



Comparison of attitudes toward psychiatry among undergraduate and postgraduate medical students

Abstract

Introduction: Attitudes toward psychiatry among medical students will have a great impact on future of expanding psychiatry and breaking barriers at multiple levels. **Aims:** To assess and compare the attitudes of undergraduate (UG) and postgraduate (PG) medical students toward psychiatry and assess association between sociodemographic variables and attitudes toward mental illness. **Methods:** A cross-sectional study conducted in a tertiary health care centre, total of 100 (50 UG and 50 PG) medical students were recruited in the study. A standardised questionnaire, Attitudes Toward Psychiatry-30 items (ATP-30) and semi-structured proforma for sociodemographic details were given to study subjects to fill up. **Statistical analysis:** Both quantitative and qualitative measures of data were calculated. Statistical significance was kept at p-value of <0.05, using Fisher's exact test and Chi-square test. Data were analysed using Statistical Package for the Social Sciences (SPSS) version 21. **Results:** The overall ATP-30 score responses were positive (>90) in both males (88%) and females (62%). More number of positive responses were seen in both UG (68%) and PG (84%) medical students compared to only some negative responses in UG (22%) and PG (16%). This difference is significant at p-value <0.05. There is a significant difference (p-value <0.05) in attitudes among UG and PG students in item number four revealing 32% PGs wish was to be psychiatrist. Majority of the UGs and PGs agreed that UG psychiatric training is valuable. **Conclusion:** We have found overall good attitudes toward psychiatry in the study population but conflicting interest in taking psychiatry as career choice.

Keywords: Stigma. Mental Illness. Psychiatry Training. Prejudice.

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INTRODUCTION

With the increase in recent researches in the field of neurobiological basis of various mental illnesses and advent of newer molecules for the treatment of the same, psychiatry has been an emerging branch in the field of medicine. With this background, there is an increasing tendency to consider most of the mental illness as a result of some aberrations in the molecular neurobiology. But, unfortunately, the attitudes and level of awareness of general public and particularly of health professionals toward mental illness is not positive. It has been found that the attitudes and knowledge of health professionals toward mental illness is one of the major determinants of the quality and outcome of care for mentally ill.[1,2] Mental health has always been the subject of negligence and undue suppression. Worldwide, mental illness has faced high levels of ignorance, discrimination, and prejudice even by health professionals. It is an ongoing concern that psychiatry, psychiatrists, psychiatric illness, and psychiatric patients are affected by negative prejudice.[3]

Attitude is a mature way of thinking or expression about particular object or a situation as per one's preferences. Attitudes of medical students toward psychiatry is utmost important as they are going to be the budding population

in health sector. Their knowledge, attitudes toward mental illness will guide and lit lamp for general population against stigma toward mental illness. Amongst the medical students, studies give a mixed picture of some pointing toward positive attitude[4] while majority pointing toward a more negative one.[2,5] Difference in attitudes among medical students arise in choosing psychiatry as a career option due to various factors- inadequate awareness, exposure, lack of familiarity about psychiatric illnesses. As of general public, they also share same superstitious belief and practices toward mental illness due to inadequate knowledge. Some studies reported that undergraduate (UG) psychiatry training is disorganised and improper. While other studies report that psychiatrists earn less money, have less respect and prestige in society.[6]

Medical students' attitudes toward psychiatry greatly influence their decisions to pursue psychiatry as a career and also help in their future relationships with psychiatric patients.[7,8] In India, the problem of negative attitudes toward psychiatry is graver, owing to prevailing stigma toward mental illness in society and more religious, magical, and supernatural beliefs regarding aetiology and treatment approaches for mental illness, mostly in the rural areas.[4,9] It is important to understand the existing attitudes of the future

specialist doctors and the other hospital staffs toward mental illness as their negative attitudes, or any misconception about mental illness will affect not only the psychiatric patients, but society at large because a common person will always follow and get influenced by what these specialist doctors have to say.

With this background, we planned to investigate the attitudes of UG and postgraduate (PG) medical students of a tertiary hospital.

Aims and objectives

To assess and compare the attitudes of UG and PG medical students toward psychiatry.

MATERIALS AND METHODS

Study design

A cross-sectional study was conducted at Silchar Medical College and Hospital (SMCH), Silchar, Assam, a tertiary healthcare centre in North-Eastern part of India.

Study group

UG and PG medical students studying at SMCH.

Study period

From December 2018 to November 2019.

Inclusion criteria

- 1) Age between 18-40 years.
- 2) UG and PG medical students.
- 3) Participants who have given written informed consent to participate in the study.

