

## ASSESSMENT OF ATTITUDES TOWARD MENTAL ILLNESS AMONG MEDICAL STUDENTS IN INDIA: A CROSS-SECTIONAL STUDY

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### ABSTRACT

**Background:** Positive patient care attitudes for mental illness cases must be developed in the early stages of medical education since those affected by mental illness or having some mental disorder suffer negative attitudes from other people in the community. Earlier studies identified several factors that affect medical students' attitudes toward patients with mental illnesses. **Purpose:** The purpose of the study was to determine the attitude of medical students toward patients of mental illness. **Methods:** In this cross-sectional study using convenience sampling, 3rd and 4th year medical students (220) were assessed for attitudes toward mental illness using a pretested and pre-designed questionnaire which included details of socio-demographic variables such as age, gender, year of study, personal experience with mental illness, family history of mental illness or having direct contact with mental illness cases and knowledge about mental illness. Percentage and proportion were calculated, and the chi square test was applied to assess significance of the results. **Results:** The factors significantly associated with medical students' attitudes toward mental illness were age, year of study, and knowing or having direct contact with mental illness patients. Those knowing mental illness cases in their family or friends had good attitude toward such patients. **Conclusion:** Education and direct contact with cases of mental illness serve as intervention strategies to reduce negative attitudes associated with mental illness among medical students.

**Keywords:** knowledge, attitude, mental illness, medical, students

## INTRODUCTION

Mental illness is a serious problem concerning most of the world's countries, with the most common illness being depression and anxiety disorders (World Health Organization, 2022). Mental illness is a bad adaptive response to various stress factors originated within the body or surrounding environment, which are altered by perception, response and behavioral disturbance (Tomljenović, 2014).

In 2019, almost 12.5 %, or 970 million of world population were living with mental illness, in which 301 million people and 280 million people, were suffering from anxiety disorders and depression respectively (World Health Organization, 2022).

Attitudes and beliefs about mental illness significantly impact how mental health is perceived. Negative attitudes and stigma are prevalent, affecting even health professionals who may hold similar prejudiced views. Literature indicates that society often perceives individuals with mental illness as dangerous, unwelcomed, and unpredictable. This widespread stigma contributes to the marginalization and misunderstanding of those with mental health conditions. Consequently, people with mental illness are often seen to be very aggressive, more dangerous, and highly unpredictable in their behavior. All these factors understandably cause fear and create social distance with them (Bennett and Stennett, 2015; Vijayalakshmi *et al.*, 2015). Previous studies indicated that previous history of being aware or in proximity to a patient who is suffering from a mental illness enhances the likelihood that one will have a positive attitude toward mental illness (Schafer *et al.*, 2011; Thongpriwan *et al.*, 2015; Bedaso *et al.*, 2016)

Understanding medical students' attitudes towards mental illnesses is crucial since they will be future medical care providers. Limited knowledge and awareness about mental illnesses among students contribute to negative community attitudes. Educational interventions targeting these attitudes are more effective for medical students during training compared to experienced doctors, as research indicates that attitudes tend to become more entrenched and resistant to change over time. A medical student's approach to mental illness should

demonstrate empathy and a non-judgmental stance.

Therefore, this study was conducted to assess the factors having an association with attitude toward mental illness among medical students. Studying these attitudes is important because medical students can influence the reduction of stigma, and the results will guide strategies to shift these attitudes. Comparing different groups within the study will reveal how successive years of undergraduate training impact attitudes, highlighting strengths and weaknesses in the current mental health curriculum.

## METHOD

### Research Design

An observational cross-sectional study using convenience sampling was conducted among 220 medical students at Medical College Rewa Madhya Pradesh India from October to November 2019 to assess their attitude toward mental illness. Third year and fourth year medical students were selected as study subjects who were willing to participate in the study. Out of 298 medical students studying in the third and fourth year, 220 gave informed written consent. They were interviewed using a pretested and pre-designed questionnaire.

