# Mental Health Literacy amongst college students: a community based study

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#### **ABSTRACT**

**Background:** High level of mental health literacy which includes adequate knowledge and positive attitudes in medical, psychology and sociology students towards psychiatric illnesses would make early recognition of and appropriate intervention in these disorders more likely. Our aim was to assess knowledge and attitude of college students of three faculties-medical, psychology and sociology towards the mentally ill and socio-demographic correlates.

**Methodology:** A survey method was employed in Medical and Arts Colleges. One medical college and 5 arts colleges were surveyed regarding students' attitude towards psychiatric illness using National Health Service (NHS) survey questionnaire. Total 1231 completed responses were analyzed. Statistical analysis methods used were Chi square test, Student's t test and One-way ANOVA.

**Results:** There was association between present and past contact with someone with mental health problem and future willingness to have relationship with the same.

**Conclusions:** Areas of deficits in attitude in students can be targeted for further educational interventions and training so that positive attitudes can be inculcated in future health professionals which will ultimately benefit our society.

Key Words: Attitude, Medical students, Psychology students, Sociology students, NHS Survey, Mentally ill

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## INTRODUCTION

The term "Mental health literacy" refers to knowledge and beliefs about mental disorders which aid their recognition management and prevention. Mental health literacy includes the ability to recognize specific disorders, knowing how to seek mental health information; knowledge of risk factors and causes, of self treatments and of professional help available; and attitudes that promote recognition and appropriate help seeking [1]. Psychiatric disorders are universal and affect more than 25% people at some time during their lifetime [2]. Many studies have shown that negative attitudes towards mental illness are widespread [3-4]. The stigma associated with mental illness may also delay seeking treatment [5]. The belief that mental illness is incurable or self inflicted can also be damaging leading to patients not being referred for appropriate mental health care. Attitudes influence both professional and personal behavior. In particular stigma and discrimination associated with mental illness and expressed by mental health professionals results in the under use of mental health services [6]. Stigma leads to social exclusion, non-compliance to effective treatment and major obstacle to recovery. Several studies report that stigma is universal and involve not only lay persons but also various health professionals including psychiatrists, other doctors, psychologists, nursing personnel and health workers [7].

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There may be various reasons for negative attitude. Lack of accurate information about mental illness, lack of contact with individuals with mental illness and lack of familiarity might be one of the most important reasons of this [8]. Research shows greater exposure to and working with mentally ill patients during medical training decreases fear and creates a positive attitude towards caring for the mentally ill [9-10].

#### Indian Studies on Attitude towards mental illness

Several Indian studies of medical students, medical professionals, and general public have concluded gaps in knowledge and stigma related to patients suffering from psychiatric disorders. In a study of 210 undergraduate medical students, the undergraduate medical students had multiple lacunae in their knowledge toward psychiatry, psychiatric disorders, psychiatric patients and psychiatric treatment. A potential contributory fact could be the neglect of psychiatry as a discipline at the undergraduate level [11]. Undergraduate teaching is not given importance. Greater exposure to and working with mentally ill during medical training decreases fear and creates positive attitude [12]. People who had psychiatric disorders believed that the mental disorders were thought to be because of loss of semen or vaginal secretion, less sexual desire, excessive masturbation, god's punishment for their past sins and polluted air were mentioned as perceived causes [13]. Researchers studied knowledge and attitude towards mental illness in general public of Southern India in 100 participants. They found poor knowledge score on most of the items. Regarding attitude only 18% stated that they would visit a psychiatrist if had an emotional problem; Sixty percent (60%) were afraid of someone with mental health problem as neighbor and 55% thought marriage can treat mental illness. Only 25% were willing to maintain friendship with someone with mental illness and 55% felt ashamed to mention someone in family who has mental illness [14].

