



Original Article

A Cross-Sectional Comparative Study on Perception of Medical, Dental and Nursing Undergraduate Students about Mental Illness

Authors

Narayan R Mutalik¹, Tejaswi TP², Shankar Moni³, Govind S Bhogale⁴

¹MD, Assistant Professor, Department of Psychiatry, S.N.Medical College, Bagalkot-587102

²MBBS, Junior Resident, Department of Psychiatry, S.N.Medical College, Bagalkot-587102

Email: drtejaswitp@yahoo.co.in, Ph.No: +91-9663812275

³Clinical Psychologist, Department of Psychiatry, S.N.Medical College, Bagalkot-582102

Email: shanmoni@gmail.com, Ph.No: +91-9731833200

⁴MD, Professor, Department of Psychiatry, S.N.Medical College, Bagalkot-587102

Email: gshogale@rediffmail.com, Ph.No: +91- 9448491622

Corresponding Author

Dr Narayan R Mutalik M.D (NIMHANS)

Assistant Professor, Department of Psychiatry, Staff Quarters. C-35,

S.N.Medical College & HSK Hospital & MRC, Navanagar, Bagalkot-587102

Email: narayanmutalik@gmail.com, Mobile No: +91-9901621771

Abstract

Background: Even though there is a famous saying there is no health without mental health, the main obstacle for this is the stigma towards mental illnesses. Most of the undergraduate medical students, dental and nursing students express negative attitudes to psychiatry and mental illness in most of the low to middle income countries.

Objectives and Methodology: Aim was to assess the attitude of medical, dental and nursing students towards psychiatry. A total of 292 undergraduate students were included based on universal sampling method. Questionnaires based study was conducted using ATP-30 scale. Undergraduate students studying in medical, dental and nursing colleges in Bagalkot were asked to anonymously complete an attitude scale, the Attitudes towards psychiatry-30 items (ATP-30). The results were analysed to ascertain their attitudes towards psychiatry.

Result: There was no significant difference in perception of medical, dental or nursing towards psychiatry in overall score on ATP. But, nursing students have shown better attitude towards several areas related to mental health field.

Conclusion: The role of education, awareness and exposure to psychiatry has the potential to improve the future delivery of psychiatric care in Bagalkot and potentially to increase the number of doctors choosing to pursue a career in psychiatry.

Keywords: Attitude, Stigma, Psychiatry, Medical Students.

Introduction

Among all the branches of medicine, psychiatry has been a neglected subject all over the world. Psychiatry as an allied science of medicine in the recent years has seen numerous advances in its field. Building a knowledge regarding psychiatric illness is essential among the general population and also the health professionals. Improved perception and awareness about the psychiatry and availability of helpful treatment modes may help in shaping up a positive attitude towards mental health and the mentally ill among the community, most importantly medical students and the health professionals at large.^[1, 2]

The stigma towards psychiatry is said to be prevalent globally throughout all regions and different cultures. There are upward indications of stigmatization of people with mental illnesses.^[3-5]

The predictable estimates for the year 2020 disclose that in India, neuropsychiatric situation will rank as the fourth foremost cause of illness burden after heart related diseases, communicable diseases and accidents. In India, unipolar major depressive disorder will be the most important cause of illness burden among women. The number of mental health professionals or others with specialist training are inadequate to effectively deal with this growing crisis.^[6]

Psychiatry is disregarded subject in the field of medicine and public health all over the world.^[11-13]

Medical students have neutral or negative attitude towards mental health as a discipline and career choice.^[14-17] Socio-demographic or cultural factors might contribute in influencing students before their entrance into medical college or during their medical training.^[18-21] Undergraduate medical education programs are found unresponsive for mental health education in most institutions.^[22,23]

Mental and emotional problems are often under-acknowledged and therefore, miserably treatment is said inadequate. Psychological factors may be the foremost determinants of the appearance as well as consequences of major medical illnesses. They make up a large part of medical practice in

both primary and secondary care.^[24] It is therefore, essential for health professionals to understand and work closely with the psychiatric specialists to recognize and resolve these problems in their patients. Additionally, psychopathology that may be related with physical sickness often presents as a crisis to these doctors.^[25,26]

