Perception, knowledge, and attitude toward mental disorders and psychiatry among medical undergraduates in Karnataka: A cross-sectional study

G. Aruna, Shobhana Mittal, Muralidhara B. Yadiyal1, Chandana Acharya2, Srilekha Acharya3, Chinmay Uppulari4

Departments of Psychiatry and 4Father Muller Medical College, 1Department of Medicine, Kasturba Medical College, Mangalore, 2Kasturba Medical College, Manipal, 3Shri Dharmasthala Manjunatheshwara Medical College, Dharwad, Karnataka, India

ABSTRACT

Context: Globally, psychiatry as a subject, psychiatrists as professionals, and patients with psychiatric disorders are subjected to cultural stereotypes and negative attitude by the general population. What is of alarming concern is that these prejudices exist within the medical community as well.

Aims: This study aims at evaluating the perception, knowledge, and attitude toward psychiatric disorders, therapeutic modalities used in psychiatry, psychiatry as a subject and psychiatrists as professionals among undergraduate medical students in Karnataka.

Settings and Design: This is a descriptive, cross-sectional type of study conducted in three medical colleges located in Karnataka.

Materials and Methods: A sample of 500 students from all three professional phases of MBBS was selected using purposive sampling. A semistructured prevalidated questionnaire was used to assess the perception, knowledge, and attitude of undergraduate medical students toward psychiatric disorders and psychiatry.

Statistical Analysis: Data were analyzed using Statistical Package for Social Sciences, version 16.0.

Results: The undergraduate medical student population had significant shortcomings in knowledge and attitude pertaining to psychiatric disorders, more glaring in the initial years of education. A comparatively positive opinion was obtained regarding psychiatry as a subject and psychiatrists as professionals, which may reflect the changing trends and concepts, both in society and medical community.

Conclusion: This study highlights the need for better educational measures at undergraduate level in order to shape a positive attitude of the health care providers towards psychiatry, which is essential for ensuring better care for patients as well as reduction of stigma surrounding psychiatric disorders.

Key words: Attitude, knowledge, medical undergraduates, mental disorders, psychiatry

INTRODUCTION

The debate about basic understanding of psychiatry, outlook toward psychiatric disorders as well as stigma surrounding...
Psychiatric disorders exist worldwide, affecting about 10% of the adult population, at any given point in time.\cite{1} Despite this global presence, negative attitude toward psychiatric disorders has been consistently reported to be prevalent in all sections of society.\cite{2} Mental disorders are either ignored or considered to be a taboo by a majority of people, hailing from all walks of life.

Globally, psychiatry as a subject, psychiatrists as professionals, and patients with psychiatric disorders are subjected to cultural stereotypes and negative attitude by the general population. What is of alarming concern is that these prejudices exist within the medical community as well.\cite{3-7}

This reign of ignorance and stigma prevails either because psychiatric disorders are not understood by most people or are surrounded by preconceived biases. Negative attitudes toward psychiatric disorders lead to deep-seated prejudices toward mentally ill persons, which may manifest in the form of fear or intolerance. This culminates in further fortifying the stigma surrounding psychiatry, and hence a vicious cycle ensues. This has an impact on the lives of not only the psychiatric patients, but also their families and treating psychiatrists. This stigma can hinder the provision of adequate and appropriate services to persons with psychiatric disorders.\cite{8,9}

To ensure effective delivery of mental health care, knowledge, and awareness regarding psychiatric disorders has to be increased among the general population. In addition to this, it is crucial that the medical fraternity itself is not plagued by prejudicial attitudes.\cite{2,8} A negative attitude toward psychiatry harbored by medical professionals may prove to be an obstacle in providing quality care to the mentally ill persons in need.

When negative attitudes toward psychiatric disorders have been reported to be prevalent in all sections of society,\cite{2} it is not surprising that medical students carry with them these prejudices when they enter the medical community.\cite{6} It has to be borne in mind, after all, that medical students are also an integral part of the society, and their attitudes are shaped and influenced by the attitudes prevalent in the sociocultural milieu they come from. However, if these negative attitudes are overlooked and unaltered during the course of medical education, it may prove detrimental in the long run.