Studies have concluded that urban and rural societies differ in type of stigma. Rural societies had a punitive model towards the severely mentally ill, while the urban group expressed a liberal view of severe mental illness. Urban Indians showed a strong link between stigma and not wishing to work with a mentally ill individual, whereas no such link existed for rural Indians [15]. In a study reported that urban respondents felt the need to hide their illness and avoided illness histories in job applications while rural respondents experienced more ridicule, shame and discrimination [16]. The study of marital status in patients with schizophrenia shows that the overall rate of marrying and intact marriages were high in Indian patients. Males were seen to marry less often, but once they did so had less of broken marriages. A continuous/relapsing course of illness seems to reduce the prospect of getting married in both sexes. It is seen that breaking of marriage, when it occurs, did so more commonly if the wife was ill and childless. The high rates of marriage and intact marriage, more marriages breaking when wife was sick all seem to reflect the socio-cultural attitudes and practices regarding marriage in the predominantly Hindu Indian society more than any illness or patient related variables [17]. Other researchers have concluded that Psychiatry is given very less importance in the Indian undergraduate medical curriculum and this affects the attitudes of students toward psychiatry and mentally ill patients. In a study aimed at surveying the attitude of undergraduate medical students and interns towards psychiatry and mentally ill patients, on the attitude toward psychiatry scale, respondents expressed views on psychiatry as it being an unscientific specialty. Psychiatrists were considered as poor role models and psychiatric teaching was thought to be of low quality and psychiatry was overall the least preferred career choice [18]. In a village health worker study, socio-economic interventions provided by family, friends and neighbors were considered to be most helpful. Local VHWs and doctors were also viewed as potentially helpful, but psychiatrists less so. Approximately half of the sample thought that dealing with the problem alone would be helpful. Special diets, tonics, appetite stimulants and sleeping pills were also strongly endorsed, but awareness of psychiatric medications was negligible [19].

The aim of the current study was to study the attitude of college students of various faculties i.e medical, psychology and sociology towards the mentally ill.

#### **METHODOLOGY**

One Medical college and 5 Arts colleges' students were surveyed regarding their attitudes towards psychiatric illness using the NHS Survey Questionnaire. In Medical College students of each year were surveyed in separate sessions while in Arts colleges students of all years surveyed in single session. Survey was done in July and August 2012.

Institution's ethics committee permission was taken before conducting the study. Purpose of the study was informed and consent was taken from participants before participation in the study. Participants were ensured of the confidentiality of the information provided. Study questionnaire was filled up by participants. After this, an educational session for mental health awareness was taken for 60 minutes.

Questionnaire comprised of Socio-demographic data, National Health Service (NHS) Survey Questionnaire.

National Health Service (NHS) Survey Questionnaire (U.K.): The survey questionnaire included questions covered a range of other topics including descriptions of people with mental illness, relationships with people with MHPs, willingness to use different modalities of psychiatric treatment, personal experience of mental illness, readiness and ease of talking about MHP and perceptions of mental health-related stigma and discrimination. The Gujarati version was used where students were not well versed with English [20].

#### STATISTICAL ANALYSIS

Analysis was done using SPSS version 15 for windows. Descriptive statistics were computed first to ensure that all of the data were entered properly and to check for missing data. Qualitative data were analyzed by chi square test and quantitative data were analyzed by student's t test and one-way ANOVA. P value of <0.05 was considered statistically significant.

#### **RESULTS**

A total of 1371 responses were received of which 140 responses were discarded as the information provided was inadequate leaving 1231 completed questionnaires for analysis.

Table 1: shows socio-demographic characteristics of the respondents

Variable	N (%)
Gender	
Female	596(48.4)
Male	635(51.6)
Age	
Range	17-25 years
Mean(SD)	19.38(1.87)
Marital Status	
Unmarried	1151(93.5)
Engaged	49(4.0)
Married	31(2.5)
Year of Education	
First	488(39.6)
Second	368(29.9)
Third	312(25.3)
Fifth	63(5.1)