The main barrier preventing nurses from maintaining the same standard of care with every patient is the stigma associated with mental illness. A study by McLaughlin in 1997, evaluated the perceptions of a group of nursing students who attended 2-5 weeks of classroom education and then completed 4 weeks of clinical work. At the end of their classroom experience, students generally had overall positive attitudes in regard to the characteristics and treatment of patients.^[31] Another study from China found that previous contact with mental illness, either from a previous psychiatric course or having a family history, had no effect on their attitudes towards mental illness. Their overall attitudes were positive. More than half of the students agreed that psychiatric hospitals should not be located in residential areas, and the same number also agreed that those with mental illness should not be allowed to have children. An overwhelming majority (96.7%) felt that every person with a mental illness should be institutionalized.^[32] As per previous studies, the clinical contact has been shown to promote both positive and negative changes in attitude. It is the requirement in most of the nursing colleges that students should complete a rotation in psychiatric nursing, so as to give students an opportunity for clinical exposure and theory on mental illness. Hence we thought of including nursing students to study their attitudes towards psychiatry.

There is no previous study conducted on this topic from this region of north part Karnataka. There are very few studies assessing dental and nursing students' knowledge and perception about psychiatry. The study therefore would be helpful for us to know the attitude towards mental health

professions and plan for the awareness programmes to fight the stigma.

Aims: To assess and compare the perception and attitude of undergraduate students studying in medical, dental, nursing colleges in Bagalkot, towards psychiatry.

Materials and Methods

A cross sectional study was conducted among the undergraduate students of medical, dental and nursing college during September and October of 2015. We included all the undergraduate students of age ranging from 18 to 25 years studying in the medical, dental and nursing colleges in Bagalkot. Written informed consent (English) was taken from all study subjects, before enrolment in the study. The nature and the purpose of the study were explained briefly to the study population in the informed consent form and then the study population were recruited based on universal sampling method. Then, specially designed proforma was given to the study population which aided in collecting socio-demographic details and confidentiality was ensured. During the study period, all the subjects were given a standardized self-answering questionnaire called ATP-30 which was used in earlier studies and standardized worldwide. Once the questionnaires are collected the sample were subjected to statistical analysis.

ATP-30 scale: It is a thirty-item scale assessing the perception about various aspects of psychiatry like psychiatric illnesses, psychiatrists, psychiatric patients, hospitals and many others. Participants need to express their agreement or disagreement to all those thirty items in terms of a five point scale ranging from strongly agree to strongly disagree. The responses are scored from one to five for fifteen items meant for assessing negative attitudes and rest of the fifteen items meant for positive attitudes are scored from five to one in reverse. Total score will give the positive or negative attitude, with higher score indicating positive and a lower score indicating negative attitudes towards psychiatry. [27, 30]

Data was collected and tabulated using Microsoft excel. Frequency and percentages calculated for all quantitative measures. Mean and standard deviation were calculated for qualitative measures. Chi-square test was used to analyse categorical values. P value of <0.05 is considered as statistically significant. SPSS version 16 was used to process the data.

