

## Research Article

# Association of Attitude Towards Mental Illness with Exposure to Psychiatry in Medical Students

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### Abstract

**Background:** Society's attitude towards patients with mental illness has been evolving over the past century and the speed of this evolution has particularly accelerated since the advent of modern ways of communication and media. As with other areas of development, attitude change may be expected to be slow-paced in our country but local evidence is lacking in this regard.

**Objective:** To measure the level of stigma towards mental illness in medical students along with its association with their prior exposure to Psychiatry.

**Method:** This is across-sectional study conducted between May to August 2019 at a private medical college. Consecutive sampling was used to include a total of 247 (71% female and 29% male) students of the fourth and final year MBBS after written informed consent. A specially designed form was used to collect relevant socio-demographic details along with data regarding exposure to Psychiatry. The scores from self-reported Mental Illness: Clinicians' Attitudes scale (MICA) were also recorded. Chi-Square test was used to assess the association of exposure to psychiatry to stigmatizing attitudes. Data were analyzed using SPSS20.

**Results:** Prior exposure to mental illness in family or friend was reported by 60.5% of the students, 70% described an exposure through media and only 32% had undergone a clinical psychiatry rotation. Average stigma scores on MICA were found in 41% of our sample, while 32% had above-average scores and 27% had lower than average stigma. Pearson's chi-square test showed that the previous exposure to mental illness via media sources was found to be significantly associated with lower levels of stigma in medical students ( $p < 0.05$ ).

**Conclusion:** A significant proportion of medical students hold negative views about psychiatric illness. Familiarity with mental health issue through media sources is linked to lower stigmatizing attitudes.

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### Introduction:

Society's attitude towards patients with mental illness has been evolving over the past century and the speed of this evolution has particularly accelerated since the advent of modern ways of communication and media<sup>1</sup>. As with other areas of development, attitude change may be expected to be slow-paced in our country but local evidence is lacking in this regard. A patient suffering from mental health symptoms in our local setup is typically not taken to a doctor first, rather

he or she is likely to consult a faith-healer or other traditional healers before seeking medical help. Stigma towards mental illness can result from misattribution to supernatural caused and perceiving the need to receive mental health care as a sign of personal weakness<sup>2</sup>. This stigma leads to discriminatory attitudes and behaviours by family and the community in terms of social acceptability, marriage and employment opportunities<sup>3</sup>. This trend is also reflected in studies done in populations belonging to the rest of the developing world<sup>3,4</sup>. In the light of this culture, one turns hopefully to health profes-

professionals to be not only the beacons that enlighten the stigmatized public perception but also practice non-stigmatized attitudes in their practice. Several studies have been done in recent times to gauge the attitudes of medical students towards mental illness internationally as well as locally. Studies done on medical students in China and India have revealed that a considerable proportion of medical students hold negative attitudes towards mentally unwell patients<sup>5,6</sup>.

The search for underlying factors behind these perspectives has not been very efficient; all we have been able to understand is the various associations. It has been found that age and education status is linked to stigma towards mental illness in some studies<sup>7-9</sup>. Many studies have been conducted to see if a clinical rotation in Psychiatry has a beneficial effect on medical students in reducing stigma, most results are promising in the short-term<sup>10</sup> but no significant difference was found in longer-term<sup>11</sup>. In Pakistan studies to assess stigma towards mental illness and its sufferers have been going on for the past decade<sup>12,13</sup>. Attitudes are a time-sensitive variable<sup>14</sup> and an older study regarding the level of stigma in medical students will contribute little to our understanding of current trends. This is one of the reasons we needed to collect and interpret data on current levels of stigma in our student population.

This study was conducted to understand the current attitudes of medical students in our university towards psychiatric illness and to evaluate if these attitudes were linked to the student's previous understanding about psychiatric illness.