Exclusion criteria

- 1) Psychiatry PG students.

Collection of samples

Institute's Ethics Committee clearance was obtained and study subjects were enrolled keeping in mind the inclusion and exclusion criteria. Fifty UG and 50 PG medical students (a total of 100) were recruited for the study. A standardised and a structured questionnaire, Attitudes Toward Psychiatry-30 items (ATP-30)[10] and semi-structured proforma for sociodemographic details, respectively were given to study subjects to fill-up.

Semi-structured proforma

For sociodemographic details like name, age, gender, and family type, semi-structured proforma was used.

ATP-30 scale

ATP-30 was designed and validated in Canada by Burra *et al.*[10] It is a five-point Likert scale. ATP-30 scale, a 30-item Likert scale has been validated for assessing the attitudes of different populations toward psychiatry. The scale consists of

30 statements, 15 positively phrased items and 15 negatively phrased items, measuring responses toward psychiatry. It can be responded within ten minutes by the study subjects. Each participant can respond to the items from one to five as "Strongly agree", "Agree", "No opinion/neutral", "Disagree", and "Strongly disagree". The total attitude score arranges from 30-150, after adding up all score responses. A total mean score of 90 indicates a neutral attitude toward psychiatry and score of higher than 90 indicates positive attitudes while score of less than 90 indicates negative attitudes toward psychiatry.[10,11]

Statistical analysis of data

Data were collected and tabulated using Microsoft excel. Both quantitative and qualitative measures of data were calculated. Statistical significant was kept at p-value of <0.05, using Fisher's exact test and Chi-square test. Analysis of data was done by using Statistical Package for the Social Sciences (SPSS) version 21.

RESULTS

Total number of participants in our study was 100 of which 50 were UG students and 50 were PG students. Sixty per cent of the participants were male and 40% females. Sixty eight per cent of the participants belonged to Hindu religion, 29% to Muslim religion, and three per cent to others. Sixty two per cent belonged to urban area and 38% belonged to rural area. Of all the participants, 82% belonged to nuclear family and 18% belonged to joint family.

As shown in Table 1, the overall ATP-30 score responses were positive (>90) in both males (88%) and females (62%). More number of positive responses were seen in both UG (68%) and PG (84%) medical students compared to only some negative responses in UG (22%) and PG (16%). This difference is significant at p-value <0.05.

Table 2 shows the gender differences of responses to ATP-30 scale. Medical students of both genders, none agreed to psychiatry as unappealing and use of little medical training, while 18% male and 15% female gave neutral response. Item four response, i.e. taking psychiatry as career, 17% male and 15% female affirmed to it. Rest 53.3% male and 48% female had responded as neutral.

There is a significant difference (p-value <0.05) in attitudes among UG and PG students in item number four revealing 70% of UGs gave neutral response and 32% PGs' wish was to be psychiatrist (Table 3). Most of the UG students (70%) and PGs (52%) agreed that psychiatric teaching increases their understanding of medical and surgical patients. This differences in understanding is significant at p-value <0.05. Majority of the UGs and PGs agreed that UG psychiatric training is valuable.

Majority of UG and PG medical students agreed to psychiatry as a respected branch of medicine. Total 100% female students agreed to this and 85% male students. None of the male PG students disagreed to item number 15 of considering psychiatrist as least stable with significant gender differences of p-value <0.05. UG students (46%) considered

Table 1: Overall ATP-30 score responses in the study populations

Gender and medical students	ATP-30 score response			Chi-square test	df	p-value
	Positive (>90)	Neutral (=90)	Negative (<90)			
Male	44 (88%)	4 (8%)	12 (24%)	0.889	2	0.641
Female	31 (62%)	1 (2%)	8 (16%)			
Undergraduate	34 (68%)	5 (10%)	11 (22%)	6.316	2	<0.05
Postgraduate	42 (84%)	0	8 (16%)			