The knowledge, perception, and attitude toward psychiatry among undergraduate medical students is of enormous significance, as these students are the future doctors, who may be involved in the care of psychiatric patients at some point in their career, either directly or indirectly. While some studies have suggested that aspiring young doctors have a favorable opinion about psychiatry as a branch,\cite{10} other studies have suggested that medical students' attitude toward psychiatry is unfavorable.\cite{8,11-17} Medical students tend to view the discipline of psychiatry as unscientific, imprecise, or ineffective.\cite{2,16} Consequently, their understanding of mental disorders may get distorted, leading to failure of timely identification of psychiatric disorders, as well as inadequate referral of patients to mental health services.\cite{2,9,16}

Moreover, a poor understanding of psychiatric disorders by the treating doctor may lead to insufficient imparting of psycho-education by the doctor to the patients as well as their caregivers, regarding the nature of psychiatric illness, course, prognosis, and treatment options available thereby causing a failure to generate awareness and de-stigmatize psychiatric disorders in society, when directly in contact with the affected population. Moreover, medical students may view psychiatry as an unattractive field while choosing their specialization and feel discouraged from working in the field of mental health care, owing to the stigma surrounding it, which is unfavorable in a country like ours where there already exists a shortage of mental health care professionals.

Psychiatric training in the undergraduate medical curricula appears to be falling short, as reflected by an insufficient number of allotted lectures, shortage of qualified teaching faculty as well as inadequate clinical postings, which leads to inadequate exposure of medical students to psychiatry.\cite{12,17-19} In order to improve psychiatric training in the undergraduate medical population both in terms of quality as well as quantity, the nature and magnitude of shortcomings in knowledge, perception, and attitude toward psychiatry in this group need to be assessed and understood.\cite{2,17}

This study aims at evaluating the perception, knowledge, and attitude toward psychiatric disorders, therapeutic modalities used in psychiatry, psychiatry as a subject and psychiatrists as professionals among undergraduate medical students in Karnataka.

**MATERIALS AND METHODS**

This was a descriptive, cross-sectional study. This study was conducted in three different medical colleges located in Karnataka. All three colleges chosen for this study were teaching institutes with tertiary care general hospital set up. All three institutes provided psychiatric services in both indoor as well as outpatient department (OPD) settings and received a good number of psychiatry patients every year. Psychiatry Departments in all these three colleges were functioning well with an adequate number of qualified staff and PG residents. The MBBS course in all three colleges had received recognition from the Medical Council of India and was being attended by a large number of medical students.

A semistructured prevalidated questionnaire was used to assess the perception, knowledge, and attitude of
undergraduate medical students toward psychiatric disorders and psychiatry. The questionnaire comprised of a total of 25 questions, which were further divided into subsections. Questions in each subsection were targeted to assess various parameters, which included basic knowledge about psychiatric disorders as well as treatment modalities used in psychiatry, general attitude, and beliefs pertaining to psychiatric disorders, as well as opinions about psychiatry and psychiatrists. The questionnaire took into account questions asked in similar previous studies, after taking due permission from their authors, in order to make a reliable comparison of results possible. In addition, the questionnaire also included questions that addressed recent issues raised in textbooks, journals, and conferences about psychiatry training, relevant in the context of the current study. Sociodemographic data including age, sex, and batch of MBBS were also collected.

A total sample of 500 undergraduate medical students was taken for the purpose of the study. The sample comprised of students from all three professional phases of MBBS from all three colleges, recruited using purposive sampling. Students were approached from different batches by designated MBBS students from each college and were informed about the nature and purpose of the study. Those students who were willing to participate in the study were given the questionnaire. Of the 500 participants who came forward to participate in the study, 96 were excluded due to incomplete filling of the questionnaire or withdrawal of consent.

Data were analyzed using the Statistical Package for Social Sciences, version 16.0 and statistical analysis was carried out using linear regression and descriptive statistics. Informed consent was taken from all participants, confidentiality was assured, and the study was approved by the Ethics Committees of the respective institutions.

