



## ATTITUDE, KNOWLEDGE AND BEHAVIOUR TOWARDS MENTAL ILLNESS AMONG UNDERGRADUATE MEDICAL STUDENTS -A COMPARATIVE STUDY.

### Medicine

**Dr. Shanmugapriya S**

Assistant Professor, Dept. of Psychiatry, Madurai Medical College, Madurai.

**Dr. Amutha G**

Associate Professor, Dept. of Psychiatry, Madurai Medical College, Madurai.

**Dr. Kavitha C\***

Assistant Professor, Dept. of Psychiatry, Madurai Medical College, Madurai.  
\*Corresponding Author

### ABSTRACT

Mental health is an indicator of the social life of a population. Social stigmatization and negative attitude towards mentally ill patients exist in majority of the people in the society. Even medical students are not immune to this prevailing stigma.

**AIMS:** The present study was designed to know the attitude, knowledge about mental illness and behavior towards mentally ill patients among undergraduate medical students.

**SETTING AND DESIGN:** The study was conducted at Government Sivagangai Medical College, Sivagangai, South India. The participants were first year MBBS students and interns. It was a cross sectional comparative study.

**MATERIALS AND METHODS:** socio demographic details and community attitude towards mental illness questionnaire, reported and intended behavior scale and mental health knowledge schedule were given to the first year and interns after informed consent. Totally 188 students were enrolled in this study, 16 students dropped due to various factors. Thus, the final study includes 172 students (70 male students and 102 female students). Students t test and one-way ANOVA were used for analyzing data.

**RESULTS:** Authoritarianism and social restrictiveness were the predominant attitude among first year medical students; benevolence and community health ideology were the predominant attitude among interns. The knowledge about mental illness recognition and the reported and intended behavior towards mentally ill were better among interns. Effective training teaching program will bring the positive attitude among undergraduate medical students.

### KEYWORDS

authoritarianism, benevolence, social restrictiveness, community health ideology

### INTRODUCTION

Psychiatric disorders are prevalent in every part of the world. Nearly ten percent of adults are affected by mental illness at any given point of time [1]. Stigma and negative attitude towards people with mental illness, psychiatry as a medical discipline and psychiatrists as profession are present both in developed and developing countries. Surprisingly these stigmatizing attitudes often exist in medical community as well [2, 3]. Metanalysis done by Schomerus et al reported that negative attitude towards mentally ill patients and psychiatry had not changed in the past two decades [4]. The negative attitude towards psychiatry in the community and in medical professionals will have a negative impact on mentally ill patients. It contributes to poor social support and acceptance by family members, inadequate treatment, unwanted referrals and inadequate mental health care. It is imperative to increase awareness about psychiatric disorders and fill the gap in the knowledge in society and also among medical professionals [5, 6].

Various studies show varied results about attitude of undergraduate medical students but overall the attitude towards mental illness is negative. Some studies show positive results after short term psychiatric training during under graduation [7]. There is also a contradiction between positive attitude and opting psychiatry as a career option [8]. The attitudes to psychiatry among medical undergraduates have been regarded as key factor in determining the choice of psychiatry as a career and willingness to deal with psychiatric disorders in general practice [9]. Medical students develop their interest towards particular specialty during the undergraduate training period. Thus, an understanding of the attitudes of medical students toward psychiatry is utmost importance.

This study was planned to know the knowledge and attitude towards mental illness and behavior towards mentally ill patients among first year students and to compare it with resident doctors. First year students didn't have a exposure to psychiatry, but interns had a psychiatry training in the form of lectures and clinical posting. The present study also assessed whether any change in the attitude among first year students and interns who have underwent psychiatric training.

### MATERIALS AND METHODS

A cross sectional study was conducted in Government Sivagangai Medical College, a tertiary care center in South India. Institution ethical committee approval was obtained. The study involved 100 first year MBBS students and 8 interns. The tools used were administered in the following order semi structured Socio Demographic Proforma, Community attitude towards mental illness questionnaire (CAMI) and Mental health knowledge schedule (MHKS), Reported and intended behavior scale (RIBS) after getting informed consent to participate in the study. Out of 188 students, 172 students were completed the research study procedures, remaining 16 students were not answered the questionnaires due to lack of time, lack of motivation, absences and incomplete response. The responses were recorded and collected data were analyzed using appropriate SPSS (17), chi square test and students t test.

### TOOLS USED

#### SOCIODEMOGRAPHIC PROFORMA;

It includes sociodemographic details such as age, gender, domicile, marital status, family type.