ATP-30: Attitudes Toward Psychiatry-30 items, df: degree of freedom

Table 2: Comparison of attitudes among gender

ATP-30 scale	Male			Female			Fisher's exact test	df	p-value
	Agree	Neutral	Disagree	Agree	Neutral	Disagree			
Item 1	0	11 (18%)	49 (81%)	0	6 (15%)	34 (85%)	0.189	2	0.440
Item 2	1 (1.67%)	23 (38%)	36 (60%)	0	12 (30%)	28 (70%)	1.448	2	0.639
Item 3	16 (27%)	6 (10%)	38 (64%)	9 (23%)	2 (5%)	29 (73%)	1.114	2	0.575
Item 4	10 (17%)	32 (53.3%)	18 (30%)	6 (15%)	19 (48%)	15 (38%)	0.644	2	0.759
Item 5	13 (22%)	10 (17%)	37 (62%)	9 (23%)	18 (45%)	13 (33%)	10.825	2	<0.05
Item 6	5 (8.3%)	8 (13.33%)	47 (78%)	1 (2.5%)	7 (18%)	32 (80%)	1.512	2	0.477
Item 7	2 (3.3%)	14 (23.3%)	44 (73%)	1 (2.5%)	5 (13%)	34 (85%)	1.998	2	0.363
Item 8	8 (13.3%)	9 (15%)	43 (72%)	2 (5%)	8 (20%)	30 (75%)	1.973	2	0.398
Item 9	34 (57%)	19 (32%)	7 (12%)	27 (68%)	7 (18%)	6 (15%)	2.541	2	0.306
Item 10	20 (33.3%)	24 (40%)	16 (27%)	12 (30%)	15 (38%)	13 (33%)	0.436	2	0.843
Item 11	51 (85%)	5 (8.3%)	4 (6.67%)	40 (100%)	0	0	5.992	2	<0.05
Item 12	56 (93.3%)	1 (1.67%)	3 (5%)	40 (100%)	0	0	2.290	2	0.031
Item 13	17 (28.3%)	35 (58.3%)	8 (13.3%)	11 (28%)	17 (43%)	12 (30%)	4.394	2	0.108
Item 14	44 (73.3%)	5 (8.3%)	11 (18.3%)	25 (63%)	6 (15%)	9 (23%)	1.664	2	0.429
Item 15	45 (75%)	15 (25%)	0	29 (73%)	6 (15%)	5 (13%)	8.220	2	<0.05
Item 16	26 (43.3%)	19 (31.67%)	15 (25%)	15 (37.5%)	21 (52.5%)	4 (10%)	5.545	2	0.063
Item 17	16 (26%)	11 (18.3%)	33 (55%)	10 (25%)	8 (20%)	22 (55%)	1.00	2	0.115
Item 18	50 (83.3%)	5 (8.3%)	5 (8.3%)	32 (80%)	3 (7.5%)	5 (12.5%)	0.589	2	0.796
Item 19	14 (23.3%)	0	46 (77%)	10 (25%)	2 (5%)	28 (70%)	2.750	2	0.255
Item 20	52 (87%)	5 (8.3%)	3 (5%)	37 (92.5%)	2 (5%)	1 (2.5%)	0.760	2	0.693
Item 21	17 (28.3%)	12 (20%)	31 (52%)	25 (62.5%)	3 (7.5%)	12 (30%)	11.484	2	<0.05
Item 22	10 (16.7%)	13 (21.7%)	37 (61.7%)	11 (27.5%)	4 (10%)	25 (62.5%)	3.199	2	0.198
Item 23	37 (61.7%)	5 (8.3%)	18 (30%)	37 (92.5%)	5 (12.5%)	18 (45%)	0.780	2	0.545
Item 24	9 (15%)	14 (23.3%)	37 (61.7%)	4 (10%)	21 (52.5%)	15 (37.5%)	8.757	2	<0.05
Item 25	55 (91.7%)	3 (5%)	2 (3.3%)	37 (92.5%)	2 (5%)	1 (2.5%)	0.278	2	0.110
Item 26	5 (8.3%)	27 (45%)	28 (46.7%)	0	22 (55%)	18 (45%)	3.626	2	0.177
Item 27	57 (95%)	1 (1.7%)	2 (3.3%)	38 (95%)	0	2 (5%)	0.939	2	0.100
Item 28	57 (95%)	0	3 (5%)	31 (77.5%)	4 (10%)	5 (12.5%)	8.019	2	<0.05
Item 29	39 (65%)	14 (23.3%)	7 (11.7%)	24 (48%)	15 (37.5%)	1 (2.5%)	6.916	2	<0.05
Item 30	9 (15%)	24 (40%)	27 (45%)	5 (12.5%)	13 (32.5%)	17 (42.5%)	0.122	2	0.961

ATP-30: Attitudes Toward Psychiatry-30 items, df: degree of freedom

psychiatry would be excluded from three most exciting medical specialties. While most of the PG students (48%) disagreed to this statement (item number 21). Among gender and in-between UG and PG medical students, most of them agreed to the statement of "Psychiatric patients are more interesting to work than other patients".