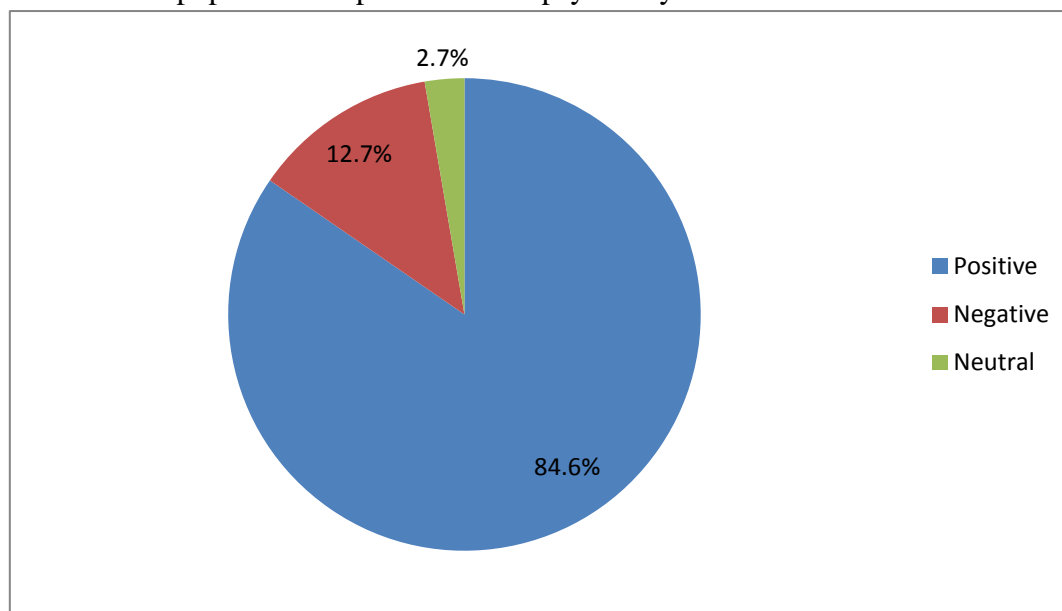
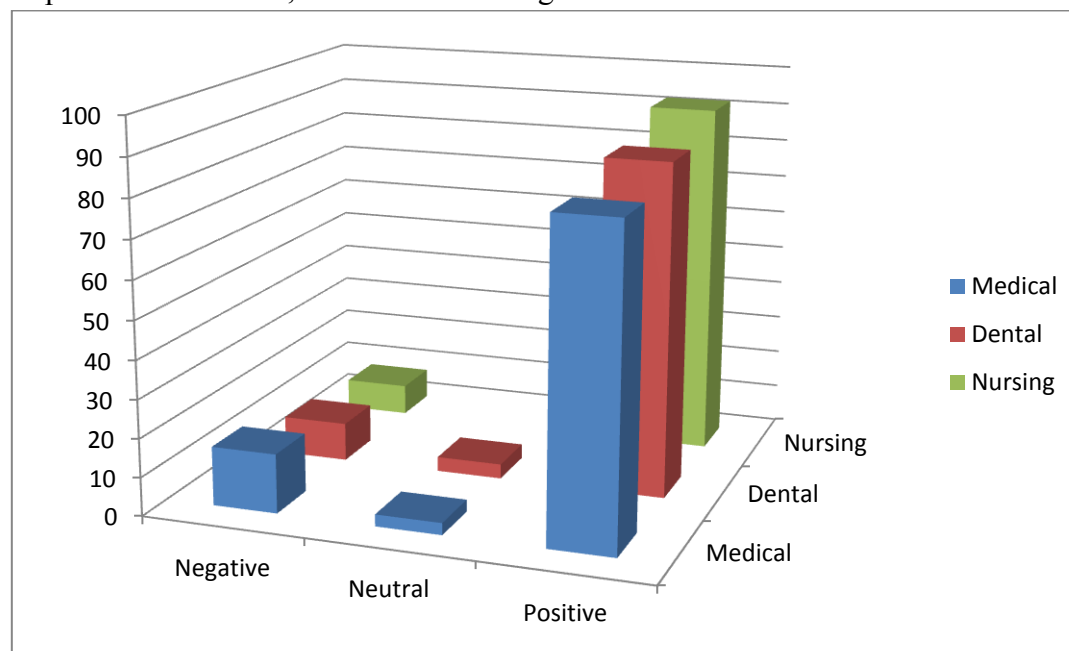
Results

Though we had given questionnaire to nearly 350 students which include 180 medical, 100 dental and 70 nursing students, we could get completed scales from only 292 participants. The mean age of the respondents was 20 years. In total, 162 medical, 80 dental and 50 nursing students participated in the study. As we can see in the Table 1 and figure 1, overall 84.6% of the participants showed positive attitude towards psychiatry, 12.7% stayed neutral and 2.7% had negative attitude. Figure 2 explains the comparison of attitudes of medical, dental and nursing students. Maximum score was 118 and minimum was 70 in the overall scoring on the ATP-30 scale. Mean score was 99.9 (SD=8.99). We tried to analyse which group has more positive attitude and which has negative attitude, we could not find any statistically significant between the medical, dental and nursing on the chi-square test of independence and the null hypothesis was accepted, $\chi^2(4)=4.561$, $p=0.335$. The results of the participants for different questions of the ATP-30 have been displayed in the Tables 2-6.