### Ethical Clearance

Ethical permission was taken before conducting the study. Ethical Clearance Commission of Shyam Shah Medical College approval number 9458/SS/PG/MC/2019.

### Data Analysis

Details of socio-demographic variables, year of study, personal interaction with mental patient, their family history of mental illness and knowledge about mental disorder were also obtained. Questions were evaluated by using a 5-point Likert scale (1 = strongly agree, 5 = strongly disagree). Overall stigma against patient with mental illness was calculated by adding the scores across all variables. The highest score was 100 and minimum score was 20. High numerical score indicated more stigma. i.e. greater mean (mean score more than 60) meant negative attitude, and vice versa.

## Statistical Analysis

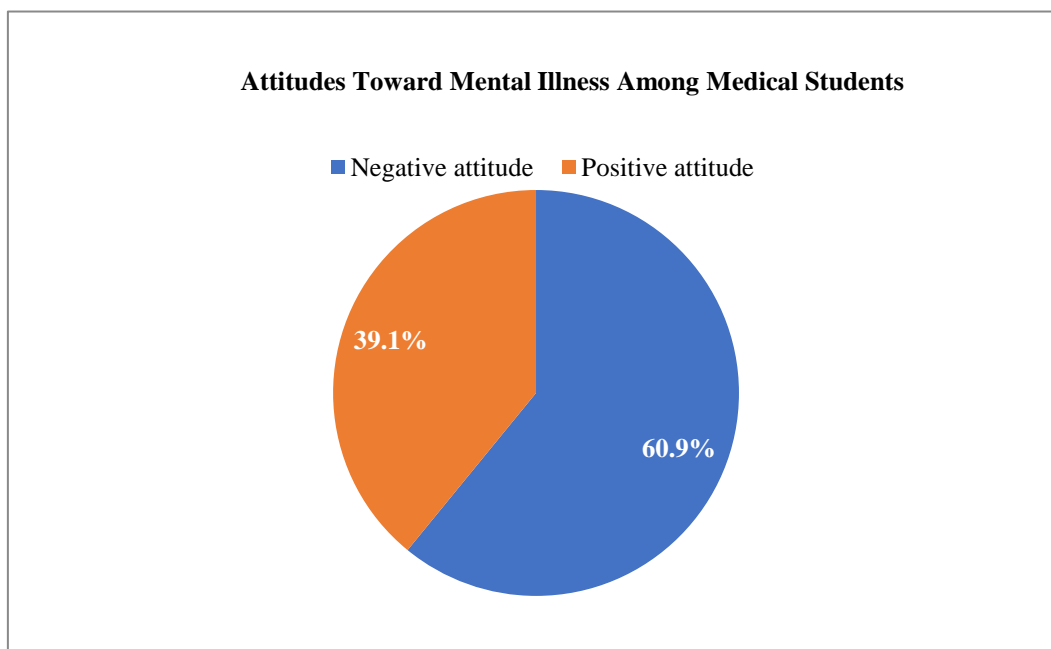
Socio-demographic variables and knowledge about mental disorders of responding medical students were analyzed. The results were described using frequency, proportion and percentage. Chi square was applied to examine the association between various factors.