RESULTS

Of 500 participants, 96 were excluded from analysis due to incomplete responses. Of the 404 participants included for analysis, 43.8% (n = 177) were males and 56.2% (n = 227) were females. The highest number of participants were from final year (n = 146, 36%), followed closely by second professional phase (n = 139, 34.4%) and the 1st year (n = 119, 29.4%). Apart from the 1st year students, all other participants (n = 285, 70.5%) had been exposed to psychiatry postings and lectures as per the current MBBS curriculum [Table 1].

| Year of study | Number of respondents n (%) | Total n (%) |
|---------------|-----------------------------|-------------|
|               | Male | Female |               |
| First         | 55 (45.3) | 64 (53.78) | 119 (29.45) |
| Second        | 59 (42.4) | 80 (57.5) | 139 (34.4) |
| Final         | 63 (43.15) | 83 (56.8) | 146 (36) |
| Total         | 177 (43.8) | 227 (56.18) | 404 (100) |

MBBS – Bachelor of Medicine and Bachelor of Surgery

or were not sure (19.05%, n = 77). When asked whether people in contact with psychiatric patients would behave strangely, 60.3% (n = 244) students did not believe so, while the rest either believed this to be true or were unsure. Around 49.7% of students believed patients with psychiatric disorders, even when recovered, would not be productively employed by others and 56.6% of them objected to the possibility of their own close relative marrying a person with a psychiatric disorder. Only 40.9% of students felt comfortable talking to psychiatric patients.

The notion that older people were less prone to psychiatric disorders was found in 42.07% of students, while 51.2% believed that children do not suffer from any kind of psychiatric problem. Nearly, half of the respondents believed that women were less prone to psychiatric disorders (45.1%, n = 182) and people from lower socioeconomic class may be more prone to psychiatric disorders (45.5%, n = 185). Over one-third of the respondents believed that higher education and intelligence quotient increased the risk of psychiatric disorders (34.65%, n = 140). While assessing the potential risk factors for psychiatric disorders, varied opinions were seen, wherein, 45.7% (n = 185) regarded failed romantic relationship, 49.2% (n = 199) considered traumatic events in childhood, and 48.7% (n = 197) thought of increased tensions as potential risk factors. A considerable proportion of students, however, did not consider decreased libido (43.06%; n = 174), excessive masturbation (46.03%, or n = 186), or a hectic lifestyle (52.7%, n = 213) to be risk factors.

When asked about the etiology of psychiatric disorders, majority of the students attributed them to genetic reasons (59.9%, n = 242) and imbalance of neurotransmitters (60.6%, n = 245). Similar importance was also awarded to abnormal family (58.9%, n = 238) and social circumstances (56.1%, n = 227). Most of the students disagreed on suggested causes like God’s punishment for past sins (52.9%, n = 214), poor nutrition (54.9%, n = 222), air pollution (68.8%, n = 278), or loss of semen/genital fluids (57.4%, n = 232) [Table 2].

On being asked, how they felt on seeing a patient with a psychiatric disorder, 54.62% (n = 65) of the 1st year students felt sad and sorry, whereas half of the
2nd year students (50.3%, n = 70) and final year students (51.36%, n = 75) felt that the patient should be treated. A meagre number of final year students (6.1%, n = 9) reported of empathy being evoked toward the psychiatric patient [Table 3].

Knowledge, attitude, and perception pertaining to treatment modalities used in psychiatry

The majority of the students (73%, n = 295) held the view that psychiatric disorders are treatable, to a variable degree, by a trained mental health professional. A considerable number of students believed that psychiatric disorders could improve by a change in environment (62.6%, n = 253). A major proportion of students (61.6%, n = 249) did not agree with the notion of psychiatric disorders being untreatable, being treated equally well by faith-healers (63.1%, n = 255) or being cured by leaving the patient alone (70.7%, n = 286). According to 65.3% of students (n = 264), psychiatric disorders could only be relieved, but not cured, with medications. Around 76.9% of respondents (n = 311) disagreed to mental disorders being less disabling than the treatment itself.

When asked about their opinion on psychotherapy, an overwhelming 80.4% (n = 325) thought of psychotherapy as an essential part of treatment for all psychiatric disorders and 72.02% (n = 291) disagreed to it being a waste of time.

