Attitudes of undergraduate medical students toward mental illnesses and psychiatry

Nimisha D. Desai, Paragkumar D. Chavda

Abstract:
BACKGROUND: Worldwide, studies show negative attitude among medical students toward psychiatry and mental illness. The knowledge of the attitude and awareness of the undergraduate medical students toward psychiatry, mental health, and psychiatric disorders are most important as they are going to be involved in the care of these patients either directly or indirectly during the later years of their careers.
AIM: This study aims to assess attitude toward psychiatry and mental illness among undergraduate medical students.
METHODOLOGY: The responses of 67 medical students from the 6th semester (third professional year) batch who completed their 2-week clinical posting of psychiatry in 4th semester (i.e., second professional year) were collected using validated questionnaires, attitude towards mental illness (AMI), and attitude towards psychiatry (ATP) that assessed their attitudes to psychiatry and mental illness. Double data entry and validation were done using EpiData and analysis using Epi Info software.
RESULTS: Median AMI score was 54 (out of maximum 100) showing a neutral AMI. Median ATP score was 82 (out of maximum 150) also showing a neutral ATP. The theme-wise analysis showed that the attitude of students toward psychiatrist and psychiatry branch was relatively better compared to their AMI.
CONCLUSION: Undergraduate students have a neutral attitude to psychiatry and mental illness. More efforts are needed to change the attitude to favorable side.

Keywords:
Attitude, medical students, mental illness, psychiatry

Introduction

Mental and behavioral disorders are universal. They are common and affect more than 25% of all people at some time during their lives.[1] In spite of the magnitude of people suffering from mental illnesses, people do not get the adequate care they need, leading to increased overall burden to society. Recent national mental health survey from 12 states of India had shown that lifetime prevalence of mental disorders in the surveyed population was 13.7%. Nearly, 150 million Indians are in need of active interventions. Nearly, 80% of persons suffering from mental disorders had not received any treatment despite the presence of illness for more than 12 months. Multiple factors ranging from lack of awareness to affordability of care influence these wide treatment gaps.[2] National Institute for Mental Health Survey suggests that one major factor responsible for this is stigma. Stigma contributes to the huge burden of mental morbidity, being a roadblock to treatment seeking. Social stigma and negative attitude can affect the quality of life for people with mental illness.

An attitude is defined by Rezler as “a relatively enduring organization of emotionally linked learned beliefs around

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The assessment of attitude of undergraduate medical students toward psychiatry and mental health is important as they are the future care providers. A negative attitude will compromise the future doctor’s ability to detect and manage psychological problems regardless of knowledge of psychiatry acquired. Persons with mental illnesses account for nearly a fourth of the total caseload in primary care settings. Most often, these individuals present as common mental health problems or as a comorbid condition of other disorders and are missed or inappropriately managed. The limited availability of specialist mental health human resources has been one of the barriers in providing essential mental health care to all. Looking at the burden of mental illnesses, it is very important to make efforts for the acquisition of positive attitude toward mental illnesses and psychiatry at the undergraduate level. During training, educational interventions targeted toward them may be more effective than doctors who have already completed their training because research has shown that, as they carry on through their career, their attitudes harden and become more resistant to change.

Carefully planned teaching programs including more exposure to the individual along with proper interaction with faculty can help in changing attitude. A study from India in 1994 reveals that 2-week posting in psychiatry was not sufficient to significantly influence students attitudes in a positive direction. At present, the majority of medical colleges in Gujarat follow 2-week clinical exposure in 4th semester. We planned to assess attitude among medical students at our college during the 6th semester as they already completed their clinical posting.

Aim
This study aims to assess attitude to psychiatry and mental illness among undergraduate medical students.

Methodology

Ethical issues
Ethics Committee approval was taken from the local Institutional Human Ethics Committee of the medical college.

Study design
This is a descriptive cross-sectional questionnaire-based study.

