



A cross-sectional study of attitude towards psychiatry among undergraduate medical students

Abstract

Background: Psychiatric disorders are common, affecting millions of population worldwide. Patients with psychiatric disorders, psychiatrists as professionals, and psychiatry as a subject are seen in negative attitudes. Prejudices and negative attitudes exist among medical professionals as well. **Aims:** This study aims to know the attitude of undergraduate medical students towards psychiatry and compare the attitude among students with or without exposure to clinical psychiatry postings. **Materials and methods:** This is a descriptive, cross-sectional study conducted at a medical college, Karnataka, South India. Undergraduate students belonging to all phases and consenting for the study were the participants. They were considered into two groups, students not exposed to psychiatry clinical posting and students exposed to psychiatry clinical postings, respectively. Apart from collecting sociodemographic details, a self-administered Attitude Towards Psychiatry-30 items questionnaire was used t-test, chi-square/Fisher's exact test were used for statistical analyses. **Result:** The sample consisted of 484 students, of which 52.3% vs 47.7% of students were not exposed to psychiatry vs exposed to psychiatry clinical postings respectively. Overall students reported having a positive attitude towards psychiatry. We found 96.1% of students with clinical exposure to psychiatry have a better attitude compared to 86.9% of students not exposed to psychiatry clinical postings. **Conclusion:** A positive attitude towards psychiatry is necessary for better care of patients as well as to reduce stigma regarding mental illness. As clinical exposure improves the positive attitude, there is always a scope for improvements in the form of better psychiatry training at the undergraduate level.

Keywords: Medical Undergraduates. Psychiatrist. Psychiatric Hospital. Psychiatric Illness.

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Received: 5 August 2019

Revised: 19 September 2020

Accepted: 22 September 2020

Epub: 26 September 2020

DOI: 10.5958/2394-2061.2021.00015.X

INTRODUCTION

People with mental illness are among the most stigmatised, marginalised, and vulnerable members of society, and suffer from discrimination in many areas of daily life as a consequence of their illness.[1] Medical students often have stigmatised views towards mental illness before the commencement of their medical training.[2,3] Medical undergraduate training renders a chance to teach and promote psychiatry to students, and inculcate interest to choose psychiatry as a career specialty. However, while they have a positive effect on students' attitude towards psychiatry, there is mixed evidence of their impact on psychiatry as a career choice.[4] To investigate the influence of psychiatry clinical posting on attitude towards psychiatry among undergraduate medical students, and apparent disparity between positive attitude towards psychiatry as a discipline and negative attitude towards psychiatry as a career, a survey of undergraduate medical students was undertaken at a medical college.

MATERIALS AND METHODS

This is a descriptive, cross-sectional study conducted at Adichunchanagiri Institute of Medical Sciences and Research Center, a constituent college of Adichunchanagiri University, a tertiary care hospital in Karnataka, South India. The sample comprised of medical undergraduate students from all four professional phases of Bachelor of Medicine, Bachelor of Surgery (MBBS) who are currently studying in the institute. They were recruited using purposive sampling. The study was conducted for three months from January to March 2019. Clearance from the Institute's Ethics Committee was obtained before starting the study. Informed consent was taken from all students. Then, specially constructed semi-structured proforma and a standardised self-answering questionnaire called Attitude Towards Psychiatry-30 items (ATP-30)[5] were given to the participants.

Inclusion criteria

1. Medical students who are studying for MBBS degree.
2. Medical students providing informed consent.

Exclusion criteria

1. Students having first- or second-degree relatives with a current psychiatric disorder.
2. Students undergoing treatment for mental health problems.

Tools of assessment

Semi-structured proforma

It contained sociodemographic details like name, age, gender, year of education, residential background, family and personal history of psychiatric illnesses and treatment.