### **Method:**

This was a cross-sectional study to assess association in which consecutive sampling was used to invite all students aged 18 to 25 years (Mean age was 22.8 years  $\pm$  1.15 SD) male or female, who were enrolled as regular students in the fourth and final year at a private medical college in Islamabad, during the study period (May to Aug 2019). Students with preexisting Psychiatric illnesses were excluded from the study to avoid the bias of findings. At the end of data collection, a total of 247 students were included in the final sample. Previous exposure to psychiatry was defined as one of three states: a) having a friend or relative with psychiatric illness, b) having exposure to the portrayal of psychiatric illness in media

and c) having gone through clinical rotation in psychiatry.

Ethical approval for the study was obtained from the FUMC's Ethical Review Committee (Reference no. FF/ FUMC/215-3 Phy/19 dated 24<sup>th</sup> May 2019). A set of documents comprising of a consent form, demographic performa and the study questionnaire (Mental Illness: Clinicians Attitude Scale) was distributed to students in their lecture hall or demonstration room. The researcher gave a brief introduction of the purpose and nature of the study and then the students were asked to fill the performa and questionnaire after signing the informed consent form.

The consent form included information about the purpose and possible benefits of the study in terms of increasing understanding of attitudes of clinicians towards mental illness. It also clarified that consent could be withdrawn at any time without consequences and no monetary reimbursement will be offered for participation in the study. The Demographic Performa asked about information on age, gender, whether the student was a hostel boarder or Day scholar and whether they have had a clinical rotation in psychiatry. It also asked whether the study respondent had personal exposure to a psychiatric patient via a family member or friend or they had seen a portrayal of mental illness on the media.

The Medical student version of Mental Illness: Clinician's Attitude Scale (MICA-2) scale was used which has 16 items. Each item is scored on a 6-point Likert type scoring system from "strongly agree" to "strongly disagree". The statements on the scale that respondent is asked to react to are designed to gauge the medical students' attitude towards mental illness in general, patients with mental illness, medical problems of psychiatric patients, understanding of mental health problems and the readiness to disclose a mental health issue. It is a comprehensive attitude check and has good content validity and convergent validity with other scales of similar nature<sup>16</sup>. The scale gives scores ranging from 16 to 96. The higher score denotes higher stigma.

To obtain meaningful analysis, the MICA scores were divided into three categories; a) 0 to 40: lower than average stigma, b) 41 to 50: average stigma and c) 51 onwards: higher than the average stigma.

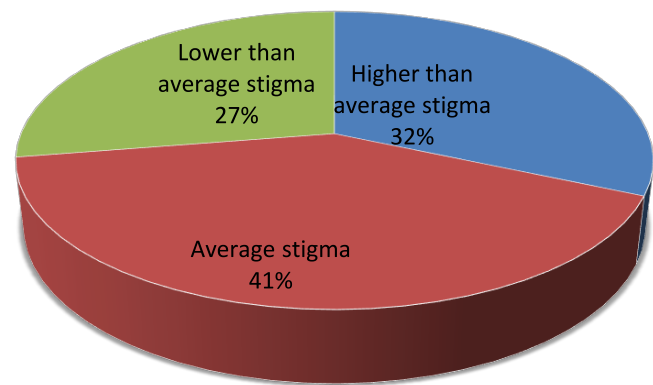
SPSS 20.0 was used to calculate Mean and the standard deviation for the variable age. Frequency and percentages were calculated for gender, resident status, personal exposure to the psychiatric patient, exposure to psychiatric illness in the media and clinical rotation in psychiatry. Frequency and percentages were also calculated for all three levels of stigma found in the student sample. The association of level of stigma and previous exposure to psychiatry was analysed using the Chi-square test.

A p-value of  $<0.05$  was considered significant.

### Results:

The mean age was 22.8 years  $\pm 1.15$  SD, with 176 (71%) female and 71 (29%) male students. Most of our participants were female and day scholars (73% vs 27% hostel boarders). The majority of them reported exposure to mental illness through media (70%). Two third of the students (60.5%) shared having had personal contact with a Psychiatric patient previously, and only about one third (30%) had undertaken a clerkship in Psychiatry before taking the survey.