Study setting
The study was conducted at Department of Psychiatry of GMERS Medical College, Vadodara, Gujarat with an annual intake of 150 undergraduate medical students. In this college, psychiatry training includes a 2-week clinical posting during the 4th semester, 20 h of didactic lectures during the 6th semester, and 2-week posting in psychiatry during the internship.

The clinical posting in psychiatry is 15 days long with 3 h sessions on each day in 4th semester of M. B. B. S. curriculum. During the clinical posting, they learn various aspects of mental health such as history taking, interviewing skills, mental status examination, presentation of common psychiatry illnesses, electroconvulsive therapy, counseling skills, and other treatment aspects. They attend daily rounds of the patients and also observe cases at outdoor patients department along with consultant. They are required to present case of common mental illnesses such as depression, schizophrenia, bipolar mood disorder, panic disorder, obsessive-compulsive disorder, and alcohol dependence. At the end, they have to submit written case records containing complete history along with mental status examination findings. Toward the end of posting, a ward leaving examination is conducted. During 6th semester, they attend didactic interactive lecture series.

Study population
We invited the batch of 116 students in their 6th semester of study. They had completed their clinical posting during 4th semester. The data collection was done on the 1st day of the lecture series on psychiatry.

Procedure
Students were explained the nature of the study and its purpose. Informed consent was taken and anonymity was preserved.

Study instrument
Two self-rating scales: ATP (ATP-30) and AMI were used. ATP-30 is a 30-item questionnaire looking at attitudes related to psychiatry. This questionnaire covers domains such as (1) psychiatry patients, (2) psychiatry illness, (3) psychiatry knowledge, (4) psychiatry treatment including drugs, (5) psychiatrists, (6) psychiatry career choice, and (7) psychiatry training. Respondents express their agreement or disagreement to each of 30 items on the scale on a five-point Likert scale with categories ranging from strongly agree, agree, neutral, disagree, and strongly disagree. Responses for the items meant to measure negative attitudes are scored 1–5, whereas, items measuring positive attitudes are scored from 5 to 1. Total score on the scale indicates positive or negative
attitude, with a high total score indicating positive and low score indicating negative attitudes toward different aspects of psychiatry.

Similarly, AMI is a 20-item questionnaire which focuses on attitudes toward the causes, treatment, and consequences of mental illness and its impact on individuals and society. It also has the items constructed on a five-point Likert scale with a higher score suggesting a more favorable attitude. The scoring on some of the items is reversed to avoid response bias.

Data analysis
Data entry was done in EpiData software. Data were analyzed using Epi Info V. 6.04d (Center for Disease Control, Atlanta, USA) software. We used unpaired t test for analysis. We considered $P$ value of <0.05 as statistically significant.

Results
This section presents the attitude of medical students toward psychiatry and mental illnesses through two standardized validated tools, i.e., ATP and AMI. The demographic details of the students are as follows. The sample consisted of 67 students of which 24 were males and 43 were females. Median age of students was 21 years. The majority were Hindu, staying at urban domicile, in nuclear families. All the students completed both questionnaires.

Figure 1 shows AMI score of all students on a box and whisker’s plot. Minimum score was 39, and the maximum score was 80 out of total 100. Median AMI score was 54 (out of maximum 100) showing a neutral AMI.

Figure 2 shows ATP score of all students on a box and whisker’s plot. Minimum score was 58, and the maximum score was 94 out of total 150. Median ATP score was 82 (out of maximum 150) showing a neutral ATP.

We performed gender-wise analysis of the AMI and ATP scores. The average AMI score was 52.9 and 55.8 among male and female students, respectively. This difference was not statistically significant ($P = 0.14$). The average ATP score was 79.5 and 81 among male and female students, respectively. This difference was also not statistically significant ($P = 0.42$).

We had a total of 50 items capturing the students’ attitude on mental illness and psychiatry coming from two separate questionnaires. With a view to simplifying the analysis, first of all, the 50 items coming from these two questionnaires were pooled together. Then, similar statements clustering around similar theme were grouped together. We formed 7 such themes for analysis. They are (1) psychiatry patients, (2) psychiatry illness, (3) psychiatry branch, (4) psychiatry treatment including drugs, (5) psychiatrists, (6) psychiatry career choice, and (7) psychiatry training. The responses on Likert scale were grouped together for simplifying the analysis, for example, “strongly agree” and “agree” were combined as a single “Agree” response, and the “strongly disagree” and “disagree” combined into a “disagree” response.

