



# Evaluation of attitude and regard towards mental illness in comparison with chronic medical conditions among final year nursing students

## Abstract

**Background:** Nursing students' perception and attitude about illnesses play a major role in providing healthcare for suffering patients. Existing literature suggests that these students perceive mental illnesses in both positive and negative manner; however, the perception towards chronic medical conditions showed variation. Hence, our study attempted to identify whether there is a significant difference in the attitude towards mental illness and chronic medical conditions. **Objectives:** To study the attitude and regard towards mental illness among nursing students and compare with chronic medical conditions (diabetes mellitus and tuberculosis). **Materials and methods:** This is a cross-sectional study conducted among final year nursing students who had finished both theory and clinical postings in psychiatry. One hundred and fifty-seven students consented to take part in the study. Sociodemographic details, Attitude Scale for Mental Illness (ASMI), and Medical Condition Regard Scale (MCRS) were used in this study. **Results:** Overall, 11.46% of the students had experienced mental illness at some point in time and 22.29% had family history of mental illness. The nursing students had significant positive attitude towards mental illness in three of the six domains: benevolence (27.20), restrictiveness (9.48), and stigmatisation (9.83). Although few mean values were higher among individual items for diabetes mellitus and tuberculosis, there was no significant difference between the overall MCRS scores for mental illnesses and diabetes mellitus ( $p=0.14$ ) and tuberculosis ( $p=0.07$ ). **Conclusion:** The general attitude of nursing students towards mental illness and chronic medical conditions (diabetes mellitus and tuberculosis) were comparable. Further studies need to focus on the various aspects of stigma/attitude towards mental illnesses among nursing students.

**Keywords:** Mental Disorders. Diabetes. Tuberculosis.

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## INTRODUCTION

Nursing care is of utmost importance in providing quality service to the patients irrespective of their illnesses. Research have been done to explore the opinions, knowledge, attitudes, and perceptions across various mental health conditions among healthcare personnel, mental healthcare providers, public sectors, medical and nursing students as well.[1-3]

In this current stressful world, mental health conditions are often being identified and diagnosed with varying severity. Nurses are the primary healthcare providers who spend most of the time with inpatients and who know better intricacies

about patients and their family which has major implications in quality of mental health services.[4]

Existing literature report that nursing students hold negative attitude (people with mental illnesses are dangerous and unpredictable) towards mental illness[5] and profession of mental health nursing.[6-9] It has been well established that mental health issues are highly stigmatised in the current society including nursing students and these negative attitudes are positively impacted by comprehensive nursing education.[4,10]

Research has been done among medical and nursing students from India in understanding the knowledge/attitude towards mental illness and common medical conditions

separately. A study from India among aspiring medical and nursing students showed the students had fair knowledge about tuberculosis and did not display any prejudice towards caring and treating patients with tuberculosis.[11] Another study done in India, showed both medical and nursing students had comparatively less stigmatising attitude towards patients with diabetes mellitus than tuberculosis.[12]

With this background, we attempted to compare and see whether the knowledge, attitude, and perception of nursing students are similar or differ across mental illness and common medical conditions including both communicable and non-communicable diseases (tuberculosis and diabetes mellitus).

## MATERIALS AND METHODS

This is a cross-sectional study conducted among the final year nursing students (aged more than 18 years) from Hosmat College of Nursing and Bethel Medical Institute of Nursing Sciences in Bangalore, Karnataka, India. Our study population was decided based on the fact that final year nursing students have been exposed to both theory and clinical postings in psychiatry as part of their third year academic curriculum. The study period extended over two months duration (November and December 2019). The study was initiated after institutional ethics committee clearance was obtained. In this study, universal sampling technique was used which included all the students who were voluntarily willing and consented to take part in the study. The students were divided into small groups consisting of 15-20 students per group based on their order of roll numbers. A brief introduction was given to the students to familiarise them with the study protocol and a written informed consent was taken. A pre-tested semi-structured questionnaire was administered to the students in the presence of the investigator. Any queries while filling up the questionnaire were addressed simultaneously. Anonymity of the information provided was ensured.

## Tools

### *Sociodemographic proforma*

A brief structured proforma was given to obtain data such as age, gender, and place of residency.

### *Attitude Scale for Mental Illness (ASMI)*

This instrument is a self-report measure of attitudes towards mental illness which is valid and reliable.[13] It has 34 items and measures the general attitude to mental illness. Each question is rated on a five-point Likert scale from one to five (one=totally disagree, two=almost totally disagree, three=sometimes agree, four=almost totally agree, and five=totally agree) accordingly. The Attitude Scale for Mental Illness (ASMI) consists of six domains which measure benevolence, separatism, stereotyping, restrictiveness, pessimistic prediction, and stigmatisation towards mental illness. Benevolence was intended to measure the paternalistic and sympathetic view towards mental illness. The domain separatism was intended to measure the attitude of discrimination. The stereotype assesses the degree of maintenance of social distance towards the mentally ill. The domain restrictiveness was intended to measure viewing the

mentally ill as a threat to society.[14] Pessimistic prediction was intended to measure the level of prejudice towards mental illness which is a negative evaluative component. Stigmatisation is the feeling of disgrace or discredit, which sets a person apart from others.[15]