Faculty of Study	
Psychology	443(36.0)
Sociology	130(10.5)
MBBS	658(53.5)
Residence	
Ahmedabad (City)	728(59.1)
Any Other	503(40.9)
-	
Monthly Income	
Rupees	647(52.6)
19575 or more	209(17.0)
9788 to 19575	229(18.6)
4894 to 9797	146(11.8)
up to 4893	
Domicile	
Urban	1022(83.0)
Rural	209(17.0)
Religion	
Hindu	1147(93.2)
Muslim	49(4.0)
Others	35(2.9)
Family Type	
Joint	589(48.3)
Nuclear	642(51.7)

#### Students' attitude towards mentally ill on National Health Service (NHS) Survey Questionnaire

**Perception of who can be considered mentally ill:** Someone who is suffering from schizophrenia (67.3%), someone who has severe bouts of depression(60.9%), someone who was to be kept in mental hospital(53%), someone with congenital brain functioning abnormality(51.7%), someone who is prone to violence(43.3%) were the more common responses.

Perception of mentally ill as violent and Intention for future relationship with mentally ill: Statistically significant difference was found for willingness to live nearby in future and belief of violence. No statistically significant difference was found for other parameters like willingness to live with, work with and willingness to be a friend with mentally ill.

## Personal experience of mental illness

Relationships with people with MHPs (Present, Past and Future): The students reported contacts with someone with MHP as follows (present or past): living with (20.7%), working with (11.2%), living in neighborhood (24.6%), close friendship (16.1%).

They agreed or strongly agreed for the following in future: to live with (31.8%), to work with (45.1%), living in neighborhood (52.1%), close friendship (66.9%).

There was association between present and past contact with someone with MHP and future willingness to have relationship with someone with MHP was statistically significant (p<0.05). Thus present or past contact with mentally ill increases the tolerance for future relationship also.

