute of Mental Health; 1964. p. 50-61.
2. Carstairs GM, Kapur RL. The great universe of Kota: Stress, change, and mental disorder in an Indian village. London: The Hogarth Press; 1976. p. 70-100.
3. Saxena S. Human resources. Workforce. In: Mental Health Atlas. Ch. 4.2. Geneva: WHO; 2011. p. 56-7.
4. Thirunavukarasu M, Thirunavukarasu P. Training and National deficit of psychiatrists in India-A critical analysis. Indian J Psychiatry 2008;52:583-8.
5. Bridges KW, Goldberg DP. Somatic presentation of DSM III psychiatric disorders in primary care. J Psychosom Res 1985;29:563-9.
6. Goldberg D. Reasons for misdiagnosis. Sartorius N, Wagstaff E, editors. Psychological disorders in general medical settings. Göttingen: Hogrefe and Hubert, 1990. p. 139-45.
7. Maguire GP, Julier DL, Hawton KE, Bancroft JH. Psychiatric morbidity and referral on two general medical wards. Br Med J 1974;1:268-70.
8. Chawla JM, Balhara YP, Sagar R, Shivaprankash. Undergraduate medical students’ attitude toward psychiatry: A cross-sectional study. Indian J Psychiatry 2012;54:37-40.
9. Kelly B, Raphael B, Byrne G. The evaluation of teaching in undergraduate psychiatric education: Students’ attitudes to psychiatry and the evaluation of clinical competency. Med Teach 1991;13:77-87.
10. Craddock N, Antebi D, Attenburrow MJ, Bailey A, Carson A, Cowen P, et al. Wake-up call for British psychiatry. Br J Psychiatry 2008;193:6-9.
11. Brockington IF, Mumford DB. Recruitment into psychiatry. Br J Psychiatry 2002;180:307-12.
12. Malhi GS, Parker GB, Parker K, Kirkby KC, Boyce P, Yellowlees P, et al. Shrinking away from psychiatry? A survey of Australian medical students’ interest in psychiatry. Aust N Z J Psychiatry 2002;36:416-23.
13. Maidment R, Livingston G, Katona C, McParland M, Noble L. Change in attitudes to psychiatry and intention to pursue psychiatry as a career in newly qualified doctors: A follow-up of two cohorts of medical students. Med Teach 2004;26:565-9.
14. Lingeswaran A. Psychiatric curriculum and its impact on the attitude of Indian undergraduate medical students and interns. Indian J Psychol Med 2010;32:119-27.
15. Yager J. The practice of psychiatry in the 21st century: Challenges for psychiatric education. Acad Psychiatry 2011;35:283-92.
16. Curtis-Barton MT, Eagles JM. Factors that discourage medical students from pursuing a career in psychiatry. Psychiatrist 2011;35:425-9.
17. Korszun A, Dharmaindra N, Koravangattu V, Bhui K. Teaching medical students and recruitment to psychiatry: Attitudes of psychiatric clinicians, academics and trainees. Psychiatrist 2011;35:350-3.
18. Lampe L, Coulston C, Walter G, Malhi G. Familiarity breeds respect: Attitudes of medical students towards psychiatry following a clinical attachment. Australas Psychiatry 2010;18:348-53.
19. Das MP, Chandrasena RD. Medical students’ attitude towards psychiatry. Can J Psychiatry 1988;33:783-7.
20. Medical Council of India. Salient features of regulations on graduate medical education; 1997. Published in Part III, Section 4 of the Gazette of India dated 17 May 1997 (amended upto Nov 2010). Available from: http://www.mciindia.org/Rules and Regulations/Graduate Medical EducationRegulations1997.aspx. [Last accessed on 2012 May 4].
21. Jiloha RC, Parkar S, editors. Recommendation for Under-graduate (MBBS) Syllabus in Psychiatry. Psychiatry Education Committee-2010. Indian Psychiatric Society; 2010. Available from: http://www.ips-online.org/. [Last accessed on 2012 May 4].
22. Wilkinson G. I don’t want you to see a psychiatrist. BMJ 1988;297:1144-5.
23. Harrison PJ, Baldwin DS, Barnes TR, Burns T, Ebeimeer KE, Ferrier IN, et al. No psychiatry without psychopharmacology. Br J Psychiatry 2011;199:263-5.
24. Sood M, Sharan P. A pragmatic approach to integrating mental health in undergraduate training: The AIIMS experience and work in progress. N Atl Med J India 2011;24:108-10.
25. Medical Council of India. Amendment Notification. No. MCI-34 (41)/2008-Med./25527. New Delhi, Letter dated 29th October, 2008.
26. Lane C, Rollnick S. The use of simulated patients and role-play in communication skills training: A review of the literature to August 2005. Patient EducCouns 2007;67:13-20.
27. McNaughton N, Ravitz P, Wadell A, Hodges BD. Psychiatric education and simulation: A review of the literature. Can J Psychiatry 2008;53:85-93.
28. Brazeau C, Boyd L, Crosson J. Changing an existing OSCE to a teaching tool: The making of a teaching OSCE. Acad Med 2002;77:932.
29. Academy of Medical Royal Colleges, NHS Institute of Innovation and Improvement. Medical Leadership Competency Framework: Enhancing Engagement in Medical Leadership. 2nd ed. University of Warwick, UK: NHS Institute for Innovation and Improvement; 2009. p. 1-93.
30. Milton O. Improving achievement via essay exams. J Vet Med Educ 1997;6:108-12.
31. Newble DI, Baxter A, Elmslie RG. A comparison of multiple-choice tests and free-response tests in examinations of clinical competence. Med Educ 1979;13:263-8.
32. Case SM, Swanson DB. Extended matching items: A practical alternative to free-response questions. Teach Learn Med 1993;5:107-15.
33. Feletti GI, Smith KE. Modified essay questions: Are they worth the effort? Med Educ 1986;20:126-32.
34. Harden RM. Twelve tips for organizing an objective structured clinical examination (OSCE). Med Teach 1990;12:259-64.
35. Newble D. Techniques for measuring clinical competence: Objective structured clinical examinations. Med Educ 2004;38:199-203.
36. Burra P, Kalin R, Leichner P, Waldron JJ, Handforth JR, Jarrett FJ, et al. The ATP 30-a scale for measuring medical students’ attitudes to psychiatry. Med Educ 1982;16:31-8.