

## Impact of psychiatry training on attitude of medical students toward mental illness and psychiatry

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### Abstract

**Background-**Today, mental disorders are attached with negative and stigmatising attitudes, which are often due to lack of knowledge about mental illness. It has been hypothesized that as the exposure to psychiatry increases, attitude toward psychiatry increases.

**Objective-**Present study was designed to know the attitude of intern students towards psychiatry before and after their psychiatry posting using 30 item Attitude towards Psychiatry questionnaire.

**Methods-**The presenting study is a 2 stage cross-sectional and comparative study. Self administered socio-demographic profile sheet and attitude toward psychiatry-30 items (ATP-30) questionnaires were given to intern medical students at the time of joining and after 15 days of psychiatry posting and the scores were analyzed using spss21.

**Results** –Among Pre-posting intern, 53 students have positive attitude toward psychiatry which increased to 85 after 15 days psychiatry posting ( $p=0.001$ ). The mean  $\pm$  standard deviation score also increased significantly ( $p=0.001$ ) from  $96.7 \pm 11.3$  pre-posting to  $102.6 \pm 8.9$  post-posting. Post-posting interns were more in favor to choose psychiatry as a career choice.

**Conclusion-**As the exposure to psychiatry increases, attitude toward psychiatry increases. More negative attitude in Pre-posting interns might be due to poor teaching, social stigma and lesser exposure to psychiatric patients, ridiculous stereotypic remarks.

**Keywords:** Stigma, attitude, mental disorders, Psychiatry, medical students

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### I. Introduction

Mental illnesses are attached with stigmatising attitudes, which are due to inaccurate information and misbeliefs about mental disorders. It has been seen that those with more knowledge about mental disorders were less likely to endorse stigmatising attitudes.<sup>[1]</sup>

Understanding of mental disorders is much improved in last few decades due to available neuroimaging techniques and knowledge about neuroscience. However, the stigmatising attitudes regarding mental illnesses are still inappropriate.<sup>[1]</sup>

There are certain factors which push away medical students from pursuing psychiatry as their career option such as: perceived low status among medical fraternity, apparently less scientific, prevailing stigma, lower consideration among peers, lower financial benefits, negative and stereotypic remarks by medical specialists from other specialty.<sup>[2]-[4]</sup> Like any other member of community, medical students share the similar belief, attitude and negative prejudice regarding mental disorders and psychiatric practices, despite being part of medical school.

Prevailing negative attitude worldwide is the important reason that we are still facing problem attracting medical students to specialize in psychiatry.<sup>[5]</sup> However, positive attitude regarding psychiatry has been shown in various studies conducted worldwide, a dissonance has been noticed between a positive attitude toward psychiatry and the career choice in number of studies.<sup>[3]-[7]</sup>

As the doctors can play an important role in reduction of negative attitude and stigma, it's mandatory to study attitude of medical students and the findings of the study will help to focus strategies to change attitudes in this group. The current study aimed at reporting the attitudes to psychiatry of intern medical students of a medical school in north India prior to and after their posting.

## II. Materials And Methods

### 2.1 Study Design

It's a 2 stage cross sectional study conducted at tertiary centre in north India. The study included 120 intern medical students posted at the Psychiatry Department of our hospital, who had no prior exposure to psychiatry in their internship. After taking informed consent the subjects were given the Attitudes toward Psychiatry-30 items (ATP-30) questionnaire along with a socio-demographic profile Performawhile they were posted to department of psychiatry .The students were asked to read the study explanation and then complete the questionnaire and submit.At the end of posting, they were again given the ATP 30 questionnaire to be filled and submitted .Of these 99 were consideredfor further analysis as the rest hadnot completed questionnaire. Anonymity was maintained, because the respondents' names were not requested. We emphasized anonymity and confidentiality to overcome the possible tendency of the students to give answers perceived as acceptable to theinvestigators rather than representative of the respondents' true opinions. To avoid peer group influence, the students were not allowed to discuss their statements among themselves.