Attitude Towards Psychiatry (ATP-30) questionnaire

The Attitude Towards Psychiatry-30 items (ATP-30) is a five-point Likert scale designed and developed by Burra *et al.*[5] The scale consists of 30 positively and negatively phrased items which have been validated for assessing the attitude of different population towards psychiatry measuring the respondents' attitude to psychiatric patients, psychiatric illness, psychiatrists, psychiatry career choice, psychiatric treatment, psychiatric institutions, and psychiatry teaching. It takes around ten minutes for each student. Each student can give his or her opinion as one - agree strongly; two - agree; three - no opinion/neutral; four - disagree, and five - disagree strongly. A score of one denotes a highly positive attitude, five denote a highly negative attitude, and three denote a neutral response. The score of each positively phrased item was converted by subtracting it from six. The total global scores range from 30 to 150. A global score of <90 (scores of one and two combined) suggests a negative attitude to psychiatry, a score of >90 (scores of four and five combined) denotes an overall positive attitude, and while a global score of 90 (average score of three) is considered to represent a neutral attitude.

Statistical analysis

Data was collected and tabulated using Microsoft excel. For qualitative data, mean and standard deviation (SD) were calculated. For quantitative data, frequency and percentages were calculated. An unpaired t-test was used for continuous variables. A chi-square/Fisher's exact test has been used to find the significance of study parameters on a categorical scale between two or more variables. A p value is significant statistically if it is ≤ 0.05 . The analysis was done using Statistical Package for the Social Sciences (SPSS) version 11.

RESULTS

The total number of consenting participants was 524; out of which, 40 were excluded from analysis due to the following reasons: 37 of them were incomplete responses, one had family history of mental illness (depression) and had taken treatment for depression, and two were on treatment for anxiety and depression. Out of 484, 253 (52.27%) were undergraduate students who had not attended psychiatry clinical postings and 231 (47.73%) had attended psychiatry clinical postings. All of them completed the questionnaire and submitted to the investigator. For purposes of the intergroup comparison of

sociodemographic and attitudinal differences, the chi-square test and student's t-test were utilised.

The mean age of the students attending and not attending psychiatry clinical postings was 19.03 (SD: 1.08) years and 21.14 (SD: 0.99) years respectively ($p < 0.001$), minimum age 18 years and maximum 24. There was no statistically significant difference in other sociodemographic characteristics (Table 1). Undergraduate students who have attended psychiatry clinical postings showed a more positive attitude than students who have not attended psychiatry clinical postings (96.1% vs. 86.9%) ($p < 0.001$) (Tables 2) and as mentioned in Table 3.

DISCUSSION

The attitude towards psychiatry is very important because undergraduate students are going to be involved in the care of patients with psychiatric illnesses either directly or indirectly in their future careers. Overall undergraduate medical students show positive attitude towards psychiatry using ATP-30 scale, but when compared with students with or without two weeks of clinical psychiatry posting exposure, majority of the students (96.1%) who have attended psychiatry clinical posting as a part of medical curriculum show more positive attitude than (86.9%) students who have not attended psychiatry clinical postings that is statistically significant. Only three percent of students show a negative attitude towards psychiatry even after exposure to psychiatry clinical posting compared to 12.3% of students who have not attended psychiatry clinical posting. These study findings are similar to studies which show improvement in attitude after clinical exposure to patients with psychiatric problem.[5-7] A few studies show the psychiatry course could not improve the attitude of the medical students. Poor awareness, lack of proper exposure and training in psychiatry may be postulated as probable reasons.[8-13]

Medical undergraduate students at Adichunchanagiri Institute of Medical Sciences have shown a lot of interest in psychiatry by participating in national and state-level psychiatry quiz activities regularly over a decade and also by attending clinical postings regularly.[14] It is likely that the interest aroused in psychiatry may be the reason that the present study shows a more positive attitude towards psychiatry among undergraduate medical students. Although the ATP-30 scores recorded were comparable to previous studies conducted elsewhere, direct comparisons were difficult due to differences in the methodologies of the studies and the level of training of the participants. It has been demonstrated that favourable attitude gained soon after exposure to an internship in psychiatry decline with time [9,15,16] Therefore, the increase in the ATP-30 scores needs to be interpreted with caution.