#### Community Attitude Towards Mental Illness Questionnaire (CAMI)

It is developed by Martin Taylor and Micheal dear in late 1970. It is a 40-item questionnaire using 5-point liekart scale. It assesses the attitudes like authoritarianism, benevolence, social restrictiveness and community mental health ideology [10]. Each attitude has 5 positive and 5 negative statements. The overall test retest reliability was above .50.

#### Mental health knowledge schedule (MHKS)

It is developed by Evans lacko in the year 2010. It is a 12-item questionnaire, of which 6 items are assessing the knowledge about mental illness and another 6 items are assessing knowledge areas like help seeking, recognition, support, employment, treatment and recovery [11].

#### Reported and intended behaviour scale (RIBS)

It is developed by Sara Evans Lacko, Clareflach in the year 2011. It is an 8-item questionnaire. It measures the mental health stigma related behavior [12]. The overall test retest reliability was 0.75. The overall internal consistency was cronbachs alpha 0.85.

**RESULTS****Table 1 Socio demographic details of undergraduate medical students**

S.NO	Variable	No	%	
1.	Age	<19 years	88	51.2
		>19 years	84	48.8
2.	Gender	Male	70	40.7
		Female	102	59.3
3.	Religion	Hindu	151	87.8
		Christian	8	4.7
		Muslim	13	7.6
4.	Domicile	Rural	57	33.1
		Urban	115	66.9
5.	Family	Nuclear	148	86
		Joint	24	14

Table 1 showing socio demographic characteristics of students. Totally 172 students were participated, of which 102(59%) students were female and 70 (40%) students were male. 87.8% of students were belongs to Hindu religion, 7.6% were muslim,8% were Christian. 66.9 % of students were from urban domicile compared to rural (33.1%). Majority of students were from nuclear family (86%) compared to joint family (14%).

**TABLE 2 Score of CAMI Scale, MHKS scale, and RIBS Scale for first year students and interns**

S. NO	Variables	1 <sup>ST</sup> YEAR		CRR I		t value
		Mean	SD	Mean	SD	
1	Authoritarianism	63.97	8.33	58.21	8.40	4.506**
2	Benevolence	73.45	9.67	79.52	8.51	-4.362**
3	Social restrictiveness	57.66	11.38	45.93	7.12	8.061**
4	Community mental health ideology	71.10	8.70	79.17	9.75	-5.738**
5	MHKS (total score)	47.42	7.87	62.63	18.56	-7.051**
6	MHKS (Levels of recognition)	51.74	7.09	60.34	18.73	-4.015**
7	RIBS (Total reported score)	49.09	14.45	64.04	17.43	-6.137**
8	RIBS (Total intended score)	37.50	6.205	50.30	19.91	-5.744**

Table 2 shows attitude towards mental illness among students, Authoritarianism ( $63.97 \pm 8.33 > 58.21 \pm 8.40$ ) and social restrictiveness score ( $57.66 \pm 11.38 > 45.93 \pm 7.12$ ) were higher among first year students. Benevolence ( $79.52 \pm 8.51 > 73.45 \pm 8.51$ ) and community mental health ideology ( $79.17 \pm 9.75 > 71.10 \pm 8.70$ ) score were higher among interns. The total score of mental health knowledge schedule was more for interns compared to first year students ( $62.63 \pm 18.56 > 47.42 \pm 7.87$ ). The mental health knowledge recognition score ( $60.34 \pm 18.73 > 49.09 \pm 14.45$ ) was higher among interns. Total score of reported ( $64.04 \pm 17.43 > 49.09 \pm 14.45$ ) and intended behavior scale score ( $50.30 \pm 19.91 > 37.50 \pm 6.20$ ) was higher among interns compared to first year. MHKS- mental health knowledge schedule, RIBS -reported and intended behaviour scale

**TABLE 3 Gender difference among medical students in relation to variable.**

S. NO	Variables	Male		Female		t value
		Mean	SD	Mean	SD	
1	Authoritarianism	61.43	8.41	60.97	9.13	.333
2	Benevolence	74.94	10.85	77.43	8.52	-1.681
3	Social restrictiveness	51.87	10.94	51.97	11.40	-0.057
4	Community health ideology	73.91	10.24	75.80	9.89	-1.213
5	MHKS (total score)	53.21	14.30	55.97	17.09	-1.108
6	MHKS (Levels of recognition)	55.62	13.60	56.15	15.39	-.232
7	RIBS (Total reported score)	56.21	15.39	56.52	16.56	-.111
8	RIBS (Total intended score)	47.35	19.99	41.27	11.85	2.500*

Table 3 shows, there was no significant gender difference among students in relation to their attitude and knowledge about mental illness. But male students scored better in intended behavior in RIBS scale.