### 2.2 Measures

Demographic data measured using socio-demographic performa. Attitudes to psychiatry were measured using the 30-item Attitudes to Psychiatry Scale (ATP-30).<sup>[8]</sup>

### 2.3 The ATP 30

The ATP 30 scale was designed and validated by Burraet al. by their study on Canadian students.<sup>[8]</sup> Since its formulation, the scale has been used in multiple surveys across different nations in the original English form and has proven its validity. It has adequate face validity, construct validity, split half reliability and high testretest reliability. Also, successful usage of this tool seen in the previous Indian studies<sup>[5]</sup> The ATP is a 5-point Likert-type scale designed and validated in Canada.The scale consists of 30 positively and negatively phrased items that measure the strength of the respondent's attitude to various aspects of psychiatry. A score of 1 denoting a highly positive attitude, 5 denoting a highly negative attitude and a score of 3 denoting a neutral response. The score of each positively phrased item was converted by subtracting it from 6. The total global scores range from 30–150. A global score of less than 90 (scores of 1 and 2 combined) suggests a negative attitude to psychiatry, a score of more than 90 (scores of 4 and 5 combined) denotes an overall positive attitude, while a global score of 90 (average score of 3) is considered to represent a neutral attitude. Each of the 30 questions was analyzed independently and thematically with groups of questions together.

For detailed study, the components of the scale were divided in different subgroups namelypsychiatricpatients and illness, psychiatric knowledge and teaching, psychiatric treatment and hospitals, and psychiatrists and psychiatry, which also done in a previous study.<sup>[9]</sup> For purposes of analysis attitudinal differences were analyzed using X<sup>2</sup>and independent sample t-tests (spps21).

## III. Results

Among the 99 students, 66 (66.67%) were males and 33 (33.33%) were females. The mean ageof male intern and female intern are 24.38 years and 23.61 years respectively and 49 males and 22 females belong to urban locality while 17 males and 11 females belong to rural locality.

**Table-1: ATP 30 scores in terms of cut of value 90 representing attitude toward psychiatry in both the groups**

G r o u p	A t t i t u d e			X <sup>2</sup> (df)	p-value
	Positive (ATP>90)	Neutral (ATP=90)	Negative (ATP<90)		
Pre-posting	53	9	37	24.6 (2)	0.001
Post-posting	85	2	12		

**Abbreviations:**X<sup>2</sup>-chi test, df-degree of freedom p-Sig. (2-tailed); 0.05 \*P- value < 0.05 significant Table 1 shows ATP 30 scores in both the groups (Post-posting and Pre-posting).Number of students having positive attitude increased after psychiatry posting.

**Table 2: Mean ATP 30 score of both group of medical students**

Group of medical students	ATP-30 Mean ± SD	t score (df)	p - v a l u e
P r e - p o s t i n g	96.7 ± 11.3	-4.0(196)	0.001
P o s t - p o s t i n g	102.6 ± 8.9		

**Abbreviations:** t score-t-test, df-degree of freedom, p-Sig. (2-tailed); 0.05 \*P- value < 0.05 significant Table 2 shows that the proportion scoring above the neutral score(90) increased at the end of posting indicating that the general attitude of intern increased significantly after 15days of psychiatry posting(p = 0.001).

**Table -3: I would like to be a psychiatrist (item 4 in ATP30)**

R e s p o n s e s	Post-posting	Pre-posting	t-score (df)	p-value
Strongly agree	2	7	1 0 . 5 ( 4 )	0 . 0 3
Agree	3	8		
Neutral	2	4		
Disagree	2	4		
Strongly disagree	1	4		

**Abbreviations:** t score-t-test, df-degree of freedom, p-Sig. (2-tailed); 0.05 \*P- value < 0.05 significant

Table 3 shows number of students would like to choose psychiatry in future increased after posting. (p = 0.03)

