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# Original Article

## Stigma and Attitudes toward Patients with Psychiatric Illness among Postgraduate Indian Physicians

Susmita Chandramouleeswaran, Wesley Rajaleelan, Natasha Catherine Edwin<sup>1</sup>, Ivan Koshy<sup>2</sup>

### ABSTRACT

**Background:** Due to paucity of psychiatrists in India, psychiatric patients often present to other doctors. We aimed to study nonpsychiatric residents' attitude and stigma toward psychiatric patients. **Methods:** A total of 57 postgraduate trainees participated in a cross-sectional study in a tertiary hospital in New Delhi. Attitudes to psychiatric patients were assessed using the attitude to mental illness questionnaire (AMIQ) and the perceived stigma questionnaire. This was correlated with sociodemographic information. **Results:** Over 70% residents accepted mentally ill patients as friends and felt they were equally employable. However, AMIQ demonstrated a negative attitude towards patients with schizophrenia. Perceived competence in dealing with psychiatric patients was associated with adequate undergraduate exposure (Chi-square = 7.270,  $P = 0.026$ ) and correlated with positive attitudes ( $t$ -test,  $P = 0.0008$ ). **Conclusions:** While the questionnaires revealed some prejudice toward psychiatric patients with schizophrenia, the postgraduate trainees who felt competent to deal with the mentally ill had the most positive attitudes toward them.

**Key words:** Attitude, medical education, mental illness, postgraduate physicians, stigma

### INTRODUCTION

Stigma toward mental illness is widespread.<sup>[1]</sup> Trained and qualified mental health professionals are scarce. As psychiatric conditions are widespread, nonpsychiatrists frequently treat patients with mental illness.<sup>[2]</sup> Assessing their attitudes toward psychiatric patients is an area of practical interest, as negative attitudes among physicians, could affect the efforts made


toward providing empathetic, inclusive therapy for the mentally ill.

Here, we present a study from India employing standardized questionnaires to investigate perceived competence and attitudes among postgraduate medical trainees in India toward patients with mental illness.

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## METHODS

The study was conducted at St Stephen's Hospital, a 700-bed tertiary care Christian mission hospital in New Delhi. All doctors pursuing Diploma in National Board at St Stephen's Hospital during the period of the study (January to March 2015) were invited to participate in this study. Approval was received from the Institutional Ethics Committee, and written informed consent was obtained from the participants.

Sociodemographic data, data on participants' training, past and family psychiatric history were collected through self-administered questionnaires. Participants were surveyed using self-administered attitudes toward mental illness questionnaire (AMIQ) and the perceived stigma questionnaire (PSQ). All data were kept confidential, and were not traceable to the individual.

AMIQ is a validated 5-item self-reported questionnaire that measures an individual's attitude toward mental illness.<sup>[3]</sup> Fictional vignettes describing individuals with mental illness or drug use are provided. These represent individuals with heroin dependence, depression and suicidal attempt, alcohol dependence, a convicted thief, patients with diabetes, schizophrenia, and a practicing Christian. Participants respond to questions based on these vignettes on a 5-point Likert scale. Scores range from -2 to +2 with negative scores indicating negative attitudes and positive scores indicating positive attitudes.

The original PSQ is a 29-item questionnaire created to measure perceived stigma of participants on four scales: devaluation-discrimination, secrecy, withdrawal, and education. The devaluation-discrimination scale measures the extent to which respondents discriminate against individuals with mental illness. This study utilizes a modified version of the devaluation-discrimination scale developed to specifically assess attitudes of professionals who work with people who receive mental health services reflecting the opinion of the respondent with regard to what they would do as opposed to what most people would. Participants are asked to rate their agreement with statements about patients with mental illness on a 6-point Likert scale. Lower scores on the scale indicate more discrimination against the mentally ill.

We use descriptive statistics to report the sociodemographic profile of the participants. Frequencies were calculated for the categorical variables and means as well as the standard deviations for the continuous variables. The differences between the groups were analyzed using independent *t*-test for continuous variables. Appropriate multivariate statistics were employed to adjust for possible confounding variables. Data

were analyzed with Statistical Package for Social Sciences version 20.0 (IBM).

## RESULTS

Of the 68 postgraduate trainee doctors, 57 (83.8%) consented to participate. Twenty-six respondents were women (45.6%) and 31 (54.4%) were men. Four individuals (7%) had history of psychiatric illness, of which two had received some form of psychological/psychiatric treatment. Thirteen respondents (22.8%) had a first-degree family member with psychiatric illness [Table 1]. Fifty-four respondents reported receiving psychiatry training as medical students (94.7%). However, only 11 (19.3%) perceived that the training was adequate. Overall, only 7 (12.3%) felt that they could handle psychiatric patients competently [Table 1].