DISCUSSIONS

With still prevalent stigma toward mental illness in society, attitudes toward psychiatric illness, taking psychiatry as career option differs among populations. The present study is a comparative study done among medical students to

Table 3: Comparison of attitudes between undergraduate and postgraduate students

ATP-30 scale	Undergraduates			Postgraduates			Chi-square test	df	p-value
	Agree	Neutral	Disagree	Agree	Neutral	Disagree			
Item 1	0	12 (24%)	38 (76%)	0	5 (10%)	45 (90%)	3.473	2	0.054
Item 2	0	26 (52%)	24 (48%)	1 (2%)	9 (18%)	40 (80%)	13.285	2	<0.05
Item 3	25 (50%)	7 (14%)	18 (36%)	0	1 (2%)	49 (98%)	50.056	2	<0.05
Item 4	0	35 (70%)	15 (30%)	16 (32%)	16 (32%)	18 (36%)	26.346	2	<0.05
Item 5	7 (14%)	10 (20%)	33 (66%)	15 (30%)	18 (36%)	17 (34%)	10.225	2	<0.05
Item 6	5 (10%)	3 (6%)	42 (84%)	1 (2%)	12 (24%)	37 (74%)	8.199	2	<0.05
Item 7	1 (2%)	17 (34%)	32 (62%)	2 (4%)	2 (4%)	46 (92%)	15.567	2	<0.05
Item 8	10 (20%)	11 (22%)	29 (58%)	0	6 (12%)	44 (88%)	15.607	2	<0.05
Item 9	35 (70%)	4 (8%)	11 (22%)	26 (52%)	22 (44%)	2 (4%)	20.715	2	<0.05
Item 10	21 (42%)	16 (32%)	13 (26%)	11 (22%)	23 (46%)	16 (32%)	4.650	2	0.105
Item 11	42 (84%)	4 (8%)	4 (8%)	49 (98%)	1 (2%)	0	5.892	2	0.051
Item 12	47 (94%)	0	3 (6%)	49 (98%)	1 (2%)	0	3.585	2	0.242
Item 13	21 (4%)	27 (54%)	2 (4%)	7 (14%)	25 (50%)	18 (36%)	20.926	2	<0.05
Item 14	29 (58%)	9 (18%)	12 (24%)	40 (80%)	2 (4%)	8 (15.4%)	6.914	2	<0.05
Item 15	29 (58%)	16 (32%)	5 (10%)	45 (90%)	5 (10%)	0	14.080	2	<0.05
Item 16	10 (20%)	24 (48%)	16 (32%)	31 (62%)	16 (32%)	3 (6%)	21.767	2	<0.05
Item 17	22 (44%)	7 (14%)	21 (42%)	4 (8%)	12 (24%)	34 (68%)	17.447	2	<0.05
Item 18	36 (72%)	7 (14%)	7 (14%)	46 (92%)	1 (2%)	3 (6%)	7.143	2	<0.05
Item 19	20 (40%)	0	30 (60%)	4 (8%)	2 (4%)	44 (84.6%)	15.357	2	<0.05
Item 20	50	0	0	39 (78%)	7 (14%)	4 (8%)	12.362	2	<0.05
Item 21	23 (46%)	8 (16%)	19 (38%)	19 (38%)	7 (14%)	24 (48%)	1.056	2	0.590
Item 22	18 (36%)	14 (28%)	18 (36%)	3 (6%)	3 (6%)	44 (84.6%)	29.528	2	<0.05
Item 23	25 (50%)	3 (6%)	22 (44%)	34 (68%)	6 (12%)	10 (20%)	6.804	2	<0.05
Item 24	9 (18%)	16 (32%)	25 (50%)	4 (8%)	19 (38%)	27 (54%)	2.205	2	0.378
Item 25	49 (98%)	1 (2%)	0	43 (86%)	4 (8%)	3 (6%)	4.648	2	0.090
Item 26	5 (10%)	26 (52%)	19 (38%)	0	23 (46%)	27 (54%)	6.435	2	<0.05
Item 27	48 (96%)	1 (2%)	1 (2%)	47 (94%)	0	3 (6%)	1.880	2	0.617
Item 28	38 (76%)	4 (8%)	8 (16%)	50 (100%)	0	0	13.890	2	<0.05
Item 29	34 (68%)	14 (28%)	2 (4%)	25 (50%)	18 (36%)	7 (14%)	4.521	2	0.116
Item 30	11 (22%)	34 (68%)	5 (10%)	4 (8%)	5 (10%)	41 (82%)	57.843	2	<0.05