**Table-4: Means of scores on items measuring attitude toward psychiatric patients and illnesses**

I t e m s	M e a n ± S D		t-score (df)	p-value
	Pre-posting	Post-posting		
Psychiatric patients are human (27)	3.99±0.964	4.04±0.999	0.362 (196)	0 . 7 1 8
Psychiatric illnesses need attention (12)	3.74±1.166	3.82±1.365	0.448 (196)	0 . 6 5 5
Psychiatric patients are interesting (29)	3.31±1.075	3.47±1.014	1.088 (196)	0 . 2 7 8
Interesting to unravel cause (18)	3.85±1.024	3.77±0.890	0.593 (196)	0 . 5 5 4

**Abbreviations:** t score-t-test, SD- standard deviation, df-degree of freedom, p-Sig. (2-tailed); 0.05 \*P- value < 0.05 significant

**Table-5: Mean responses of items measuring attitude toward psychiatric knowledge and teaching**

I t e m s	M e a n ± s d		t-score(df)	p-value
	Post-posting	Pre-posting		
Most of the so-called facts in psychiatry are vague speculation(26)	3.04 ± 1.2	2.81 ± 1.2	-1.4 (196)	0 . 1 6
Psychiatry has very little scientific information to go on (13)	3.36 ± 1.044	2.93 ± 1.12	-2.2 (196)	<b>0 . 0 0 5</b>
Psychiatry is so unscientific that even the psychiatrists cannot agree to scientific basis(24)	3.03 ± 0.931	2.81 ± 0.94	-1.7 (196)	0 . 0 9 7
Psychiatric teaching increases our understanding of medical and Surgical patients(9)	3.63 ± 0.852	3.32 ± 1.01	-2.3 (196)	<b>0 . 0 2 3</b>
These days psychiatry is the most important part of the curriculum In medical school (23)	3.52 ± 1.06	3.73 ± 1.14	1.35 (196)	0 . 1 7 8
Students who report that their psychiatric undergraduate training has been valuable(10)	3.52 ± 1.034	3.36 ± 1.2	0.96 (196)	0 . 3 3 8
Psychiatry is so amorphous that it cannot be taught effectively (30)	2.78 ± 1.20	2.64 ± 0.96	-0.91 (196)	0 . 3 6 2

**Abbreviations:** t score-t-test, SD- standard deviation, df-degree of freedom, p-Sig. (2-tailed); 0.05 \*P- value < 0.05 significant

**Table-6: Mean responses of items measuring attitude toward psychiatric treatment and hospitals.**

I t e m s	M e a n ± s d		t-score(df)	p-value
	Post-posting	pre-posting		
Efficacy of psychotherapy. ( 5 )	3.73±0.818	3.46±1.19	-1.8 (196)	0 . 0 7
Psychotherapy is fraudulent ( 8 )	3.69±1.056	3.22±1.174	-2.9 (196)	<b>0 . 0 0 4</b>
With therapy, patients improve (14)	3.31±1.113	3.67±0.915	2.44 (196)	<b>0 . 0 1 5</b>
Psychiatric treatment causes patients to worry about symptoms (16)	3.33±0.915	2.70±0.886	-4.97 (196)	<b>0 . 0 0 1</b>
Little that psychiatrist can do for their patients.(19)	3.68±1.1	3.12±1.2	-3.37 (196)	<b>0 . 0 0 1</b>
Psychiatric treatment has become effective( 25)	3.80±0.903	3.94±0.86	1.124 (196)	0 . 2 6 2
Psychiatric hospitals little more than prisons(3)	3.15±1.14	2.71±1.03	-2.9 (196)	<b>0 . 0 0 4</b>
Psychiatric hospitals have specific contribution to make to the treatment of mentally ill (20)	3.52±0.983	3.96±0.891	3.33 (196)	<b>0 . 0 0 1</b>

**Abbreviations:** t score-t-test, SD- standard deviation, df-degree of freedom, p-Sig. (2-tailed); 0.05 \*P- value < 0.05 significant