When asked about electroconvulsive therapy (ECT), the majority of the students (72.02%, n = 288) did not think of it as being inhuman or cruel. Two-thirds of the participants did not feel that ECT should be banned (66.05%, n = 267). Most of the students were aware that modified ECT (M-ECT) was given under general anesthesia (77.2, n = 312) and viewed it as an effective treatment modality in psychiatry (65.3%, n = 269) [Table 4].

Outlook toward psychiatry and psychiatrists

When asked to opine subjectively about psychiatrists, most of the students did not believe that psychiatrists were eccentric (60.3%, n = 244) or that they “know nothing and do nothing” (62.2%, n = 253).

Less than half of total respondents thought of psychiatry as a branch of medicine (42.01%, n = 170), whereas 29.2% (n = 118) thought of it as a separate discipline altogether while 28.7% (n = 116) were not sure about where they would place psychiatry as a discipline. 39.85% (n = 161) regarded psychiatry as an early discipline, while 52.4% (n = 212) found psychiatry to be stimulating. Around 55.4% (n = 224) of students viewed psychiatry as a glamorous profession, and 50.4% (n = 204) remarked that psychiatry, in private practice, has bright prospects in India.

Half of the students thought that majority of psychiatrists did not opt for the subject by choice (50.7%, n = 205).

Table 2: Basic knowledge, attitude, and perception pertaining to psychiatric disorders

| Questions asked                                                                 | Yes n (%) | No n (%) | Not sure n (%) |
|---------------------------------------------------------------------------------|-----------|----------|---------------|
| Q1. Are psychiatric disorders legitimate medical disorders                       | 186 (46.3)| 141 (34.9)| 77 (19.05)    |
| Q2. Does contact with psychiatric patients lead to strange behavior              | 93 (23.01)| 244 (60.3)| 67 (16.5)     |
| Q3. Recovered psychiatric patients are not employed productively                | 201 (49.7)| 130 (32.1)| 73 (18.06)    |
| Q4. Would you object to a recovered psychiatric patient marrying your relative? | 229 (56.6)| 118 (29.2)| 57 (14.1)     |
| Q5. Are you comfortable talking to a psychiatric patient?                       | 162 (40)  | 195 (48.2)| 47 (11.6)     |
| Q6. Does the risk of psychiatric problems increase in people who                |           |          |               |
| a. Have less sexual desire                                                      | 155 (38.3)| 174 (43.06)| 75 (18.5)   |
| b. Masturbate excessively                                                       | 139 (34.4)| 186 (46.03)| 79 (19.5)   |
| c. Are sad and unhappy mostly                                                  | 148 (36.6)| 179 (44.3)| 77 (19.05) |
| d. Have a busy and hectic lifestyle                                             | 113 (27.9)| 213 (52.7)| 75 (18.5)   |
| e. Frequently complain of tiredness                                            | 116 (28.7)| 208 (51.4)| 82 (20.2)  |
| f. Have a failed romantic relationship                                          | 185 (45.7)| 162 (40.09)| 57 (14.1)  |
| g. Have a traumatic childhood                                                   | 199 (49.2)| 154 (38.1)| 51 (12.6)  |
| h. Have lot of tensions                                                        | 197 (48.7)| 150 (37.1)| 57 (14.1)  |
| Q7. Are older people less prone to mental disorders                             | 170 (42.07)| 93 (23.01)| 141 (34.9) |
| Q8. Children do not suffer from psychiatric problems                            | 207 (51.2)| 150 (37.1)| 47 (11.6)  |
| Q9. Women are less prone for psychiatric disorders                              | 182 (45.0)| 147 (36.3)| 77 (19.05) |
| Q10. Lower socioeconomic class increases risk of having psychiatric disorders   | 184 (45.5)| 148 (36.6)| 72 (17.8)  |
| Q11. Higher education or high IQ increases risk for psychiatric disorders        | 140 (34.65)| 194 (48.26)| 70 (17.3) |
| Q12. Psychiatric disorders are due to                                           |           |          |               |
| a. Genetic reasons                                                              | 242 (59.9)| 114 (28.2)| 48 (11.8)  |
| b. Neurotransmitter imbalances                                                  | 245 (60.6)| 110 (27.2)| 51 (12.6)  |
| c. Abnormal family                                                              | 238 (58.9)| 115 (28.4)| 51 (12.6)  |
| d. God’s punishment for past sins                                               | 135 (33.4)| 214 (52.4)| 55 (13.6)  |
| e. Social circumstances                                                         | 227 (56.1)| 126 (31.1)| 51 (12.6)  |
| f. Poor nutrition                                                               | 149 (36.8)| 222 (54.9)| 33 (8.1)   |
| g. Polluted atmosphere                                                          | 97 (24.09)| 278 (68.8)| 29 (7.1)   |
| h. Loss of seminal/genital fluids                                               | 144 (35.6)| 232 (57.4)| 28 (6.9)   |
Only one-fourth of the students were open to taking up psychiatry in the future (25%, \( n = 101 \)), whereas half did not wish to do so (50.9%, \( n = 206 \)) while the rest were not sure (24%, \( n = 97 \)). Positive responses toward psychiatry and psychiatrists accounted for about 55.6% of the total responses obtained [Table 5].