ATP-30: Attitudes Toward Psychiatry-30 items, df: degree of freedom

know their attitudes toward psychiatry based on exposure to psychiatric training and psychiatry as specialty choice in future. Previous studies have reported that over the course of medical education, there is decay in interest among medical students in choosing psychiatry as future career.[12]

In a study exploring family physicians' attitudes toward mental health, it has been seen that lack of awareness of usefulness of psychiatric treatment and stigma for the patients; they are not being referred to psychiatrist.[13] In our study, overall positive attitudes toward psychiatry was prevalent more in females than males and this result is in concurrence with previous studies.[13-15] Possible explanation of positive attitudes toward psychiatry – with increasing awareness of mental health issues in society, one who is exposed to psychiatric illness and training during UG teaching, and one who had gone through or had family history of psychiatric illness understands the importance of

mental health. Negative attitudes toward psychiatry may be due to short duration of exposure to psychiatry curriculum in UG teaching days, still prevalent stigma due to superstitious belief before entering medical school. Majority of our study population disagree that psychiatry is unappealing because it makes little use of medical training.

In our study, there is a conflicting interest in taking psychiatry as career choice. A study done in Kenya also shows disparity in attitudes toward choosing psychiatry as career in future.[6] In our study, most of the UG and PG students favour psychiatric teaching increases their understanding of medical and surgical patients. In a study done in Ireland, O'Connor *et al.*[16] found that attitudes of pre-clinical and clinical medical students toward psychiatry were positive even prior to any teaching in psychiatry as evidenced by scores on the Community Attitudes to Mental Illness (CAMI). In our study, majority considered psychiatry to be a respected branch of

medicine. In a previous study by Pailhez *et al.*[17] on attitudes and views on psychiatry among Spanish and the United States (US) medical students, it was found that the Spanish students regard psychiatry as more scientific and precise specialty than other specialties.

In the present study, UG students (50%) feel psychiatric hospitals are nothing more than prisons; it is concurrent to previous study by Jilowa *et al.*[18] This difference is because of less or infrequent visits of UG students to psychiatry wards. Both study groups (UG and PG) disagree that psychiatrist can do very little for their patients. UG medical students find it hard to think of psychiatrist as equal to other doctors. This is because of inadequate or lack of exposure to psychiatric teaching, stereotypic comments, remarks by others or fellow medical faculties of different branches. Similar problems are reported by study conducted in Bahrain by Al-Ansari and Alsadadi.[19] In a study by Mutalik *et al.*,[20] 61.1% of UG compared to 43% of PG find it hard to think psychiatrist as equal to other doctors. In a study by Nielsen and Eaton,[21] students believe psychiatry is interesting but yield less income compared to other branches of specialty. Psychiatry, a discipline neglected at the UG medical stages, leads to lack of knowledge about the subject as general misconceptions are created about psychiatric illness, patients, and treatments. Majority of the students in the college confessed that they did not attend or had least interest in attending psychiatry theory or practical classes during UG days. This might be due to negligence or lack of strictness of the authority in making compulsory posting of psychiatry. Many students find psychiatry patients interesting to deal with than other patients. Studies say that students believe psychiatry to be interesting but thinks it is less glamorous, earn less than other branches of medicine.[21] Exposure of students during UG days and in internship training might influence their decision in taking psychiatry as career of choice in future. Dealing effectively with the mental health problems, thereby encouraging and educating the young minds during UG days about mental health profession and its future in taking up psychiatry as career must be done.

Limitations

Our sample size was small. Our study is limited to the students of only one medical college of North-Eastern part of India. So, other multi-centric studies should be conducted to have generalisable results. In our study population, we have not enquired about the personal or family history of any mental illness. So, the knowledge and experience of the participants about mental illness may contribute to bias in attitudes. Except ATP-30 scale, no other scale has been used in the study, especially to assess psychological distress in the study population which may result in difficulty to get the adequate response to the items.

Conclusion

Conflicting interest in taking psychiatry as career choice shows disparity in attitudes among study populations. Majority of study subjects find psychiatry patients to be interesting to work with than other patients. We have found overall attitudes was good toward psychiatry. Possible

explanation of positive attitudes toward psychiatry can be that with increasing awareness of mental health issues in society, one who is exposed to psychiatric illness and training during UG teaching, and one who have gone through or have family history of psychiatric illness understands the importance of mental health.

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AUTHOR CONTRIBUTIONS

All the authors listed in the manuscript contributed sufficiently to qualify for authorship. The design and concept was given by PG. The statistical analysis was mainly done by MD. The major part of data collection and manuscript was done by ND while AB also contributed to data collection and manuscript.

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