## RESULT

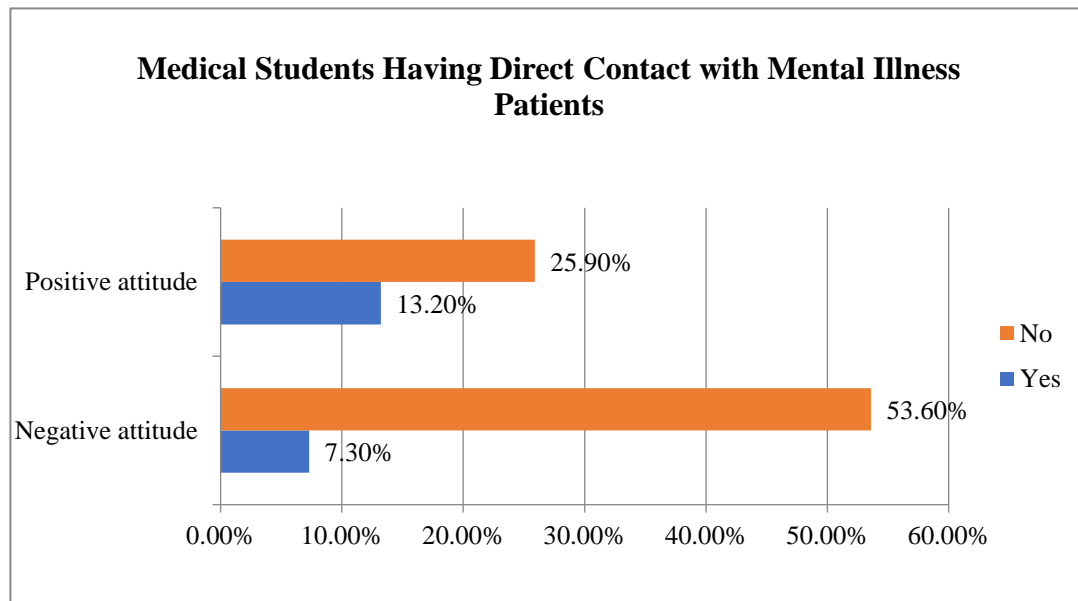
Figure 1 depict frequency distribution of study subjects (220) according to attitude toward mental illness. Overall positive and negative attitude of medical students toward mental illness is 86 (39.1%) and 134 (60.9%), respectively.

Figure 2 depicts frequency distribution of study subjects (220) according to direct contact with patients with mental illness. Of medical students who had positive attitude toward mental illness patients. i.e., 86, only 29 (13.2%) had direct contact with patients of mental illness while 57 (25.9%) had no direct contact. Medical students with negative attitude comprised of 16 (7.3%) who had direct contact, whereas 118 (53.6%) had no direct contact with mental illness patients.

Table 1 depicts association of various factors with attitude toward mental illness among study subjects. Thirty (32.7%) males had positive attitude whereas 62 (67.3%) males had negative attitude in comparison to females where 56 (43.7%) had positive attitude and 72 (56.3%) had negative attitude toward mental illness. Medical students studying in the third year had 78 (46.1%) positive attitude and 91 (53.9%) had negative attitude in comparison to fourth year students where eight (15.6%) had positive attitude and 43 (84.4%) had negative attitude toward mental illness. In socioeconomic status upper lower socioeconomic class had a maximum 22 (81.5%) with positive attitude compared to other classes as upper class had five (23.9%), upper middle class had 19 (21.2%), and lower middle class had 40 (48.8%), whereas upper middle class had 71 (78.8%) with maximum negative attitude as compared to other classes where upper class had 16 (76.1%), lower middle class had 42 (51.2%) and upper lower class had five (18.5%) with negative attitude toward mental illness. Medical students with family history of mental illness had 13 (72.3%) with positive attitude.



**Figure 1.** Frequency Distribution of Study Subject According to Attitude Toward Mental Illness Among Medical Students



**Figure 2.** Frequency Distribution of Medical Students According to Direct Contact with Patients of Mental Illness.

Students who had no family history of mental illness, (73,36.2%) and medical students (129,63.8%) with no family history of mental illness had negative attitude toward patients with mental illness in comparison with students (5.27.7%) with a family history of mental illness, 29 (64.4%) Medical students who had direct contact with mental illness patients had positive attitude as compared to 57 (32.6%) who had no direct contact with mental illness patients. Medical students who had direct contact with mental illness patients

(15,35.6%) had less negative attitude compared to 118 (67.4%) who had no direct contact with mental illness patients. Table 1 depicts that significant association was found with the year of study, socioeconomic status, family history of mental illness and having direct contact with mental illness patients of study subjects and attitude of medical students toward patients of mental illness, whereas gender of medical students had no significant association with attitude toward mental illness.