There was a statistically significant positive correlation between perceived adequacy of undergraduate psychiatry education and residents' comfort in dealing with patients with mental illness. (Chi-square test = 7.270, *P* = 0.026).

The mean score of AMIQ was 4.93, and the range was from -16 to 35 [Table 2]. Higher scores indicated a

**Table 1: Baseline characteristics of participants**

	Response	n (%)
Male	Yes	31 (54.3)
Female	Yes	26 (45.6)
Past history of psychiatric illness	Yes	4 (7.0)
	No	53 (93.0)
Family history of psychiatric illness	Yes	13 (22.8)
	No	44 (77.2)
Psychiatric training received in MBBS	Yes	54 (94.7)
	No	3 (5.3)
If so, do you feel it was adequate?	Yes	11 (20.3)
	No	43 (79.6)
Do you feel competent to deal with psychiatric patients?	Yes	7 (12.3)
	No	46 (80.7)
	Not sure	4 (7.0)

**Table 2: Scores on individual vignettes in the attitude to mental illness questionnaire**

Vignettes	Minimum score	Maximum score	Mean score	SD	95% CI
Christian	-3.00	10.00	7.94	3.30	6.98-8.75
Diabetic	-3.00	10.00	7.54	3.02	6.71-8.24
Alcohol dependence	-10.00	10.00	2.29	4.4	1.15-3.36
Depression	-6.00	8.00	1.05	3.14	0.22-1.87
Schizophrenia	-10.00	10.00	-2.14	4.43	-3.28-0.93
Heroin dependence	-10.00	4.00	-4.84	2.85	-5.57-4.07
Convicted thief	-10.00	6.00	-6.92	3.09	-7.64-6.05

SD - Standard deviation; CI - Confidence interval

**Table 3: Comparison of most common responses for vignettes of schizophrenia and practicing Christian**

Questions on individual vignettes	Frequency (%)	
	Schizophrenia patient-most common response	Christian-most common response
Do you think this will damage the person's career?	Strongly agree (40)	Strongly disagree (82.5)
Would you be comfortable with this person as a colleague?	Neutral (39)	Strongly agree (74)
Would you be comfortable to invite him to dinner party?	Neutral (42)	Strongly agree (71)
How likely do you think it is for his wife to leave him?	Quite likely (35)	Very unlikely (75)
How likely do you think it is for him to get in trouble with the law?	Quite likely (32)	Very unlikely (70)

more favorable attitude toward patients with mental illness. In our sample, the highest positive attitude on AMIQ was toward the practicing Christian, followed by the diabetic, and alcohol dependence as a distant third. The most negative attitude was toward the convicted thief, followed by the person with heroin dependence. The attitude toward the persons with depression was slightly more positive than that toward the one with schizophrenia, which was the third lowest in the group, and was  $<0$  [Table 2]. While comparing the most common responses to the person with schizophrenia with those towards the practicing Christian, it is possible to note the underlying attitudes [Table 3].

Possible factors that could influence the scores on the AMIQ were analyzed using independent *t*-test [Table 4]. We found that having a past history or family history of psychiatric illness and receiving undergraduate psychiatric training did not correlate significantly with higher total scores on the AMIQ while perceived competence to deal with psychiatric patients did so. On further analysis, we looked for an association between the scores on the vignettes for depression and schizophrenia, with the above factors through one-way ANOVA, and found that perceived competency alone associated significantly with positive attitude to depression ( $P = 0.002$ ), but not for schizophrenia.

In the PSQ, the respondents were asked to rate their reactions toward people with mental illness from 1 (strongly disagree) to 6 (strongly agree). Higher scores indicate a more positive attitude to those with mental illness. Scores of 1–3 and 4–6 were clubbed to indicate a negative or a positive response to the questions, respectively. The percentage of respondents with positive or negative responses to the question was calculated. The mean score for the modified PSQ was 43.04, with a range of 22 to 56 [Table 5].

The percentage of positive responses for whether they would have friendship with, trust, consider as intelligent, have as a teacher for small children, consider to be qualified for a job is over 70%, indicating that the majority of the group had favorable views on these aspects. However, they perceived that most people in the community would not treat a person with mental illness similar to others, or prefer to date them [Table 5].