Table 2: Present and past contact with mentally ill and future intention

Agree 240(24.6) 74(29.0) Neutral 374(38.4) 76(29.8) Disagree 195(20.0) 50(19.6) Strongly Disagree 114(11.7) 28(11.0) Total 976 255  Willing to work Strongly Agree 379(34.7) 56(40.6) Neutral 321(29.4) 27(19.6) Disagree 210(19.2) 17(12.3) Strongly Disagree 88(8.1) 13(9.4) Total 1093 138  Willing to live Strongly Agree 110(11.8) 53(17.3) 11.98 0.0 nearby Agree 352(37.9) 128(42.4) Neutral 261(28.1) 72(23.8) Disagree 141(15.2) 32(10.6) Strongly Disagree 64(6.9) 18(6.0) Total 928 303  Willing to be a Strongly Agree 414(40.1) 70(35.4) Neutral 192(18.6) 22(11.1) Disagree 100(9.7) 18(9.1) Strongly Disagree 62(6.0) 13(6.6)	Future Relationship with mentally ill	Level of Agreement	Present or Past Contact		Chi Square	P value
Agree 240(24.6) 74(29.0) Neutral 374(38.4) 76(29.8) Disagree 195(20.0) 50(19.6) Strongly Disagree 114(11.7) 28(11.0) Total 976 255  Willing to work Strongly Agree 95(8.7) 25(18.1) 19.98 0.0 with Agree 379(34.7) 56(40.6) Neutral 321(29.4) 27(19.6) Disagree 210(19.2) 17(12.3) Strongly Disagree 88(8.1) 13(9.4) Total 1093 138  Willing to live Strongly Agree 110(11.8) 53(17.3) 11.98 0.0 nearby Agree 352(37.9) 128(42.4) Neutral 261(28.1) 72(23.8) Disagree 141(15.2) 32(10.6) Strongly Disagree 64(6.9) 18(6.0) Total 928 303  Willing to be a Strongly Agree 414(40.1) 70(35.4) Neutral 192(18.6) 22(11.1) Disagree 100(9.7) 18(9.1) Strongly Disagree 62(6.0) 13(6.6)						
Neutral   374(38.4)   76(29.8)   Disagree   195(20.0)   50(19.6)   Strongly Disagree   114(11.7)   28(11.0)   Total   976   255      Willing to work   Strongly Agree   95(8.7)   25(18.1)   19.98   0.0   Other Methods   O	Willing to live with	Strongly Agree	53(5.2)	27(10.6)	13.94	0.0075*
Disagree   195(20.0)   50(19.6)     Strongly Disagree   114(11.7)   28(11.0)     Total   976   255     Willing to work   Strongly Agree   95(8.7)   25(18.1)   19.98   0.0     with   Agree   379(34.7)   56(40.6)     Neutral   321(29.4)   27(19.6)     Disagree   210(19.2)   17(12.3)     Strongly Disagree   88(8.1)   13(9.4)     Total   1093   138     Willing to live   Strongly Agree   110(11.8)   53(17.3)   11.98   0.0     nearby   Agree   352(37.9)   128(42.4)     Neutral   261(28.1)   72(23.8)     Disagree   141(15.2)   32(10.6)     Strongly Disagree   64(6.9)   18(6.0)     Total   928   303     Willing to be a   Strongly Agree   265(25.7)   75(37.9)   15.42   0.0     friend   Agree   414(40.1)   70(35.4)     Neutral   192(18.6)   22(11.1)     Disagree   100(9.7)   18(9.1)     Strongly Disagree   62(6.0)   13(6.6)		Agree	240(24.6)	74(29.0)		
Strongly Disagree   114(11.7)   28(11.0)		Neutral	374(38.4)	76(29.8)		
Total 976 255  Willing to work Strongly Agree 95(8.7) 25(18.1) 19.98 0.00 with Agree 379(34.7) 56(40.6) Neutral 321(29.4) 27(19.6) Disagree 210(19.2) 17(12.3) Strongly Disagree 88(8.1) 13(9.4) Total 1093 138  Willing to live Strongly Agree 110(11.8) 53(17.3) 11.98 0.00 nearby Agree 352(37.9) 128(42.4) Neutral 261(28.1) 72(23.8) Disagree 141(15.2) 32(10.6) Strongly Disagree 64(6.9) 18(6.0) Total 928 303  Willing to be a Strongly Agree 265(25.7) 75(37.9) 15.42 0.00 friend Agree 414(40.1) 70(35.4) Neutral 192(18.6) 22(11.1) Disagree 100(9.7) 18(9.1) Strongly Disagree 62(6.0) 13(6.6)		Disagree	195(20.0)	50(19.6)		
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Willing to be a friend       Strongly Agree       265(25.7)       75(37.9)       15.42       0.0         friend       Agree       414(40.1)       70(35.4)         Neutral       192(18.6)       22(11.1)         Disagree       100(9.7)       18(9.1)         Strongly Disagree       62(6.0)       13(6.6)		Strongly Disagree	64(6.9)	18(6.0)		
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Disagree 100(9.7) 18(9.1) Strongly Disagree 62(6.0) 13(6.6)	friend		414(40.1)	70(35.4)		
Strongly Disagree 62(6.0) 13(6.6)		Neutral	192(18.6)	22(11.1)		
		Disagree	100(9.7)	18(9.1)		
1		Strongly Disagree	62(6.0)	13(6.6)		
Total 1033 198		Total	1033	198		

(All statistics done using the Chi square test, \*significant p<0.05)

Table 3: Attitude towards treatment for people with MH Problems

Statement	Strongly	
	Agree/Agree (%)	
Most people with MHPs want to have paid employment	46.5	
If a friend had a MHP, I know what advice to give them to get professional help	74.4	
Medication can be an effective treatment for people with MHPs	53.4	
Psychotherapy (e.g., talking therapy or counseling) can be an effective treatment for people with MHPs	83.0	
Person suffering from mental illness can be completely cured.	58.6	
Most people with MHPs go to a healthcare professional to get help	61.4	