When we tried comparing the medical, dental and nursing students' perception about mental illness, mentally patients and mental health professionals, we found nursing students comments are in favor of psychiatry compared to the other two groups. On asking the participants whether psychiatrists seem to talk nothing but sex, 66% of nursing students disagreed compared to 63% of dental and 55% of medical students having statistically significant difference in the response [$\chi^2(4)=9.766$, $p<0.05$]. Nearly 86% of nursing students, 88% of

Table 1: Details of scores of medical, dental and nursing students on ATP

| | No. of Subjects N(%) | Positive Attitude N(%) | Negative Attitude N(%) | Neutral Attitude N(%) | Min. Score | Max. Score | Mean Score(SD) |
|---------|-------------------------|---------------------------|---------------------------|--------------------------|------------|------------|----------------|
| Medical | 162(55.5) | 132(81.5) | 25(15.4) | 5(3.1) | 70 | 118 | 98.42(8.79) |
| Dental | 80(27.4) | 69(86.2) | 8(10) | 3(3.8) | 70 | 115 | 100.59(9.09) |
| Nursing | 50(17.1) | 46(92) | 4(8) | 0(0) | 85 | 118 | 103.62(8.38) |
| Total | 292(100) | 247(84.6) | 37(12.7) | 8(2.7) | 70 | 118 | 99.9(8.99) |

Figure 1: Distribution of population as per attitude to psychiatry**Figure 2:** Comparison of Medical, Dental and Nursing students' attitude.

dental students compared to 73% of medical students agreed that psychiatry is respected branch of medicine. Here 15% of medical students compared to 4% of nursing and 2% of dental students do not think psychiatry is a respected

branch of medicine [$\chi^2(4)=13.311$, $p<0.005$]. Around 82% of nursing students, 65% of dental students compared to 55% of medical students believe that most psychiatric patients improve on therapy [$\chi^2(4)=12.132$, $p<0.05$]. Majority of

nursing students around 86% believe that it is interesting to try to unravel the cause of a psychiatric illness compared to 61% of dental and 71% of medical students [$\chi^2(4)=17.082$, $p<0.005$]. Approximately 43% of medical students, 26% of nursing students, and 25% of dental students do not think psychiatrists as equal to other doctors [$\chi^2(4)=11.819$, $p<0.05$]. The reason for this belief needs to be explored. Nearly 90% of nursing students, 66% of dental students compared to 72% of medical students are of the opinion that the practice of psychiatry allows the development of really rewarding relationships with people [$\chi^2(4)=13.945$, $p<0.005$]. Around 66% of nursing students, 51% of dental students compared to 51% of medical students believe psychiatric patients are often more interesting to work with than other patients [$\chi^2(4)=12.293$, $p<0.05$]. However, 84% of nursing students, 65% of dental students compared to 72% of medical students opine that psychiatric patients are just as human as other people [$\chi^2(4)=9.513$, $p<0.05$]. After trying to find out which group showed more positive attitude towards among medical, dental and nursing students, results were insignificant ($p>0.05$). But these opinions superficially conclude that nursing students report more of positive perception about psychiatry compared to medical and dental students.