Psychiatric illness

The majority of students (80.1%) who have attended psychiatry clinical posting agree that it is interesting to try to unravel the cause of a psychiatric illness that is statistically significant compared to students (66.7%) who have not attended clinical postings. A study in India by Tharyan *et al.*[10] and Parikh *et al.*[17] also had similar findings. As aetiology of most

Table 1: Sociodemographic characteristics of the participants (n=484)

Sociodemographic characteristics	Unexposed (n=253)	Exposed (n=231)	Total (n=484) p value
Age (in years)	19.03±1.08	21.14±0.99	t=22.37 p<0.001* df=482
Gender			
Male	114 (45.1%)	94 (40.7%)	$\chi^2=0.94$
Female	139 (54.9%)	137 (59.3%)	p=0.33 df=1
Religion			
Hindu	232 (91.7%)	203 (87.9%)	p=0.542
Muslim	11 (4.3%)	13 (5.6%)	(FET)
Christian	8 (3.2%)	12 (5.2%)	
Others	2 (0.8%)	3 (1.3%)	
Year of MBBS			
1st year	137 (54.2%)	-	
2nd year	116 (45.8%)	-	
3rd year	-	104 (45%)	
4th year	-	127 (55%)	
Type of family			
Nuclear	190 (75%)	179 (77.5%)	$\chi^2=2.71$
Extended family	31 (12.3%)	33 (14.3%)	p=0.26
Joint family	32 (12.7%)	19 (8.2%)	df=2
Place			
Rural	65 (25.7%)	75 (32.5%)	$\chi^2=2.69$
Urban	188 (74.3%)	156 (67.5%)	p=0.10 df=1

*=Statistically significant, t=Unpaired t-test, χ^2 =Chi-square test, FET=Fisher's exact test, df=Degree of freedom, MBBS=Bachelor of Medicine, Bachelor of Surgery

Table 2: Comparison of ATP-30 total score between undergraduate medical students without or with exposure to psychiatric clinical postings

ATP-30	Unexposed	Exposed	p value
Positive (>90)	220 (86.9%)	222 (96.1%)	p<0.001*
Neutral (=90)	2 (0.8%)	2 (0.9%)	(FET)
Negative (<90)	31 (12.3%)	7 (3%)	
Total	253	231	

ATP-30=Attitude Towards Psychiatry-30 items, *=Statistically significant, FET=Fisher's exact test

psychiatric illness is hypothetical, students are keen to know what could be possible causes leading to psychiatric illness.

Psychiatric institutions and treatments

Majority of students who have attended psychiatry clinical posting agree that psychiatric hospitals have a specific contribution to make for the treatment of the mentally ill, also disagree that psychiatric hospitals are little more than prisons and the practice of psychotherapy basically is fraudulent since there is no strong evidence that it is effective. It is statistically

significant compared to students who have not attended clinical postings. Though it is not a statistically significant difference between the two groups, majority of them agree that psychiatric treatment causes patients to worry too much about their symptoms.

Similar findings were seen in studies by Corrigan *et al.*[18,19] that educating the young doctors will improve awareness about the management of mental illness. There were a few studies in European countries[20,21] and India[22,23] that show a lack of belief in the efficacy of psychiatric treatment. May be two weeks of clinical posting was not enough to know about the outcome of treatment of mental illness, and clinical posting focuses more on basic common illness and treatment, more exposure to psychiatry might require them to get to know better about the course and prognosis of mental illness.

Psychiatry knowledge and teaching

Majority of students who have attended psychiatry clinical posting for two weeks agree that psychiatry is a respected branch of medicine, also disagree that psychiatry is so unscientific that even psychiatrists cannot agree as to what its

Table 3: Comparison of ATP-30 scores (item wise) between undergraduate medical students without or with exposure to psychiatric clinical postings