**Table-7: Means of scores on items measuring attitude toward psychiatrists and psychiatry**

I t e m s	M e a n ± s d		T score (df)	p-value
	Post-posting	Pre-posting		
Psychiatrists seem to talk nothing but sex (7)	3.61±0.99	3.02±1.05	-4.04(196)	<b>0.000</b>
At times it is hard to think of psychiatrists equal to other doctors (22)	3.39±1.15	2.77±1.09	-3.9(196)	<b>0.000</b>
I would like to be a psychiatrist(4)	3.36±1.02	2.98±1.09	-2.65(196)	<b>0.011</b>
Psychiatrist tend to be as stable as average doctors( 15)	3.45±0.92	3.34±1.00	-0.814(196)	0.417
Psychiatrists get less satisfaction from their work than other specialists(17)	3.20±0.95	2.83±0.94	-2.76(196)	<b>0.006</b>
If I were asked what I considered to be the three most exciting specialties psychiatry would be excluded(21)	2.80±1.27	2.39±1.10	-2.38(196)	<b>0.018</b>
The practice of psychiatry allows the development of really rewarding relationship with people (28)	3.77±.806	4.03±0.77	2.33(196)	<b>0.020</b>
Psychiatry is unappealing because it makes little use of medical training.(1)	3.39±1.2	2.87±1.30	-2.93(196)	<b>0.004</b>
On the whole, people taking up psychiatric training are running away from. Participation in real medicine (6)	3.10±1.0	2.80±1.0	-2.09(196)	<b>0.037</b>
Psychiatry is a respectable branch of medicine (11)	3.36±1.03	3.26±1.2	-0.627(196)	0.532
Psychiatrists talk a lot but do very little (2)	3.27±1.16	2.90±1.16	-2.26(196)	<b>0.025</b>

**Abbreviations:** t score-t-test, SD- standard deviation, df-degree of freedom, p-Sig. (2-tailed); 0.05 \*P- value < 0.05 significant

Table 4-7 shows mean response of items measuring attitude towards psychiatric patients and illness, psychiatric knowledge and teaching, psychiatric treatment and hospitals, and psychiatrists and psychiatry respectively.

#### IV. Discussion

Attitude is a hypothetical construct that represents an individual's like or dislike. The present study has explored impact of psychiatry posting in attitude of interns towards psychiatry as a specialty. Positive attitude towards psychiatry increased after posting in psychiatry (Table-1). Similar results were found in other studies conducted in different medical colleges of Karachi, 2003.<sup>[6], [7]</sup> At the end of posting, proportion scoring above the neutral score (90) increased significantly after 15 days of psychiatry posting (Table 2,  $p = 0.001$ ). Ekpo et al. (1989) and Obembe JU (1991) also found similar results.<sup>[10], [11]</sup> Only seven pre-posting intern students decided to be psychiatrist in future (Table 3). This low preference is similar to the findings reported in the previous studies<sup>[2]</sup> where psychiatry was the least popular clinical specialty. Stigmatizing familial attitude, the attitude of non-psychiatric faculty, perceived low respect for the discipline and fears of contracting psychiatric illness may be the reasons for not opting psychiatry as a career choice.<sup>[12], [13]</sup> After posting, there was significant increase in the proportion of students who wanted to be psychiatrists ( $p$  value 0.03). Similar impact was also found in previous studies.<sup>[14], [15]</sup> As shown in Table-4, all of the respondents show positive attitude towards psychiatric patients and psychiatric illnesses (though not statistically significant) and they all agree that psychiatric patients are not only human but they are also interesting. Another study with different methodology found similar results.<sup>[7]</sup> Table 5 displays the attitudes to psychiatric knowledge and teaching. Scores for items "Psychiatry has very little scientific information to go on, Psychiatric teaching increases our understanding of medical and surgical patients" increased significantly. One facet that shows decline (not statistically significant) is "These days psychiatry is the most important part of the curriculum in medical school". And it may be due to the teaching of psychiatry at the undergraduate level is either disorganized or not done properly.<sup>[6]</sup> Majority of students reported that psychiatric teaching increased their understanding of medical and surgical patients. These observations were similar to earlier reports<sup>[14], [15]</sup> and like them showed improvement after psychiatric posting.