Table 1 shows the medical students’ responses on statements related to psychiatry patients. On 2 ATP items, students show a positive attitude to psychiatry patients. However, on some AMI items, students show neutral response such as, “Psychiatric patients generally speaking are difficult to like,” “The mentally ill should be discouraged from marrying,” “Those with a Psychiatric history should never be given a job with responsibility.” At the same time, they were concerned about them also like “People who take an overdose are in need of compassionate treatment,” “It is preferable that the mentally ill live independently rather than in the hospital,” “Not enough is being done for the care of the mentally ill.” Mean score of this domain was 51.5%.

Table 2 shows responses of the medical students on statements related to mental illness and treatment. Majority of students opined about the etiology of mental illnesses that mental illnesses are genetic in origin and results of adverse social circumstances and also found important and interesting. For some concepts, students have unfavorable attitude such as “Violence mostly results from mental illness,” “Depression occurs in people with a weak personality.” Mean score of this domain was 46.9%.

Table 1: Medical students’ responses on statements related to psychiatry patients

| Statement                                                                 | AMI Score | ATP Score |
|---------------------------------------------------------------------------|-----------|-----------|
| Psychiatric patients generally speaking are difficult to like              | 39        | 58        |
| The mentally ill should be discouraged from marrying                      | 50        | 78        |
| Those with a Psychiatric history should never be given a job with responsibility | 54        | 82        |
| People who take an overdose are in need of compassionate treatment        | 59        | 86        |
| It is preferable that the mentally ill live independently rather than in the hospital | 80        | 94        |
| Not enough is being done for the care of the mentally ill                 | 54        | 82        |

Table 2: Medical students’ responses on statements related to mental illness and treatment

| Statement                                                                 | AMI Score | ATP Score |
|---------------------------------------------------------------------------|-----------|-----------|
| Mental illnesses are genetic in origin and results of adverse social circumstances | 39        | 58        |
| Important and interesting                                                 | 50        | 78        |
| Unfavorable attitude such as “Violence mostly results from mental illness” | 54        | 82        |
| “Depression occurs in people with a weak personality.”                     | 80        | 94        |
They show positive attitude toward the effectiveness of treatment including psychotherapy and ECT. However, negative attitude on some statements like “Psychiatric drugs are mostly used to control disruptive behavior.” Mean score on this domain was 55%. 

Table 1: Psychiatry patients

| Number | Statement                                                                 | Agree (%) | Neutral (%) | Disagree (%) |
|--------|----------------------------------------------------------------------------|-----------|-------------|--------------|
| ATP 27 | If we listen to them, psychiatric patients are just human as other people | 94        | 6           | 0            |
| ATP 29 | Psychiatric patients are often more interesting to work with than other patients | 85        | 15          | 0            |
| AMI 1  | Psychiatric patients generally speaking are difficult to like               | 33        | 34          | 33           |
| AMI 2  | The mentally ill should be discouraged from marrying                       | 39        | 26          | 44           |
| AMI 4  | Those with a psychiatric history should never be given a job with responsibility | 30        | 26          | 44           |
| AMI 7  | Those who attempt suicide leaving them with serious liver damage should not be given transplant | 28       | 24          | 48           |
| AMI 10 | People who take an overdose are in need of compassionate treatment        | 83        | 17          | 0            |
| AMI 17 | Care in the community for the mentally ill puts society at risk            | 16        | 27          | 57           |
| AMI 18 | It is preferable that the mentally ill live independently rather than in the hospital | 60        | 40          | 0            |
| AMI 19 | Not enough is being done for the care of the mentally ill                  | 70        | 30          | 0            |
| AMI 20 | Patients with chronic schizophrenia are incapable of looking after themselves | 54        | 34          | 12           |

ATP=Attitude toward psychiatry, AMI=Attitude toward mental illness
The mean score for the domain Psychiatry patients was 51.5%.