**Overall findings**

The number of factually correct and appropriate responses varied in accordance with the professional year being attended by the student. The number of factually correct responses given by the students increased from 31.9% for the 1st year, 46.04% for second professional phase and 57.53% for the final professional phase. Ambivalent responses like “not sure” decreased from the 1st year (23.52%) to the final year (15.06%) [Table 6].

**DISCUSSION**

In this study, the sample size was adequate and sufficiently represented the undergraduate medical student population, with nearly one-third of participants hailing from each of the three professional phases of MBBS. There was no overrepresentation of either sex in the sample taken. The participants were approached for the study by designated MBBS students from their own institute under the supervision of the authors, instead of being approached by professors or other teaching staff, in order to encourage enthusiastic participation in the study, and get genuine and unbiased responses from the medical students. Involving medical students in the study itself generated curiosity and awareness among the medical students toward academic research in general and psychiatry in particular.

Undergraduates in the 1st year had not received formal exposure to psychiatry yet, while the rest of the respondents (70.5%) had received some exposure to psychiatry in the form of at least one clinical posting or lecture in psychiatry and had come in contact with at least one patient with a psychiatric disorder. All the three medical colleges from where the sample was taken had well-functioning Psychiatry Departments with adequate teaching staff and a good in-flow of patients in the psychiatry OPD as well as inpatient department.

Despite of this, less than half the respondents (46%) considered psychiatric disorders to be legitimate medical disorders or considered psychiatry to be a legitimate branch of medicine (42.01%).

Negative attitudes toward psychiatric disorders became apparent when more than half of the respondents did not feel comfortable to even talk to psychiatric patients. Half of the students believed that psychiatric patients were not unemployable irrespective of their recovered status, and objected to the possibility of a close relative being married to a person with psychiatric disorder. These responses highlight the stigma and discrimination present toward psychiatric disorders, within the medical community itself. These finding are similar to those of previous studies done on similar lines.[8,17,20,21]

**Table 3: Outlook toward psychiatric patients**

| Question asked                                      | 1st year n (%) | 2nd year n (%) | Final year n (%) |
|-----------------------------------------------------|----------------|----------------|------------------|
| Q13: Upon seeing a patient with psychiatric disorder, you feel ________ |                  |                |                  |
| a. Sympathetic                                     | 20 (16.8)      | 13 (9.3)       | 17 (11.6)        |
| b. Sad and sorry                                   | 65 (54.62)     | 42 (30.2)      | 45 (30.8)        |
| c. That they should be treated                      | 25 (21.0)      | 70 (50.3)      | 75 (51.36)       |
| d. Empathetic                                      | 9 (7.5)        | 12 (8.6)       | 9 (6.1)          |