**Table 1.** Association of Various Factors with Attitude Toward Mental Illness Among Medical Students

Gender	Negative attitude	Positive attitude	Total	Chi square	P value
Male	62 (67.3%)	30 (32.7%)	92	2.79	0.094
Female	72 (56.3%)	56 (43.7%)	128		
<b>Year of study</b>					
Third	91 (53.9%)	78 (46.1%)	169	15.27	0.000093
Fourth	43 (84.4%)	8 (15.6%)	51		
<b>Socioeconomic status</b>					
Upper	16 (76.1%)	5(23.9%)	21	37.88	<0.001
Upper middle	71 (78.8%)	19 (21.2%)	90		
Lower middle	42 (51.2%)	40 (48.8%)	82		
Upper lower	5 (18.5%)	22 (81.5%)	27		
<b>Family history of mental illness</b>					
Yes	5 (27.7%)	13 (72.3%)	18	9.03	0.0026
No	129 (63.8%)	73 (36.2%)	202		
<b>Having direct contact with mental illness patient</b>					
Yes	16 (35.6%)	29 (64.4%)	45	13.96	0.00018
No	118 (67.4%)	57 (32.6%)	175		

## DISCUSSION

According to recent research, views toward mental illness were related to knowing or being in close proximity to people who had mental illnesses. Numerous studies have demonstrated that being aware of or in close proximity to a patient who is suffering from a mental illness enhances the likelihood that one will have a favorable attitude toward mental illness (Schafer *et al.*, 2011; Thongpriwan *et al.*, 2015; Bedaso *et al.*, 2016).

Education level, a demographic component that has previously been linked to attitudes toward mental illness, is connected to the year of study (Vijayalakshmi *et al.*, 2015; Bedaso *et al.*, 2016; Riffel and Chen, 2020). The academic year also impacts whether students have already encountered individuals with mental illnesses (Desai *et al.*, 2019; Pal and Singh, 2022). In the third and fourth years, 39.1% cases showed a positive attitude toward mental illness, as students in our study usually face cases of mental illness either in theory or in practice. Recent and previous studies have shown that students who have studied psychiatric theory and have clinical experience in psychiatric wards have positive attitudes toward mental illness (Happell and Gaskin, 2013; Rodríguez-Ferrer *et al.*, 2022). Students having more interaction with mental disorder patients had more positive attitude compared to others.

The theoretical elements taught before clinical admission play an important role in fostering positive attitudes toward mental illness. In addition, clinical experience equips students with the professional competencies to meet the needs of mental illness by providing diverse learning opportunities (Happell and Gaskin, 2013). So, education can be an important factor in reducing stigma associated with mental illness.

Several previous studies have shown association between a family history of mental illness and attitudes toward mental illness (Vijayalakshmi *et al.*, 2015; Bedaso *et al.*, 2016; Durmaz and Tastan, 2022). They reported that people with a family history of mental illness had lower negative attitudes toward mental illness than those without a family history of mental illness. This is because direct interaction with such cases had reduced prejudices and negative beliefs.

Similarly, our study shows that a family history of mental illness is associated with attitudes toward mental illness in college students and is consistent with other studies, with our study finding that 13 of 18 individuals with a family history example showed positive attitudes toward mental illness (Gyllensten *et al.*, 2011; Simões de Almeida *et al.*, 2023).

## CONCLUSION

In the present study it can be concluded that a positive attitude of medical students toward mental illness is found to be strongly associated with knowledge and exposure they acquired during clinical posting social sitting / families. Thus, knowledge and direct interaction with mental disorder patients can be effective intervention strategies to reduce negative attitudes associated with mental illness among medical students.

## SUGGESTION

Education related to mental disorders should be introduced at an early stage of courses.

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## CONFLICT OF INTEREST

The authors have no conflict of interest.

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## AUTHOR CONTRIBUTION

Authors Neera Marathe, Sandeep Singh, Anshuman Sharma contributed to literature review, study design, data analysis, supervision, references and manuscript revision. Authors Lav Patel, Priyanshi Namdeo, Murchhana Pradhan contributed to literature review, study design, data collection, data analysis, references, manuscript writing.

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