Table 6 displays the attitudes to psychiatric treatments and hospitals. The item "psychotherapy is fraudulent, psychiatric treatment causes patients to worry about symptoms, little that psychiatrists can do for their patients, psychiatric hospitals little more than prisons" showed an appreciable and statistically significant increase in the proportions that agreed with this proposition after the posting. Some items in this domain show statistically significant decrease in the proportions after the posting. For example, "Psychiatric hospitals have a specific contribution to make to the treatment of the mentally ill, with therapy, patients improve". The response for item "Psychiatric treatment has become effective" decreased after posting (although not statistically significant and it is even more towards positive). This could be due to frequent relapse and chronic course in psychiatric illnesses. Overall positive attitude to this domain increased and it may be due to improvements in psychiatric treatments, especially the use of newer antipsychotic and anti-depressant drugs with reduced side-effect profiles. Better treatments had probably resulted in observable improvements in the symptoms of most patients. In this study, the psychiatric ward was not viewed as akin to a prison. If the study had been conducted in a chronic long-stay psychiatric hospital, the views expressed might have been different. On the domain that assesses the attitude to psychiatrists and psychiatry (Table 7), most of the items showed statistically significantly positive attitudes at the end of the posting. For example, "Psychiatrists seem to talk nothing but sex, At times it is hard to think of psychiatrists equal to other doctors, I would like to be a psychiatrist, Psychiatrists get less satisfaction from their work than other specialists, If I were asked what I considered to be the three most exciting specialties psychiatry would be excluded, Psychiatry is unappealing because it makes little use of medical training. On the whole, people taking up psychiatric training are running away from participation in real medicine, Psychiatrists talk a lot but do very little". The findings are similar to study done in the United States<sup>[16]</sup> where students reported their psychiatric training as appealing. In this study, attitudes to psychiatrists and psychiatric institutions were generally positive. The respondents viewed psychiatrists to be as stable as other doctors and disagreed with the view that they were not equal to them. This positive attitude would go a long way towards reducing the stigma attached to people and facilities caring for patients with mental illness. Various studies<sup>[7], [15]</sup> have been carried out in the world addressing the attitude of medical students towards psychiatry. However the results of these studies are not encouraging. But our study as well as the literature shows over all positive attitudes towards most of the aspects of psychiatry.<sup>[7], [14], [15], [17]</sup> Thus our study supports the hypothesis that as the exposure to psychiatry increases, attitude toward psychiatry increases.<sup>[18]</sup> This may be due to their compulsory psychiatric posting of 15 days during which regular classes were taken by psychiatrists and regular attendance was given. They are compelled to attend ward rounds, and to work up psychiatric cases.

However, a psychiatry internship by itself is inadequate, regardless of length, to stimulate interest in and understanding of our specialty. We must build and maintain a sophisticated curriculum, with strong outreach to medical students, across all 5<sup>1/2</sup> years of medical school.

## V. Limitations

One limitation of this study was that it was performed in a single institution, so that its findings may not be generalised to the entire country. Also it used internal controls (i.e. before versus after differences within the same group) rather than comparison with external controls. The study participants were aware of our area of interests, which could have influenced some of the responses. The study was not longitudinal and therefore could not measure changes in attitudes and career choices later in life. By increasing the sample size we can find more accurate data regarding attitude of interns toward psychiatry. Similarly if the study had included students from other institutions, inter-institutional comparison might have been possible

## VI. Conclusion

Intern students overall shared a more positive attitude after compulsory psychiatric posting. The pre-intern students had many gaps in their knowledge toward psychiatry, psychiatric disorders, psychiatric patients, psychiatric treatment and psychiatrists. The total number of students increases after posting who affirmatively decided to be a psychiatrist. But a potential easily rectifiable fact could be the casual approach with which, we address Psychiatry at undergraduate level, superimposed on the already existing stigma.

We can change negative attitude by giving more weight to psychiatry both in forms of marks allotted in exams and also posting duration.

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