The proportions of students falling in the three categories of stigma severity were also calculated based on MICA scores. Out of the total 247 students, 101 (41%)



**Figure 1:** Levels of Stigmatizing attitudes among Medical Students

of the students were found to have an average stigma towards mental illness, while 78 (32%) were found to have higher than average stigma and 68 (27%) were found to have a lower stigmatizing attitude towards mental illness. Figure 1 shows the graphical representation of the frequency distribution of the stigma levels

Table 1 reports the association of study variables with the distribution of stigma according to Mental Illness Clinicians Attitude (MICA) scores. Students with exposure to mental illnesses through media were found to have lower stigmatizing attitudes, and this association was statistically significant for our study participants.

Variable	Low Stigma N (%)	Average Stigma N (%)	High Stigma N (%)	$\chi^2$	p-value
Gender				5.284	0.071
Female	52 (29.5)	76 (43.2)	48 (27.3)		
Male	16 (22.5)	25 (35.2)	30 (42.3)		
Resident status				0.507	0.776
Day Scholar	50 (27.6)	76 (42)	55 (30.4)		
Hostel Boarder	18 (27.3)	25 (37.9)	23 (34.8)		
Personal exposure to a psychiatric patient				2.943	0.230
Present	32 (33)	35 (36.1)	30 (30.9)		
Absent	35 (23.5)	66 (44.3)	48 (32.2)		
Exposure to psychiatric illness in the media				15.996	<b>&lt;0.001</b>
Present	59 (34.1)	70 (40.5)	44 (25.4)		
Absent	9 (12.2)	31 (41.9)	34 (45.9)		
Clinical Rotation in Psychiatry				0.379	0.828
Completed	24 (30)	32 (40)	24 (30)		
Yet to undertake	44 (26.3)	69 (41.3)	54 (32.3)		

## Discussion:

This study has helped understand the levels of stigmatizing attitudes prevailing in medical students towards mental illness and its sufferers. It was found that 32% of the sample population had higher than average negative perceptions and attitudes towards mental illness. This corresponds to the evidence available from recent literature where an Indian study conducted in medical students found negative attitudes towards psychiatric illness prevalent in about half of their study participants, and about one-third of nursing students were found to have negative attitudes<sup>4</sup>. Similarly, a study from the West Indies assessed the attitude of medical students towards mental illness as compared to physical conditions. The authors found that the students hold a significantly more negative attitude towards mental illness as compared to physical disorders even after going through under-graduate clinical exposure<sup>18</sup>. Given the significant levels of stigmatizing attitudes in the medical community, particularly at the undergraduate level, bringing about an attitudinal change towards mental illness appears to be the need of the hour.

Findings of this study related to MICA score distribution in medical students also highlight that these negative mind-sets are held regardless of being in university educational program; they may be a part and parcel of the culture, and more than one generation of providing education and inculcating tolerance may be required to produce a notable change in attitudes. Cross-cultural research regarding these attitudes in medical students in 5 different countries has come up with interesting and correlating conclusions. The authors reported that students from the US had the most positive attitudes among all five countries (US, Brazil, Ghana, Nigeria and China), students from Nigeria and Ghana were most likely to base the aetiology of mental illness in supernatural causes and students from China were least likely to show social acceptance towards patients with mental illness<sup>4</sup>. This also correlates with a local survey of the attitude of students in Lahore regarding mental illness, which revealed that about 80% of them think that religion plays a significant role in presence of mental illness<sup>15</sup>. This tends to provide one explanation for the significance of faith healers in the pathway to mental healthcare in our settings<sup>2</sup>. Thus it can be interpreted

that these negative attitudes towards mental illness are linked not only with a lack of information and education, but are also present as a psychological construct having complex sociocultural under-pinning.