Discussion

Mindset of an individual determines direction towards any environment. Attitude of an individual itself towards anything is a hypothetical entity. Trend to prefer psychiatry as profession by medical practitioner and their orientation towards supervision of psychological problem in physically ill patients as general medicine and surgery is demand of the present time. Maximum part of attitude building towards subjects takes place in medical training. Thus, approach of medical students is of utmost importance. Very few studies have assessed the attitude of dental and nursing students towards psychiatry. Several studies have been conducted all over the world for assessing the attitude of medical students towards psychiatry. But, the outcomes of those studies are not encouraging. As per earlier studies, overall attitude towards mental illness and psychiatry among the medical students has been negative. [7-10] However, our study depicted positive attitude corroborating with a study done by Niaz et.al reported quite a high number of both senior and junior medical students having positive view about psychiatry [28] supported by another study by Tharyan et.al. [29]

Table 2: Perception about Psychiatry patients, Illnesses

| Questions | ATP-30 Responses | | | | | | | | | P-Value |
|---|------------------|---------------------|------------------|---------------|-----------------|----------------------|----------------|-----------------|------------------|---------|
| | Medical (N=162) | | | Dental (N=80) | | | Nursing (N=50) | | | |
| | Agree N(%) | Neutra l N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagr ee N(%) | Agree N(%) | Neutral N(%) | Disagree N(%) | |
| Psychiatry Patients | | | | | | | | | | |
| If we listen to them, Psychiatric patients are just as human as other people. | 118(72) | 16(9) | 28(17) | 52(65) | 16(20) | 12(15) | 42(84) | 5(10) | 3(6) | 0.049 |
| Psychiatric patients are often more interesting to work with than other patients. | 84(51) | 34(21) | 44(27) | 41(51) | 26(32) | 13(16) | 33(66) | 13(26) | 4(8) | 0.015 |
| Psychiatric Illnesses | | | | | | | | | | |
| Psychiatric illness deserves at least as much attention as physical illness | 137(84) | 9(5) | 16(9) | 66(82) | 8(10) | 6(7) | 44(88) | 1(2) | 5(10) | 0.421 |
| It is interesting to try to unravel the cause of a psychiatric illness. | 115(71) | 25(15) | 22(13) | 49(61) | 25(31) | 6(7) | 43(86) | 6(12) | 1(2) | 0.002 |

Almost equal proportion of subjects feel that psychiatric hospitals are little more than prisons and psychiatry has very little scientific information to go on.(Table 4,5) It will guide us in changing the psychiatry ward into a regular

general ward and make awareness regarding the biological basis behind psychiatric disorders. If you look at the Table 3, it says that most participants accept that psychiatry is a respected branch of medicine; psychiatrists are as equal to

other doctors and believe that most psychiatric patients improve with the therapy. As in Table 2, participants are of the opinion that psychiatric patients are often more interesting to work with than other patients and if they listen to them, psychiatric patients are just as human as other

people. Nearly equal number of subjects says that they would not consider psychiatry among the top three most exciting medical specialties. But, subjects believe that practicing psychiatry allows the development of really rewarding relationships with people.

Table 3: Perception about Psychiatrists

| Questions | ATP-30 Responses | | | | | | | | | P-Value |
|---|------------------|-----------------|------------------|---------------|-----------------|------------------|----------------|-----------------|------------------|---------|
| | Medical (N=162) | | | Dental (N=80) | | | Nursing (N=50) | | | |
| | Agree N(%) | Neutral N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagree N(%) | |
| Psychiatrists | | | | | | | | | | |
| Psychiatrists talk a lot but do very little. | 46(28) | 38(23) | 78(48) | 18(22) | 16(20) | 46(57) | 12(24) | 11(22) | 27(54) | 0.724 |
| Psychiatrists seem to talk nothing but sex. | 20(12) | 52(32) | 90(55) | 14(17) | 15(18) | 51(63) | 10(20) | 7(14) | 33(66) | 0.045 |
| Psychiatrists tend to be at as stable as the average doctor. | 79(48) | 53(32) | 30(18) | 43(53) | 25(31) | 12(15) | 28(56) | 14(28) | 8(16) | 0.876 |
| Psychiatrists get less satisfaction from their work than other specialists. | 59(37) | 50(30) | 53(32) | 24(30) | 32(40) | 24(30) | 8(16) | 21(42) | 21(42) | 0.072 |
| There is very little that Psychiatrists can do for their patients. | 35(21) | 27(16) | 100(61) | 15(18) | 18(22) | 47(58) | 8(16) | 5(10) | 37(74) | 0.313 |
| At times it is hard to think of psychiatrists as equal to other doctors. | 70(43) | 30(18) | 62(38) | 20(25) | 19(23) | 41(51) | 13(26) | 8(16) | 29(58) | 0.019 |