**Table 4: Knowledge, attitude, and perception pertaining to treatment modalities used in psychiatry**

| Questions asked                                                                 | Yes n (%) | No n (%) | Not sure n (%) |
|--------------------------------------------------------------------------------|-----------|----------|---------------|
| Q22. In your opinion, psychiatric disorders are ___________                      |           |          |               |
| a. Untreatable                                                                  | 54 (13.3) | 249 (61.6)| 101 (25)      |
| b. As well treated by faith healers as psychiatrists                             | 45 (11.1) | 255 (63.1)| 101 (25)      |
| c. Improved by leaving patient alone                                            | 32 (7.9)  | 286 (70.7)| 88 (21.7)     |
| d. Improved by change in environment                                            | 253 (62.6)| 96 (23.7) | 55 (13.6)     |
| e. Improved by increasing awareness toward emotions                              | 286 (70.7)| 75 (18.5) | 43 (10.6)     |
| f. Treatable by a psychiatrist                                                   | 295 (73.0)| 72 (17.8) | 37 (9.1)      |
| Q23. According to you, psychiatric disorders are ___________                     |           |          |               |
| a. Only relieved, not cured using medicines                                      | 264 (65.3)| 94 (23.2) | 46 (11.3)     |
| b. Less disabling than the treatment itself                                      | 38 (9.4)  | 311 (76.9)| 55 (13.6)     |
| Q24. According to you, in the treatment of psychiatric disorders ___________    |           |          |               |
| a. Psychotherapy is an essential part for all disorders                          | 325 (80.4)| 96 (8.9)  | 43 (10.6)     |
| b. Psychotherapy is a waste of time                                              | 69 (17.01)| 291 (72.02)| 44 (10.8)    |
| Q25. According to you, ECT is ___________                                        |           |          |               |
| a. Inhuman and cruel                                                            | 79 (19.5) | 288 (71.2)| 45 (11.1)     |
| b. ECT should be banned                                                          | 87 (21.5) | 267 (66.08)| 50 (12.3)    |
| c. M-ECT is given under GA                                                      | 312 (77.2)| 32 (7.9)  | 56 (13.8)     |
| d. M-ECT is one of the effective treatment modality in psychiatry               | 264 (65.3)| 87 (21.5) | 53 (13.1)     |

M-ECT – Modified electroconvulsive therapy; IQ – Intelligence quotient; GA – General anesthesia
Aruna, et al.: K.A.P. toward psychiatry among medical undergrads

Table 5: Outlook toward psychiatry and psychiatrists

| Questions asked                                                                 | Yes n (%) | No n (%) | Not sure n (%) |
|---------------------------------------------------------------------------------|-----------|----------|----------------|
| Q14. According to you, most psychiatrists are                         |           |          |                |
| a. Are eccentric                                                              | 123 (31.1)| 244 (60.3)| 34 (8.4)       |
| b. “Know nothing and do nothing”                                            | 113 (27.9)| 253 (62.2)| 38 (9.4)       |
| Q16. Psychiatry is an early discipline                                       | 161 (39.85)| 127 (31.4)| 116 (28.7)     |
| Q17. Psychiatry is a stimulating discipline                                  | 166 (41.08)| 212 (52.4)| 26 (6.4)       |
| Q18. Psychiatry is a glamorous profession                                     | 224 (55.4)| 137 (33.9)| 43 (10.6)      |
| Q19. Psychiatry has bright prospects for private practice in India            | 155 (38.3)| 204 (50.4)| 45 (11.1)      |
| Q20. Majority of psychiatrists opt for the subject by choice                  | 105 (25.9)| 205 (50.7)| 94 (23.2)      |
| Q21. Would you take up psychiatry as a profession in your future?             | 101 (25)  | 206 (50.9)| 97 (24)        |

Table 6: Overall nature of responses

| Nature of response (%)                                                                 | Professional year of the respondents |
|---------------------------------------------------------------------------------------|-------------------------------------|
|                                                                                      | 1st year | 2nd year | Final year |
| Appropriate responses (“not sure”)                                                    | 31.9     | 46.04    | 57.53      |
| Ambivalent answers (“not sure”)                                                       | 23.52    | 19.42    | 15.06      |

Around half of the respondents held the notion that elderly, children, and women were less vulnerable to psychiatric disorders. However, on the contrary, these special populations also have specific health care needs, including mental health, which are often overlooked by doctors as well as family members.

Deficits in knowledge about psychiatric disorders became obvious when nearly half the respondents could not identify the risk factors or etiological factors contributory toward psychiatric disorders. Certain stressors like interpersonal relationship difficulty, childhood trauma, and increased tensions in life were given more weightage by students, especially by those in the 1st year. Other factors like decreased libido or excessive masturbation did not receive much approval from the students as risk factors. This may be attributed to increased awareness about sexuality and sexual knowledge in the adolescent and early adulthood population in today’s sociocultural scenario, and not necessarily due to an increase in knowledge regarding psychiatric disorders.