Table 2: Psychiatry illness and treatment

| Number | Statement                                                                 | Agree (%) | Neutral (%) | Disagree (%) |
|--------|----------------------------------------------------------------------------|-----------|-------------|--------------|
| ATP 12 | Psychiatric illness deserves at least as much attention as physical illness | 90        | 10          | 0            |
| ATP 18 | It is interesting to try to unravel (discover) the cause of psychiatric illness | 85        | 15          | 0            |
| AMI 3  | Violence mostly results from mental illness                                | 57        | 30          | 13           |
| AMI 6  | Mental illnesses are wrongly diagnosed women and ethnic minorities         | 14        | 55          | 31           |
| AMI 12 | Depression occurs in people with a weak personality                        | 50        | 21          | 29           |
| AMI 13 | Mental illness is the result of adverse social circumstances               | 82        | 18          | 0            |
| AMI 14 | Alcohol abusers have no self-control                                       | 70        | 18          | 12           |
| AMI 15 | Mental illnesses are genetic in origin                                     | 64        | 36          | 0            |
| AMI 16 | People who had good parenting as children rarely suffer from mental illness | 54        | 27          | 19           |

ATP=Attitude toward psychiatry, AMI=Attitude toward mental illness, ECT=Electro Convulsive Therapy
The mean score for Psychiatry illness and treatment was 46.9% and 55% respectively.
Table 3 shows responses of the medical students on statements related to psychiatry as branch including psychiatric hospitals and psychiatrists. They show respect and importance of psychiatry in curriculum and also of hospitals in care of mentally ill persons. Mean score of this domain was 53.9%. For psychiatry branch, students have a favorable attitude such as the majority of the students agreed with statements like, “Psychiatry is respected branch of medicine,” “The practice of psychiatry allows the development of really rewarding relationships with people.” Students show the favorable attitude to psychiatry. Mean score on this domain was 67.4%.

Table 4 shows responses related to Career in Psychiatry and Psychiatry training. Students show a favorable attitude toward a career in psychiatry and psychiatry training. The majority of students report that their psychiatric undergraduate training has been valuable, “These days, psychiatry is the most important part of the curriculum in medical schools.” Majority of students want to become a psychiatrist, none of the students disagree on this item.

The theme-wise analysis showed that the attitude of students toward psychiatrist and psychiatry branch was relatively better compared to their attitude to mental illness as reflected in mean score for these domains.

**Discussion**

Attitude is a hypothetical construct that represents an individual’s like or dislike for an item; which may be positive, negative, or neutral. It originates from judgments and has affective, behavioral, and cognitive components. It also determines orientation toward a particular environment. Hence, the orientation of the medical students toward the management of psychological problem in physically ill patients during medical training shapes their attitude to mental illness as a disease and psychiatry as a medical subspecialty. This attitude also determines the trend to choose psychiatry as a career by future doctors.

Many studies have been conducted using various scales to assess the attitude of medical students toward mental illness and psychiatry. We also assessed the attitude of medical students toward psychiatry and mental illness at our college using two well-known scales ATP-30 and AMI used worldwide at various places. In a study from Nepal, attitude of medical