Table 4: Perception about Psychiatry Teaching and knowledge

| Questions | ATP-30 Responses | | | | | | | | | P-Value |
|--|------------------|-----------------|------------------|---------------|-----------------|------------------|----------------|-----------------|------------------|--------------|
| | Medical (N=162) | | | Dental (N=80) | | | Nursing (N=50) | | | |
| | Agree N(%) | Neutral N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagree N(%) | |
| Psychiatric Teaching | | | | | | | | | | |
| Psychiatric teaching increases our understanding of medical and surgical patients. | 100(61) | 36(22) | 26(16) | 56(70) | 16(20) | 8(10) | 35(70) | 10(20) | 5(10) | 0.575 |
| The majority of students report that their Psychiatric undergraduate training has been valuable. | 87(53) | 46(28) | 29(17) | 49(61) | 24(30) | 7(8) | 28(56) | 13(26) | 9(18) | 0.421 |
| These days Psychiatry is the most important of the curriculum in medical schools. | 99(61) | 38(23) | 25(15) | 51(63) | 15(18) | 14(17) | 38(76) | 7(14) | 5(10) | 0.362 |
| Psychiatry is so amorphous that it cannot really be taught effectively. | 85(53) | 46(28) | 31(19) | 29(36) | 29(36) | 22(27) | 17(34) | 18(36) | 15(30) | 0.065 |
| Psychiatry Knowledge | | | | | | | | | | |
| Psychiatry is respected branch of medicine. | 119(73) | 18(11) | 25(15) | 71(88) | 7(8) | 2(2) | 43(86) | 5(10) | 2(4) | 0.001 |
| Psychiatry has very little scientific information to go on. | 55(34) | 40(24) | 67(41) | 18(22) | 19(23) | 43(53) | 8(16) | 14(28) | 28(56) | 0.075 |
| Psychiatry is so unscientific that even Psychiatrists can't agree as to what its basic applied sciences are. | 49(30) | 55(34) | 58(35) | 13(16) | 33(41) | 34(42) | 10(20) | 18(36) | 22(44) | 0.161 |
| Most of the so- called facts in Psychiatry are really just vague speculations. | 43(26) | 68(42) | 51(31) | 20(25) | 38(47) | 22(27) | 8(16) | 25(50) | 17(34) | 0.564 |

The findings from this study are consistent with the findings of McLaughlin (1997) that student nurses generally have positive attitudes toward persons with mental illness and these attitudes may develop even before the students actually participate in a clinical rotation in psychiatric nursing^[31] Nurses' attitudes toward persons with mental illness can affect the care they give to their patients. Stereotypes shape our perceptions of others and guide our behaviour towards them, unless these stereotypes are actively inhibited.^[33] Further investigation of changes in student attitudes toward mental illness the formation of student attitudes toward mental illness during their entire nursing curriculum may help to identify factors that contribute to positive attitude formation.