**DISCUSSION**

Patients with mental illness often experience stigmatizing attitude not only in general public but also in health care system. Negative attitude towards mentally ill patient among medical personnel greatly affects the patient care, improper referral and inadequate treatment. The attitude of undergraduate medical students towards mental illness is utmost importance because they are directly or indirectly involved in the patient care in future. The image of psychiatry within the medical community is quite good but has to improve its image in laymen's mind by Jiloha R c et al [13]. The response rate was 88% for first year students and 95% for interns. This response rate indicates exposure to psychiatry among interns in the form of clinical posting increases their willingness to participate in the study compared to the first-year medical students who didn't have an exposure to psychiatry. Totally 172 students participated, of whom 102 (59%) were female and 70(40 %) students were male.

On comparing the domicile 66.9% students were from urban area and 33.1% students from rural area. Majority of students were from nuclear family (86%) compared to joint family (14%). This consistent with current trend that more female students were opting for medical profession from nuclear family in urban background.

In this study we assessed the attitude of medical students in terms of 4 different factors using CAMI questionnaire. Factor 1 Authoritarianism indicates a belief that people with mental illness are inferior to normal individuals and needs coercive handling [14]. In this study first year students scored significantly higher on authoritarianism compared to interns. Factor 2 Benevolence related to kindness and sympathetic views of the respondents toward people with mental illness. In this study Interns scored significantly higher on benevolence than first year students. Factor 3 Community mental health ideology reflects the positive orientation. In this study Interns scored significantly higher on community mental health ideology score than first year students. Factor 4 Social restrictiveness explores the belief that people with mental illness constitute a threat to society, particularly to the family, and must therefore be restricted in their functioning during hospitalization and afterward [14]. In our study, social restrictiveness scores were significantly higher in first year students than interns. In the present study Authoritarianism and social restrictiveness are the predominant attitude among first year students. Benevolence and community mental health ideology were the predominant attitude among interns. More positive attitude towards mental illness among interns compared to first year students. The present study findings is concurrent with, Hemanthkumar B G et al, that the degree of change in attitude was higher among interns when compared with 1st year students. He also indicated that continuous education and training improved the attitude of medical students towards psychiatry patients [15]. Similarly, Aruna G et al stated that negative attitude toward psychiatric disorder become apparent in the initial years of medical education [16]. authoritarianism is the predominant attitude among first year medical students and benevolence among interns which is also consistent with our findings [17]. Chukwumeka M et al from Nigeria stated that health professionals working directly with mentally ill patients showed more positive attitude than those who did not. Contact with people with mental illness seems to be a stronger predictor of less stigmatizing attitude towards mental illness, as perceived danger and desired social distance decrease with increasing contact [18]. Another study from Malaysia shows increasing positive attitude among medical students towards mental illness [19].

Contrary to our results Jilowa c s et al stated that second year medical students have more positive attitude than the interns [20]. In a Romanian study, Codrutaalinapopescu et al showed the stigmatizing attitude among medical students towards mental illness [21]. Many international studies also reported the negative attitude. There was no significant gender difference in the attitude of medical students towards mental illness. But male students were scored better in indented behavior score towards mentally ill.

Mental health knowledge schedule, mean score of levels of recognition was significantly higher among interns compared to first year students. This indicates that recognition of the mental illness was better among interns than first year students. Total intended behaviour mean score was higher among interns compared to first year students. It is consistent with Youssef FF, clinical student's student's scores higher than preclinical students on knowledge about the mental illness [22]. It is observed that more no of days of clinical postings and

involvement in community-based mental health program will enhance their attitude, knowledge behavior towards mental illness among undergraduate medical students.

## CONCLUSION

The current study suggest that the interns have more positive attitude towards people with mental illness in benevolence and community mental health ideology domain compared to first year students. Also, there was significant change in knowledge about mental illness recognition among interns than first year medical students. Reported and intended behavior towards mentally ill was also better among interns compared to first year medical students. Psychiatry training has a valuable impact on the attitude, knowledge and behavior of undergraduates towards mental illness. It is recommended that, the Comprehensive mental health education and training can be effective in reducing the stigma of mental illness and can increase medical student's confidence in working with people with mental illness. Limitations of our study was, we used the convenient sampling in small sample of students in our medical college, which cannot be generalized. In future we can extend our study involving a greater number of students.