Table 4: Perception of Usefulness of Different Types of Treatment and Faculty

Usefulness of	Level of	Psychology	Sociology	Medical	Chi	P value
Type of	Agreement	Students	Students	Students	Square	
Treatment		(N=443)	(N=130)	(N=658)		
Medicines	Strongly Agree	60 (13.5)	15(11.5)	123(18.7)	67.9	<0.0000001*
	Agree	127(28.7)	37(28.5)	295(44.9)		
	Neutral	124(28.0)	38(29.2)	125(19.0)		
	Disagree	97(21.9)	30(23.1)	101(15.4)		
	Strongly Disagree	35(7.9)	10(7.7)	14(2.0)		
Psychotherapy	Strongly Agree	135(30.6)	28(21.5)	357(54.3)	136.8	<0.000001*
(Counseling)	Agree	189(42.9)	60(46.2)	251(38.2)		
	Neutral	67(15.2)	30(23.1)	35(5.3)		
	Disagree	42(9.5)	9(6.9)	10(1.5)		
	Strongly Disagree	10(1.8)	3(2.3)	5(0.6)		

(All statistics done using the Chi square test, p < 0.05 – significant)

**Table 5:** Perception of Conditions as Mental illness

Statement	Agree strongly (%)	Agree slightly (%)	Neither agree nor disagree (%)	Disagree slightly (%)	Disagree strongly (%)
Depression	30.6	43.3	12.5	9.7	3.9
Stress	20.6	37.7	17.6	16.7	7.4
Schizophrenia	51.7	30.0	12.6	3.8	1.9
Bipolar disorder	35.8	25.4	26.6	8.7	3.4
Drug addiction	20.1	27.3	19.0	20.8	12.7
Grief	13.2	27.8	20.9	23.3	14.7

The lowest percentage was for grief (13.2%- Strongly agree), 33.5% disagree with the statement that drug addiction is a type of mental illness while 47.4% agreeing that drug addiction was a type of mental illness. The percentage agreeing that stress was a type of mental illness was 57.7%.

### Closest person having mental illness

58.7% of respondents said that they don't have any known who has or had some kind of mental illness. Close persons who has or has had some kind of mental illness were Acquaintances (11%), Friend (10.6%),other family members (8%), immediate family members (7%), work colleague (2.7%), self (1.1%) and partner (1.4%)

## Perception of percentage of people having MH Problem in the City (Ahmedabad)

Respondents were asked what percentage of people in the city (Ahmedabad) they think might have a MHP at some point in their lives, and were given a list of options to choose from, ranging from 1 in 3 to 1 in 1000. The largest group of respondents (30.5%) thought the percentage of people who would have a MHP at some point in their lives was 1 in 100. 22.2 % thought that it was 1 in 50, 19.8% said it was 1 in 10. 17.9% said it was 1 in 1000. 5.9% and 3.7% thought that it was 1 in 4 and 1 in 3 respectively.

# Help-seeking

71.1% of respondents said that they would be likely to go to their GP for help. 48.8% of respondents said they are not comfortable talking to a friend or family member about their mental health, for example, telling them they had a mental health diagnosis and how it affects them. 51.2% of respondents said they are not comfortable talking to a teacher about their mental health, for example, telling them they had a mental health diagnosis and how it affects them.

#### **DISCUSSION**

#### Perception of who can be considered mentally ill

Our study finding was similar to NHS study in 2011. The descriptions least likely to be selected were "someone who cannot be held responsible for his or her own actions" at 31.5% and "someone who is incapable of making simple decisions about his or her own life" at 28.1%. These were also similar to NHS study. The descriptions "Someone prone to violence" was at 43.3% which was higher than NHS study in which this description was at 33%. This description is very important as many studies [21-22] reported that if people had more belief about violence by mentally ill, more the social distance, fear, exclusion and stigma found for mentally ill.

#### Perception of mentally ill as violent and Intention for future relationship with mentally ill

Most studies on mental health literacy perceived mentally ill violent [23-24]. This is one of the most important factors that determine a person's attitude towards mentally ill as regards to social distance. Those who do not believe that mentally ill are violent, remain open to interaction with mentally ill without fear of harm.

## Personal experience of mental illness

Willingness to live with someone with a MHP was 31.8% which was lower than NHS study (56%). 52.1% would be willing either to live nearby to and 45.1% would be willing work with someone with a MHP. 66.9% would be willing to be a close friend with someone with MHP.