Items	Unexposed		Exposed		p value df=1
	Agree	Disagree	Agree	Disagree	
Psychiatric patients					
27. If we listen to them, psychiatric patients are just as human as other people.	175 (69.4%)	36 (14.3%)	152 (65.9%)	37 (16%)	$\chi^2=0.42$ p=0.52
29. Psychiatric patients are often more interesting to work with than other patients.	142 (56.3%)	30 (11.9%)	133 (57.5%)	27 (11.7%)	$\chi^2=0.02$ p=0.89
Psychiatric illness					
12. Psychiatric illness deserves at least as much attention as physical illness.	201 (80.1%)	19 (7.8%)	211 (91.3%)	9 (3.9%)	$\chi^2=3.814$ p=0.051
18. It is interesting to try to unravel the cause of psychiatric illness.	168 (66.7%)	21 (8.4%)	185 (80.1%)	7 (3%)	$\chi^2=7.796$ p=0.005*
Psychiatrists					
15. Psychiatrists tend to be at least as stable as the average doctor.	147 (58.6%)	31 (12.4%)	134 (58%)	17 (7.3%)	$\chi^2=2.49$ p=0.12
2. Psychiatrists talk a lot but do very little.	38 (15.1%)	157 (62.6%)	24 (10.4%)	168 (72.2%)	$\chi^2=3.51$ p=0.06
7. Psychiatrists seem to talk about nothing but sex.	21 (8.4%)	167 (66.6%)	7 (3%)	205 (88.7%)	$\chi^2=9.48$ p=0.002*
17. Psychiatrists get less satisfaction from their work than other specialists.	54 (21.4%)	111 (44.1%)	59 (25.5%)	96 (41.5%)	$\chi^2=0.99$ p=0.32
19. There is very little that psychiatrists can do for their patients.	37 (14.7%)	170 (67.4%)	32 (13%)	155 (67.3%)	$\chi^2=0.04$ p=0.84
22. At times, it is hard to think of psychiatrists as equal to other doctors.	74 (29.4%)	120 (47.6%)	43 (18.6%)	136 (58.9%)	$\chi^2=8.62$ p=0.003
Psychiatric knowledge					
11. Psychiatry is a respected branch of medicine.	193 (76.9%)	18 (7.2%)	195 (84.4%)	3 (1.3%)	$\chi^2=8.93$ p=0.003*
13. Psychiatry has very little scientific information to go on.	65 (25.9%)	114 (45.4%)	52 (22.5%)	105 (45.5%)	$\chi^2=0.38$ p=0.54
24. Psychiatry is so unscientific that even psychiatrists cannot agree as to what its basic applied sciences are.	43 (17.1%)	104 (41.3%)	26 (11.3%)	121 (52.4%)	$\chi^2=5.47$ p=0.02*
26. Most of the so-called facts in psychiatry are really just vague speculations.	47 (18.7%)	81 (32.1%)	37 (16%)	96 (41.6%)	$\chi^2=2.38$ p=0.12
Psychiatric treatments					
5. It is quite easy for me to accept the efficacy of psychotherapy.	93 (37.1%)	45 (17.9%)	91 (39.4%)	37 (16%)	$\chi^2=0.43$ p=0.51
14. With the forms of therapy now at hand, most psychiatric patients improve.	187 (74.5%)	15 (6%)	175 (75.8%)	11 (4.8%)	$\chi^2=0.35$ p=0.55
25. In recent years, psychiatric treatment has become quite effective.	193 (76.6%)	17 (6.8%)	195 (84.4%)	13 (5.6%)	$\chi^2=0.53$ p=0.47
8. The practice of psychotherapy basically is fraudulent since there is no strong evidence that it is effective.	32 (12.7%)	131 (52.2%)	15 (6.5%)	169 (73.2%)	$\chi^2=9.73$ p=0.002

(Contd...)

Table 3: (Continued)

Items	Unexposed		Exposed		p value df=1
	Agree	Disagree	Agree	Disagree	
16. Psychiatric treatment causes patients to worry too much about their symptoms.	102 (40.5%)	69 (27.3%)	113 (48.9%)	50 (21.7%)	$\chi^2=3.41$ p=0.07
Psychiatry as a career choice					
4. I would like to be a psychiatrist.	80 (31.9%)	64 (25.5%)	41 (17.7%)	76 (32.9%)	$\chi^2=10.92$ p<0.001*
28. The practice of psychiatry allows the development of really rewarding relationships with people.	179 (71%)	14 (5.6%)	187 (81%)	12 (5.2%)	$\chi^2=0.24$ p=0.63
1. Psychiatry is unappealing because it makes so little use of medical training.	46 (18.3%)	136 (54.2%)	17 (7.4%)	178 (77.1%)	$\chi^2=18.54$ p<0.001*
6. On the whole, people taking up psychiatric training are running away from participation in real medicine.	73 (29.1%)	111 (44.2%)	40 (17.3%)	122 (52.8%)	$\chi^2=8.79$ p=0.003*
21. If I were asked what I considered to be the three most exciting medical specialties'; psychiatry would be excluded.	59 (23.4%)	103 (40.9%)	88 (38.1%)	80 (34.7%)	$\chi^2=8.51$ p=0.004*
Psychiatric institutions					
20. Psychiatric hospitals have a specific contribution to make to the treatment of the mentally ill.	176 (69.8%)	34 (13.5%)	183 (79.2%)	16 (6.9%)	$\chi^2=6.33$ p=0.01*
3. Psychiatric hospitals are little more than prisons.	67 (26.7%)	104 (41.4%)	33 (14.3%)	134 (58%)	$\chi^2=15.29$ p<0.001*
Psychiatry teaching					
9. Psychiatric teaching increases our understanding of medical and surgical patients.	167 (66.5%)	33 (13.2%)	150 (64.9%)	18 (7.8%)	$\chi^2=2.56$ p=0.11
10. The majority of students report that their psychiatric undergraduate training has been valuable.	143 (57%)	16 (6.4%)	115 (49.8%)	23 (10%)	$\chi^2=2.82$ p=0.09
23. These days psychiatry is the most important part of the curriculum in medical schools.	170 (67.5%)	21 (8.4%)	137 (59.3%)	43 (18.7%)	$\chi^2=10.79$ p=0.001*
30. Psychiatry is so amorphous that it cannot really be taught effectively.	81 (32.1%)	65 (25.6%)	77 (33.3%)	64 (27.7%)	$\chi^2=0.02$ p=0.88