**Table 4: Factors associated with higher scores on attitude to mental illness questionnaire**

Factors	<i>t</i>	df	Significant (two-tailed)	Mean difference	SED	95% CI	
						Lower	Upper
Past history	-0.962	55	0.340	-5.571	5.789	-17.173	6.031
Family history	0.673	55	0.504	2.383	3.540	-4.711	9.476
Training in MBBS	1.053	55	0.297	6.963	6.612	-6.288	20.214
Competence	2.756	51	0.008	11.602	4.209	3.152	20.053

SED – Standard error difference; CI – Confidence interval

## DISCUSSION

Negative attitudes were revealed toward the patient with schizophrenia. The majority of the participants (94.7%) reported some exposure to psychiatry in their MBBS (undergraduate) days. However, only 19.3% felt their training was adequate, and only 12.3% currently felt competent to deal with psychiatric patients. The presence of a significant association (Chi-square test,  $P = 0.026$ ) between perceived adequacy of the training and competence in dealing with psychiatric patients implied that improving undergraduate training in psychiatry can have long-term benefits in improving care. We hypothesized that family or past history of psychiatric illness, adequate exposure to the subject during undergraduation, and perceived competence in dealing with psychiatric patients could influence the attitude of residents toward patients with mental illness. Surprisingly, no association was found between past and family history of psychiatric illness and positive attitudes to mental illness.

A previous study on undergraduate medical students from India that revealed that 74% of students had psychiatry postings. However, there were many gaps in their knowledge of psychiatric illness and more than one-third of these students reported feeling fear and anger when exposed to psychiatric patients.<sup>[1]</sup> This was similar to our findings with only 11 of the 54 doctors (20%) who had undergraduate training in psychiatry finding the postings adequate.

This is a cause for concern, as in a country like India, with a significant shortage of psychiatric professionals; most patients with mental health would report to and might receive treatment from other specialists. Further,

**Table 5: Scores on perceived stigma questionnaire**

	Minimum	Maximum	Mean score	SD	Percentage positive response
Accepting mentally ill as a close friend	2	6	4.50	1.176	80.4
Believe that mentally ill are as intelligent as average person	2	6	4.38	1.342	76.8
Believe that mentally ill are as trustworthy as average person	1	6	4.09	1.468	73.2
Accept recovered person as school teacher for young children	1	6	4.43	1.500	73.2
Believe that entering mental hospital is sign of personal failure	1	6	2.09	1.405	80.4
Would not hire to look after my children	1	6	3.55	1.548	46.4
Would hire if qualified for job	1	6	4.59	1.359	80.4
I would pass over application in favor of others	1	6	2.64	1.577	71.4
Most young people in my community will be reluctant to date someone with mental illness	1	6	4.57	1.399	21.4
Most people in community would treat a mentally ill person same as anyone else	1	6	2.48	1.362	21.4
I will take their opinion less seriously	1	6	3.04	1.572	57.1
Think less of person who has been in mental hospital	1	6	2.68	1.539	69.6

SD – Standard deviation

it is unlikely that nonpsychiatric residents would receive additional psychiatric training after MBBS.

In a previous study carried out among medical professionals in India, 44.7% reported that they would reject marriage with a person recovered from mental illness, and one-third of the subjects said that they would not be comfortable talking to a recovered person.<sup>[4]</sup> Among junior doctors in New Delhi, 25% believed that contact with a psychiatric patient could produce odd behaviors, and 30% felt uncomfortable talking to a person with psychiatric illness. Sixty-three percent of respondents would not employ a person who has recovered from mental illness, and 45% said they would be against a close relative marrying such a person.<sup>[5]</sup> Among nonpsychiatric health professionals in Chandigarh, a substantial number of civil and military health professionals felt that psychiatric patients were inferior to others.<sup>[6]</sup>

In contrast, in our study, a majority of doctors had positive attitudes toward maintaining friendship with a person with mental illness and found them equally trustworthy and intelligent. This was a heartening finding and indicated less stigma among the group of young doctors we studied and can hopefully be generalized to similar young medical professionals across the country. However, they perceived their community's attitude to a person with mental illness as negative.

Among the factors studied, participants who perceived themselves as competent in handling psychiatric patients had a more positive attitude toward them. Those who perceived their undergraduate training in psychiatry to be adequate were more likely to feel competent (Chi-square,  $P = 0.034$ ) This has also been seen in the previous studies that had described that attitudes to psychiatric illness became more positive after undergoing exposure to psychiatry at the undergraduate level.<sup>[2]</sup>

## CONCLUSIONS

Although some stigmatization toward psychiatric patients, especially toward patients with schizophrenia, was observed, this study revealed that positive attitudes were associated with adequate training in psychiatry during undergraduate training. This suggests that if the quality of undergraduate training improves, it could lead to better care of psychiatric patients and less stigmatization among nonpsychiatric medical professionals.

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### Conflicts of interest

There are no conflicts of interest.

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