Table 5: Perception about Psychiatry Hospitals and Treatment

| Questions | ATP-30 Responses | | | | | | | | | P-Value |
|--|------------------|-----------------|------------------|---------------|-----------------|------------------|----------------|-----------------|----------------------|---------|
| | Medical (N=162) | | | Dental (N=80) | | | Nursing (N=50) | | | |
| | Agree N(%) | Neutral N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagre e N(%) | |
| Psychiatric Treatments | | | | | | | | | | |
| It quite easy for me to accept the efficacy of Psychotherapy | 75(46) | 51(31) | 36(22) | 40(50) | 30(37) | 10(12) | 18(36) | 21(42) | 11(22) | 0.234 |
| The practice of psychotherapy basically is fraudulent since there is not strong evidence that it is effective. | 27(16) | 60(37) | 75(46) | 10(12) | 30(37) | 40(50) | 8(16) | 11(22) | 31(62) | 0.261 |
| With the forms of therapy now at hand most Psychiatric patients improve. | 90(55) | 50(30) | 22(13) | 52(65) | 20(25) | 8(10) | 41(82) | 5(10) | 4(8) | 0.016 |
| Psychiatric treatment causes patients to worry too much about their symptoms. | 82(50) | 35(21) | 45(27) | 30(37) | 25(31) | 25(31) | 21(42) | 14(28) | 15(30) | 0.335 |
| In recent Years Psychiatric treatment has become quite effective. | 124(76) | 23(14) | 15(9) | 63(78) | 9(11) | 8(10) | 45(90) | 4(8) | 1(2) | 0.283 |
| Psychiatric Hospitals | | | | | | | | | | |
| Psychiatric hospitals have a specific contribution to make to the treatment of the mentally ill. | 121(74) | 23(14) | 18(11) | 55(68) | 15(18) | 10(12) | 42(84) | 3(6) | 5(10) | 0.318 |
| Psychiatric hospitals are little more than prisons. | 55(34) | 33(20) | 74(45) | 22(27) | 24(30) | 34(42) | 11(22) | 17(34) | 22(44) | 0.204 |

Table 6: Interest in Psychiatry as Career choice

| Questions | ATP-30 Responses | | | | | | | | | P-Value |
|--|------------------|-----------------|------------------|---------------|-----------------|------------------|----------------|-----------------|------------------|---------|
| | Medical (N=162) | | | Dental (N=80) | | | Nursing (N=50) | | | |
| | Agree N(%) | Neutral N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagree N(%) | Agree N(%) | Neutral N(%) | Disagree N(%) | |
| Psychiatry as career choice | | | | | | | | | | |
| Psychiatry is unappealing because it makes so little use of medical training. | 39(24) | 30(18) | 93(57) | 18(22) | 18(22) | 44(55) | 8(16) | 7(14) | 35(70) | 0.458 |
| I would like to be a Psychiatrist. | 63(38) | 44(27) | 55(34) | 29(36) | 16(20) | 35(43) | 21(42) | 16(32) | 13(26) | 0.279 |
| On the whole, People taking up psychiatric training are running away from participation in real medicine. | 39(24) | 55(34) | 68(42) | 19(23) | 28(35) | 33(41) | 9(18) | 11(22) | 30(60) | 0.223 |
| If I were asked what I considered to be the three most exciting medical specialties, psychiatry would be excluded. | 55(34) | 47(29) | 60(37) | 33(41) | 20(25) | 27(33) | 19(38) | 10(20) | 21(42) | 0.621 |
| The practice of Psychiatry allows the development of really rewarding relationships with people. | 118(72) | 24(14) | 20(12) | 53(66) | 21(26) | 6(7) | 45(90) | 3(6) | 2(4) | 0.007 |

It would also be beneficial to compare the attitude of students to how they interact with persons who have mental illness, to assess if there is congruency between beliefs and behaviours. The data suggest that student nurses generally have positive attitudes toward persons with mental illness, while clinical contact was shown to be a factor that contributed to a slight shift of student attitudes in a more negative direction. We could not find any previous study assessing dental student's perception towards mental health related issues. Ours is the first study assessing their attitude towards psychiatry and it shows positive opinion which is a good sign of acceptance of psychiatry field.

Conclusion

It would be wrong on our part to generalize the results of studies conducted in different parts of India. So, it is the test of the time to come up with a better questionnaire which needs to be elaborate and open ended, for finding out obstacles in the formation of positive attitude towards different areas of psychiatry. A further study with medical students from different institutions from different parts of the country is required to get a detail idea which can be used in the future academic programs. Better attitudes to a subject are a must to influence the career choice in a speciality, particularly in psychiatry.

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Abbreviations: ATP-Attitude Towards Psychiatry, SD-Standard Deviation, SPSS-Statistical Package for Social Studies

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