| Table 3: Psychiatry branch and psychiatrists |
|--------------------------------------------|
| **Number** | **Statement** | **Agree (%)** | **Neutral (%)** | **Disagree (%)** |
| --- | --- | --- | --- | --- |
| **Psychiatry branch** | | | | |
| ATP 11 | Psychiatry is respected branch of medicine | 86 | 14 | 0 |
| ATP 13 | Psychiatry has very little scientific information to go on (is not based on much scientific evidence) | 25 | 27 | 48 |
| ATP 23 | These days, psychiatry is the most important part of the curriculum in medical schools | 81 | 19 | 0 |
| ATP 24 | Psychiatry is so unscientific that even psychiatrists cannot agree as to what its basic applied sciences are | 22 | 24 | 54 |
| ATP 26 | Most of the so-called facts in psychiatry are really just vague speculations | 12 | 43 | 45 |
| ATP 28 | The practice of psychiatry allows the development of really rewarding relationships with people | 85 | 15 | 0 |
| ATP 3 | Psychiatric hospitals are little more than (not very different from) prisons | 25 | 24 | 51 |
| ATP 20 | Psychiatric hospitals have a specific contribution to make to (can help specifically in) the treatment of the mentally ill | 95 | 5 | 0 |
| AMI 5 | Psychiatric diagnoses stigmatize people and should not be used | 19 | 34 | 46 |
| **Psychiatrists** | | | | |
| ATP 2 | Psychiatrists talk a lot but do very little | 3 | 31 | 66 |
| ATP 7 | Psychiatrists seem to talk about nothing but sex | 3 | 15 | 82 |
| ATP 15 | Psychiatrists tend to be at least as stable as the average doctor | 70 | 30 | 0 |
| ATP 17 | Psychiatrists get less satisfaction from their work than other specialists | 21 | 42 | 37 |
| ATP 19 | There is very little that psychiatrists can do for their patients | 9 | 20 | 71 |
| ATP 22 | At times, it is hard to think of psychiatrists as equal to other doctors | 22 | 31 | 46 |

ATP=Attitude toward psychiatry, AMI=Attitude toward mental illness
The mean score for psychiatry branch and psychiatrist was 53.9% and 67.4% respectively.
The majority of students report that their psychiatric teaching increases our understanding of medical and surgical patients.

Psychiatry training

| Statement | Agree (%) | Neutral (%) | Disagree (%) |
|-----------|-----------|-------------|--------------|
| Dental posting increases our understanding of medical and surgical patients | 88 | 12 | 0 |
| The majority of students report that psychiatric undergraduate training has been valuable | 90 | 10 | 0 |
| These days, psychiatry is the most important part of the curriculum in medical schools | 81 | 19 | 0 |

We have also done theme-wise analysis by clubbing the items of both scales in seven areas: (1) psychiatry patients, (2) psychiatry illness, (3) psychiatry treatment including drugs, (4) psychiatry branch, (5) psychiatrists, (6) psychiatry career choice, and (7) psychiatry training. We found that the attitude of students toward psychiatrist and psychiatry branch was relatively better compared to their attitude to mental illness. This might be due to the actual content of psychiatry being taught, and it would be interesting to see whether it can be modified to change the attitude towards mental illness also. Earlier studies have shown that psychiatry education has proved to be effective in changing the attitude of medical students toward mental illness; however, there is urgent need to review the current curriculum also and to incorporate newer teaching methods to develop the attitudes of empathy, respect, understanding, etc., and to reduce stigma toward psychiatry resulting in better patient care.

A substantial number of students also gave “neutral” response to statements of ATP and AMI. This is known to happen when the respondents have little knowledge about the topic of interest. This is likely the case with our students. It is likely that our students may not have formed a concrete opinion related to the themes under this study.

The limitation of this study is that we could cover participants from only one batch of students from our institute only. This was a cross-sectional study, and there were no other groups taken for any comparison. Furthermore, we could not study the attitude of these students before clinical posting.

Conclusion

Overall attitude to mental illness and psychiatry among the 6th semester medical students of our college were...
neutral. There was no gender difference in the attitude to mental illness or psychiatry. A further study among other semester students is needed to get the overall picture. More efforts are needed to change the attitude to the positive side.

**Recommendations**
Looking at the burden of mental illnesses, it is very important to make efforts for acquisition of positive attitude to mental illness and psychiatry at the undergraduate level. Carefully planned teaching programs including more exposure to the individual along with proper interaction with faculty should be tried for bringing the expected change in attitude.

Furthermore, we would like to study the impact of clinical postings and didactic lecture series on the attitude of students in subsequent batches.

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**Conflicts of interest**
There are no conflicts of interest.

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