ATP-30=Attitude Towards Psychiatry-30 items, *=Statistically significant, χ^2 =Chi-square test, df=Degree of freedom

basic applied sciences are, and agree that these days psychiatry is the most important part of the curriculum in medical schools that is statistically significant compared to students who have not attended clinical postings. Also, in the previous study done by Konwar *et al.*[24]and Mutalik *et al.*[25] from India, undergraduate medical students were found to have multiple lacunae in their knowledge towards psychiatry, psychiatric disorders, psychiatric patients, and psychiatric treatment which however was found to be less in the students who had undergone two weeks' clinical training. As the method of teaching undergraduate medical students from the current year is phase-wise competence-based teaching, it probably removes biases about the type of teaching done by different other subjects.

Psychiatrist and psychiatry as a career

Majority of the students who have attended psychiatry clinical posting disagree that psychiatrists seem to talk

about nothing but sex and it is hard to think of psychiatrists as equal to other doctors, 32.9% disagree to become psychiatrist, 54.2% disagree that psychiatry is unlikeable because it makes so less use of medical training. 52.8% students disagree that on the whole, people taking up psychiatric training are running away from participation in real medicine and 38.1% agree that "If I were asked what I considered to be the three most exciting medical specialties, psychiatry would be excluded" that is statistically significant compared to 40.9% students who have not attended clinical postings. Results were similar to a study conducted by Aruna *et al.*,[26] but many studies show a psychiatrist in negative response.[27-30] Positive attitude towards psychiatrist indicates a changing trend among students about psychiatrist.

Several previous studies have shown a dissonance between favourable attitude and the intention to choose psychiatry as a future career,[31-33] whereas the study

showed a nearly three-fold increase in the likelihood of pursuing a career in psychiatry from 9.4% to 25.8%. Similar improvements have been recorded following eight-week clinical attachments in both developed and developing countries.[34-36]

The negative attitude was not the only reason for refraining from choosing this field for one's future career. Other reasons such as more of subjective history taking and less objective examinations, psychiatry subject being not as per their expectations, low employment opportunities for graduates in this field, low income, and stigma attached to psychiatry also may have role in students not opting for psychiatry as career.

Limitations

There is a need to conduct multi-centric studies involving larger samples to arrive at the generalisability of this finding.

Conclusions

The current study shows an overall positive attitude towards psychiatry amongst undergraduate medical students. Clinical exposure in psychiatry improves their positive attitude and also shows that the choice of career depends on multiple factors not only on a positive attitude towards psychiatry.

ACKNOWLEDGMENTS

We thank all the participating students and also extend our gratitude to the principal for permitting to conduct this study.

AUTHOR CONTRIBUTIONS

SKBK had a role in conceptualising, acquisition, analysis, and interpretation of the data along with drafting of the work and revising it critically. NRB helped in acquisition and analysis. VHR contributed for acquisition and interpretation of the data apart from providing intellectual content and revising the draft. All the authors had role in final approval of the version and agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work.

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Source of support: Nil. **Declaration of interest:** None.