Regarding the presumed etiology of psychiatric disorders, the majority of the respondents cited factors like neurotransmitters and genetic disturbances. An equal importance was also laid upon social circumstances. A significant majority of students also disagreed on other commonly held notions that were put forth as God’s punishment, past sins, air pollution, or loss of semen.

As the students progressed along their course from the 1st year to final year, the trend of responses obtained varied with respect to factual knowledge regarding psychiatric disorders and treatment modalities. Most of the factually correct responses were provided by the final year students (57.53%), while most the 1st year students either held misconceptions about the areas assessed or were not sure about the query made. Considering that the students from the first professional phase had not been formally exposed to psychiatry, while the students from the second and final professional phases had been exposed to psychiatric teaching in their respective colleges’ adequately functional departments as per the currently recommended curriculum, this finding highlights that exposure to psychiatry could improve the knowledge base of medical students. Similar observations have also been made in previous studies. However, even after exposure to psychiatry as per the recommended curriculum, 42.47% of the final year students still gave either factually incorrect or ambivalent responses, which reflects that while knowledge improved along the course, yet gaps in knowledge remained, highlighting the insufficiency of the current curriculum design in bringing about a positive change. These gaps in knowledge have been highlighted by other studies as well.

While factual knowledge about psychiatric disorders and treatment modalities was noticed to improve from the 1st year to final year, a similar trend was not seen in other areas pertaining to overall perception and attitude toward psychiatric disorders. Even after exposure to psychiatric postings, only a minority of students (6.1%) reported of any empathy toward patients with psychiatric disorders.

In certain aspects, positive outcomes were also noted in this study regarding outlook toward psychiatry and psychiatrists. The majority of the students had positive views about psychiatrists. Half of the students thought of psychiatry as a glamorous and stimulating discipline, with psychiatric practice perceived to have promising prospects. The majority of the students held an optimistic view about treatability of psychiatric disorders (61.6%) and the positive outlook toward psychotherapy (80%) and M-ECT (72.02%) was overwhelming. These finding came as a pleasant surprise as compared to previous studies, which had reported bleaker figures, with fewer respondents viewing psychiatry and psychiatrists in a positive light. A positive transformation in the public perception of psychiatry in India has been emerging with changing times. Positive opinions regarding psychiatry and psychiatrists may indicate a changing trend in the outlook of medical students and hopefully shall help boost the morale of mental health professionals.

Positive outlook in these aspects could be due to the fact that psychiatry as a department was well established and functional in all the three medical colleges where the study was conducted and this could have influenced the student’s personal opinions. Moreover, Karnataka has been among the early states in the country to receive community-based mental health programs, which could have also played an
important role in enhancing the general awareness and attitude toward psychiatry.

Even with these positive figures, only one-fourth of the students were open to considering psychiatry as a career choice in the future while the majority were either unsure did not wish to do so. Considering the fact that the median number of psychiatrists in India is only 0.2/100,000 population, compared to a global median of 1.2,[26] this is an alarming situation in a country like ours, where we are already falling short of mental health professionals.