A rotation in clinical psychiatry has also been studied in literature to assess its impact on stigmatizing attitudes in medical students. It can be expected that if students are trained to understand the biological basis of mental illness, and they also have the first-hand opportunity during clinical rotations to come in contact with patients who are being effectively managed at mental health departments, such students are likely to have a more informed and less stereotyped view of the matter. This study also analyzed the association of having gone through a psychiatric rotation and stigmatizing attitudes, we found no significant association in these two parameters. This does seem contrary to common sense assumption but our finding correlates with the results of similar cross-sectional studies in recent literature<sup>6,11</sup>. The studies that were designed to measure attitudes of students at two points i.e. before and after their rotation in psychiatry show different results i.e. the attitude of students towards mental illness becomes significantly more positive following a clinical rotation in psychiatry<sup>10</sup>. So it seems that when one looks at this process of attitude change in a longitudinal manner, there is some benefit of clinical rotation in psychiatry, but the impact may not be as long-lasting as one expects it to be.

We also reported that there is a significant inverse association of stigmatizing attitudes with exposure to mental illness in media; having been exposed to information about mental illnesses in the media is associated with lower stigmatizing attitudes and this finding was statistically significant for our study population. However in our research, no distinction was made between exposures in electronic, print or social media, so we can assume that responses must be about all of these mediums. As technology advances, our social landscapes are rapidly changing, the young generation spends a very significant amount of their time and energy on social media and electronic media. This time was previously divided between interacting with peers, teachers and family, so they were the most influential sources in perception building. In this day and age, the social media occupies most of the free time the young generation has

and is thus predictably the main player in shaping their attitudes and perceptions<sup>19</sup>. The use of mass media and film videos in interventions to reduce stigma related to mental illness is increasingly being studied in recent literature. It is known from studies done internationally that exposure through videos and other media to mental health problems, plays a very positive role in decreasing stigma<sup>16</sup>. A Canadian based study finds that videos made in collaboration with psychiatric patients about their experiences had a significant impact in reducing stigma and were also cost-effective<sup>16</sup>. In another study, filmed video contact with patients with mental health problems regularly over a year had a considerable effect on reducing stigma in young adults, which is the same age group of study participants as ours<sup>20</sup>. This finding further bolsters our analysis that exposure to the media portrayal of mental health problems has an anti-stigma effect on young adult students. A review of data on the same question in 2013 reveals that Mass-media interventions have a moderate positive effect in reducing prejudice against mental ill health<sup>21</sup>. It seems that using media to fight public prejudice and stigma can be an efficient and appropriate mechanism especially to target the young generation.

Personal exposure of the students to mentally unwell individuals within the family was also studied as a factor associated with mental illness stigma. It was found that students who reported such a personal exposure were more likely to have low stigma level (33%) as compared to those who hadn't had such an exposure (23%), however, this difference did not reach statistical significance for our sample. This finding correlates to other studies of similar nature, for instance, a study published in *Journal of Social Psychiatry* reports that students who had familiarity with mental illness had lower stigma including those who either had relatives suffering from mental illness or they had gone through such an ailment<sup>22</sup>.

#### **Limitations and further recommendations:**

This study has given information on an important and modifiable factor associated with the fight against the stigma of mental illness, but it does have the limitation of gathering data from only one medical college which cannot be representative of the vast population of medical students of the country. It was also not possible to delineate the various kinds of media sources the stu-

dents got their exposure from and the kind of exposure it was, hence it is not possible to draw pragmatic conclusions from this data as to how to implement this positive impact of media portrayal. It is recommended that further research should be geared at gathering data on various modes of media portrayals and their nature. It will also be pertinent to understand the attitudes of journalists and other media personnel who are making this content. It may lead to another important avenue of an effective and far-reaching anti-stigma campaign.

#### **Conclusion:**

A considerable proportion of medical students have negative attitudes towards psychiatric illness. The level of stigmatizing attitudes that students hold towards Psychiatry is significantly affected by the quality of their exposure to mental illness. Exposure to the media portrayal of mental illness was found to be the most strongly associated with lower levels of negative views in medical students.

**Ethical Approval:** Given

**Conflict of Interest:** The authors declare no conflict of interest.

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