## Relation of Present or Past Contact with mentally ill and Intention for future relationship

There was association between present and past contact with someone with MHP and future willingness to have relationship with someone with MHP. Thus close contact with mentally ill increases the tolerance for future relationship also.

# Attitudes towards treatment for people with MHPs

The belief regarding medication usefulness was significantly lowered as compared to NHS study (79% agreement) while that of psychotherapy (Counseling) was almost similar (81% agreement).

## Perception of Usefulness of Different Types of Treatment and Faculty

Medication usefulness considered by medical students can be understood but nonmedical students' (psychology and sociology) higher disagreement regarding psychotherapy (counseling) usefulness is a matter of concern. There was no statistically significant difference between psychology and sociology students.

Regarding the prognosis statement that "Person suffering from mental illness can be completely cured" was agreed by 58.6% while in NHS study also 58% agreed and in Ireland survey 48% agreed. So we can say that still many were not optimistic about prognosis of mental illness.

### What would be considered as mental illness

The pattern was similar in NHS Study. In that nearly nine out of ten agreeing schizophrenia as a mental illness, while in present study 62% agreeing strongly and 83% agreeing overall that schizophrenia is a mental illness. The finding regarding depression and bipolar disorder is similar to NHS study. The percentage agreeing that grief was a type of mental illness was (18% - Strongly agree) similar to NHS study finding. The percentage agreeing that drug addiction was a type of mental illness was 46% is similar to NHS study finding. This suggests that many do not consider drug addiction as a MHP which is their ignorance and needs to be included in curriculum.

#### Closest person having mental illness

Individuals who knew someone who received treatment for a MHP, or who had personally received treatment, were more likely to endorse biological theories of causality and positive attitudes than those individuals without this familiarity to MHP [25-26].

## Help-seeking about a MHP

71.1% of respondents said that they would be likely to go to their GP for help. In NHS study this figure was 85%. In most of the studies the general family physician was considered first point of professional contact which can be understood because of little stigma attached by contacting the family physician. 48.8% of respondents said they are not comfortable talking to a friend or family member about their mental health. In NHS study 70% said that they would feel comfortable talking to friend or family member

about their mental health. 51.2% of respondents said they are not comfortable talking to a teacher about their mental health. In NHS study also 43% said that they would feel uncomfortable talking their employer about their mental health.

## Mental health-related stigma and discrimination

91.7% said that people with mental illness experience stigma and discrimination. Most students opined that people with mental illness experience stigma and discrimination. In NHS study also this figure was 85%.

#### Strength of the study

- This is the first Indian study to use National Health Service (NHS) Survey Questionnaire in Indian population.
- This is the first study to compare mental health attitude in all three faculties of students namely medical, psychology and sociology in large sample population who will be the future mental health professionals dealing with mentally ill.
- All students were also imparted mental health awareness after collecting data in 1 hour session which can improve their knowledge and attitude.

#### Limitations of the study

- Sample size of sociology students were less.
- The study doesn't reflect the attitude towards MHP of general community.

#### **CONCLUSIONS**

We found significant negative attitude in students of all faculties. There were also perceptions of mentally ill as a violent person. Close contact with mentally ill in present or past was associated with willingness for future relationships to live with, to work with, to live in a neighborhood and to be a close friend with them. On treatment related issues, psychotherapy (counseling) in psychology and sociology students had lower agreement than medical students which is their main area of work dealing with mentally ill. Many participants were not comfortable telling to a friend, family member or teacher about their mental health issues. These all suggest that there are needs to improve mental health literacy in students' population who are future mental health professionals. A similar study can be conducted in general community, in people with all age group and different educational background using National Health Service (NHS) Survey Questionnaire. Areas of deficits in attitude in students can be targeted for further educational interventions and training. There is an immediate need to change psychiatry curriculum and training in undergraduate students in all faculties so that positive and tolerant attitude can be learnt from starting of the study only.

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