CONCLUSION

The undergraduate medical student population had significant shortcomings in knowledge and attitude pertaining to psychiatric disorders, more glaring in the initial years of education. A comparatively positive opinion was obtained regarding psychiatry and psychiatrists, which may reflect the changing trends and concepts, both in society and medical community. This may also, hopefully, help in boosting the morale of mental health professionals. The study highlights the need for better educational measures at the undergraduate level in order to address the current pitfalls. This could help in shaping a positive attitude of the health care providers toward psychiatry and thereby reduce stigma and discrimination surrounding psychiatric disorders.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. WHO. Investing in Mental Health Magnitude and burden of mental disorders. Geneva: WHO; 2003. p. 8.
2. Jugul K, Mukherjee R, Parashar M, Jiloha RC, Ingle GK. Beliefs and attitudes towards mental health among medical professionals in Delhi. Indian J Community Med 2007;32:198-200.
3. Jiloha RC. Image of psychiatry among medical community. Indian J Psychiatry 1989;31:285-7.
4. Malhi GS, Parker GB, Parker K, Carr VJ, Kirkby KC, Yellowlees P, et al. Attitudes toward psychiatry among students entering medical school. Acta Psychiatr Scand 2003;107:424-9.
5. Minhas FA, Mubbasher MH. Attitude of medical students towards psychiatry in Pakistan. J Coll Physicians Surg Pak 2003;10:69-72.
6. Murthy RS, Khandelwal S. Undergraduate training in psychiatry: World perspective. Indian J Psychiatry 2007;49:169-74.
7. Mukherjee R, Fialho A, Wijetunge K, Checinski K, Surgenor T. The stigmatization of psychiatric illness: The attitudes of medical students and doctors in a London teaching hospital. Psychiatr Bull 2002;26:178-81.
8. Kishore J, Gupta A, Jiloha RC, Bantman P. Myths, beliefs and perceptions about mental disorders and health-seeking behavior in Delhi, India. Indian J Psychiatry 2011;53:324-9.
9. Trivedi JK, Dhyani M. Undergraduate psychiatric education in South Asian countries. Indian J Psychiatry 2007;49:163-5.
10. Thirunavukarasu M, Chethuri SD, Pragatheeshwar KD, Thirunavukarasu P. Public perception of psychiatry in India: a changing landscape. Indian J Psychiatry 2012;54:6-7.
11. Rao TS, Rao KN, Rudrappa DA, Reddy DR. Medical students attitudes to psychiatry. Indian J Psychol Med 1989;12:29-35.
12. Rao TS, Rao KN, Rudrappa DA, Reddy DR. Medical students attitudes to psychiatry: Interest to specialize in psychiatry. Indian J Psychol Med 1989;12:23-8.
13. Prabhakaran RR, Murugappan M, Devar JV. Undergraduate psychiatric education and attitudes of medical students toward psychiatry. Indian J Psychol Med 1989;12:29-35.
14. Kumar A, Goyal U, Ganesh KS, Srivastava MK, Gautam BD, Kumar R. Attitude of postgraduate residents towards psychiatry. Indian J Psychiatry 2001;43:2.
15. Alexander PJ, Kumaraswamy N. Senior medical students’ attitude towards psychiatry: relationship with career interest. Indian J Psychiatry 1993;35:221-4.
16. Mukherjee R, Kishore J, Jiloha RC. Attitude towards psychiatry and psychiatric illness among medical professionals. Delhi Psychiatry Bull 2006;9:34-8.
17. Chawla JM, Balhara YP, Sagar R, Shivaprakash. Undergraduate medical students’ attitude toward psychiatry: a cross-sectional study. Indian J Psychiatry 2012;54:37-40.
18. Rajagopalan M, Kuruvilla K. Medical students’ attitudes towards psychiatry: effect of a two week posting. Indian J Psychiatry 1994;36:177-82.
19. Gulati P, Das S, Chavan BS. Impact of psychiatry training on attitude of medical students towards mental illness and psychiatry. Indian J Psychiatry 2014;56:271-7.
20. Feldmann TB. Medical students’ attitudes toward psychiatry and mental disorders. Acad Psychiatry 2005;29:354-6.
21. Mukherjee R, Fialho A, Wijetange A, Checinski K, Surgenor T. The stigmatization of psychiatric illness: The attitudes of medical students and doctors in a London teaching hospital. Psychiatr Bull 2002;26:178-81.
22. Baxter H, Singh SP, Standen P, Duggan C. The attitudes of tomorrow’s doctors’ towards mental illness and psychiatry: changes during the final undergraduate year. Med Educ 2001;35:381-3.
23. Wilkinson DG, Toone BK, Greer S. Medical students’ attitudes to psychiatry at the end of the clinical curriculum. Psychiatr Med 1983;13:655-8.
24. Feifel D, Moutier CY, Swedlow N R. Attitudes toward psychiatry as a prospective career among students entering medical school. Am J Psychiatry 2014;9:1397-1402.
25. 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.
26. Trivedi JK, Dhyani M. Undergraduate psychiatric education in South Asian countries. Indian J Psychiatry 2007;49:163-5.