## ACKNOWLEDGEMENTS

We thank all medical students who participated in this study.

## CONFLICTS OF INTEREST

There are no conflicts of interest

## REFERENCES

1. WHO Investigating in mental health magnitude and burden of mental disorders. Geneva: WHO 2003 p8
2. Murthy RS, Khandelwal s. undergraduate training in psychiatry: world perspective. *Indian journal psychiatry* 27,49:169-74.
3. Mukherjee R, Falho A, Wijesinghe , Checinski K, Surgenor T , The stigmatization of psychiatric illness in attitude of medical students and doctors in a London teaching hospital. *Psychiatric bulletin* 22:26:
4. schomerus G, Schwahn C, Holzinger A, Corrigan, Grabe HJ, Carka et al. Evolution of public attitudes about mental illness: A systematic review and meta-analysis. *Acta psychiatriscand* 2012;125:440-52
5. Kishore J, Gupta A, Jiliha RC, Bantman P, myths, beliefs and perceptions about mental disorders and health seeking behaviour in Delhi, India. *Indian Journal psychiatry* 2011: 53:324-9.
6. Minoy, Yasuda N, Tsuda T, Shimodera S. Effects of a one-hour educational program on medical student's attitudes to mental illness. *Psychiatry clinical neuroscience* 2001:55
7. Holm-Petersen c, Vinge S, Hansen J, Gyrd Hansen D. The impact of contact with psychiatry on senior medical student's attitudes toward psychiatry. *ActaPsychiatrScand* 2007;116:308-11
8. Ndeta DM, khasakhala L, Ongecha-owuner F, Kuria M, Muteso, Syanda J et al. Attitudes toward psychiatry: A survey of medical students at the University of Nairobi, Kenya. *Acad psychiatry* 2008;32:154-9.
9. Rich CL, Pitts FN Jr. Suicide by psychiatrists: A study of medical specialists among 18,730 consecutive physician deaths during a five-year period, 1967-72 *J clin Psychiatry* 1980; 41;261-3.
10. Martin Taylor, Michael Dear scaling community attitudes toward the mentally ill
11. Evans -Iacko et al Development and Psychometric properties of the mental health knowledge schedule
12. Sara Evans Iacko, Diana Rose Development and psychometric properties of the Reported and Intended behaviour scale; a stigma related behaviour measure
13. Jiloha. R. C. Image of psychiatry among medical community. *Indian journal of psychiatry* (1989), 31(4), 285-287.
14. Prannaygulati, Subash das, B.S. Chavan. Impact of psychiatry training on attitude of medical students toward mental illness and psychiatry.
15. Hemantkumar BG, Keertish N, SathyanarayanaMT,Hyder S. Attitude of interns towards psychiatry before and after 2 weeks of clinical rotation. *Indian J Soc Psychiatry* 2017; 33:365-9.
16. Aruna G, Mittal S, YadiyalMB, Acharya C, Acharya S, Uppulari C. Perception, knowledge, and attitude toward mental disorders and psychiatry among medical undergraduates in Karnataka: A cross-sectional study. *Indian J Psychiatry* 2016; 58:70-6.
17. Astha Prasai, I Shubash Chandra Sharma, I Rika Rijal, I Shreeyanta K.C. I Attitude Towards Mental Illness among Medical Students and Interns of A Medical College I Kathmandu Medical College and Teaching Hospital, Simangal, Kathmandu, Nepal.
18. Chukwuemeka Michael Ubaka I\*, ChiomaMirrian Chikezie2, KosisochiChinwendu Amorha I, Chinwe Victoria Ukwel Health Professionals' Stigma towards the Psychiatric Ill in Nigeria.
19. JP Reddy, SMK Tan, MT azmi, MH shaharom, R Rosdinom, T mianim, ZZ ruzanna, IH Minas. The effect of a clinical posting in psychiatry on the attitudes of medical students towards psychiatry and mental illness in a Malaysian medical school.
20. Jilowa CS, Meena PS, Jain M, DhandaG, Sharma KK, Kumawat AK, et al. Attitude of undergraduate medical students toward psychiatry: A cross-sectional comparative study. *IndPsychiatry J* 2018; 27:124-30.
21. Codruta alinapopescu, Anca Dana buzoianu, Soimitamihaelasuciu and Sebastian mihaiarmean. Attitude toward mentally ill patients: a comparison between Romanian and international medical students.
22. Youssef FF. Attitudes toward mental illness among Caribbean medical students. *Educ Health* 2018; 31:3-9.