### *Medical Condition Regard Scale (MCRS)*

This instrument is used to assess the biases, emotions, and expectations across various medical conditions.[16] It is a non-condition specific scale which consists of 11 question items and each response is rated on a six point Likert scale ranging from one to six (one=strongly disagree, two=disagree, three=not sure but probably disagree, four=not sure but probably agree, five=agree, and six=strongly agree). Items three, five, seven, eight, and 11 are phrased negatively to reduce the dissent response effect and hence, these responses are reverse scored for analysis. The item number seven is modified to suit Indian context (wastage of medical Dollars to wastage of money). The total Medical Condition Regard Scale (MCRS) scores range between minimum score=six and maximum score=66 which is considered as an indicator of attitude towards specific condition studied. The cut-off value among positive and negative sides, has a mean MCRS score of 3.5 and the closer the score is to six, the regard for the particular condition is considered more positive. This instrument has good reliability and validity with psychometric properties of Cronbach's alpha of 0.87 and a test-retest reliability of 0.84 respectively.

## Statistical analysis

Data was analysed using Statistical Package for the Social Sciences (SPSS) 20 software. The data were expressed in terms of mean, standard deviation (SD), and percentage, and paired sample t-test was employed to analyse the data statistically. Shapiro-Wilk test was used to test the normality and the data was normally distributed. The confidence interval has been kept at standard 95%. The p value of <0.05 was considered as significant.

## RESULTS

Out of 177 final year nursing students, 157 of them consented for the study, among which 13.4% were male students (n=21) and 86.6% were female students (n=136). The mean age of students participated in the study was 20.90±1.04 years (mean age±SD). Regarding the place of residency, most of the students were from rural 47.2% (n=67) followed by semi-urban 37.6% (n=59) and urban 19.7% (n=31) respectively. Regarding the religion, most of the students were Christians 64.33% (n=101) followed by Hindu 29.29% (n=46), Muslims 5.09% (n=eight), and others 1.2% (n=two). Among the study group, 11.46% of the students had experienced mental illness at some point in time and sought professional help and 22.29% had family history of mental illness.

Table 1 explains the responses of the students on both positive and negative domains of the attitude towards mental illness scale. The students had higher scores on the positive domains like benevolence (27.20), restrictiveness (9.48), and stigmatisation (9.83). The negative domains such as separatism (29.39), stereotyping (13.46), and pessimistic prediction (11.2) are indicative of unhealthy attitude of nursing students towards mental illnesses.

Table 2 shows the comparison of MCERS scores between mental illness and diabetes mellitus. Although the score for seven items (out of 11) were higher for diabetes mellitus compared to that of mental illness, there was no significant difference between the overall MCERS scores of the two conditions ( $p=0.14$ ).

Table 3 shows the comparison of MCERS scores between mental illness and tuberculosis. Although the score for nine items (out of 11) were higher for mental illness compared to that of tuberculosis, there was no significant difference between the overall MCERS scores of the two conditions ( $p=0.07$ ).

Table 4 shows the comparison of MCERS scores between diabetes mellitus and tuberculosis. The score for nine items (out of 11) were higher for diabetes mellitus compared to that of tuberculosis and there was statistically significant difference between the overall MCERS scores of the two conditions ( $p<0.05$ ) with favouring attitude towards patients with diabetes mellitus.

## DISCUSSION

Good mental health is crucial for the well-being of individuals. Patients with mental illness are often considered difficult to deal with. Nurses' knowledge on chronic conditions and mental illness would certainly help in better understanding

of the patient and their problems.[4] Therefore, they are expected to have no bias in treating both kinds of patients. In order to understand the outlook of future nurses, our research examines the attitude of nursing students towards patients with mental illness and compares it with attitude towards patients with chronic medical conditions like diabetes mellitus and tuberculosis.

Our study revealed that nursing students showed higher benevolence (mean score= $27.2\pm4.59$ ) towards mentally ill people compared to other attitudes. These findings suggest that the nursing students feel that patients with mental illness are like any other medical patients and the findings were comparable with another study conducted by Vijayalakshmi *et al.*[8] In a similar study, Hamaideh and Mudallal[17] found that Jordanian nursing students have a positive attitude towards mentally ill patients in four of five attitude factors such as authoritarianism, mental hygiene ideology, benevolence, and interpersonal aetiology.

However, differing results were reported by Lingeswaran,[18] wherein medical students and interns from Pondicherry, India rated high in the negative domains, implying unhealthy attitude towards the mentally ill. A multicentric project across European countries and Australia showed that nursing students had significant negative attitude (i.e., people with mental illness are dangerous) and prejudice towards people diagnosed with mental illness as they perceived patients with mental illness are weak

**Table 1:** Distribution of attitude towards mental illness among nursing students

Subscales	Number of items	Possible score	Cut-off (mid) point	Mean	Standard deviation
Separatism (S)	10	5-50	25	29.39	5.49
Stereotyping (St)	4	4-20	10	13.46	3.25
Restrictiveness (R)	4	4-20	10	9.48	3.36
Benevolence (B)	8	8-40	20	27.20	4.59
Pessimistic prediction (P)	4	4-20	10	11.2	3.05
Stigmatizing (Stig)	4	4-20	10	9.83	3.30

**Table 2:** Comparison of attitude towards mental illness and diabetes mellitus among nursing students

MCERS items	Mental illness (mean score)	Diabetes mellitus (mean score)	p value
Working with patients like this is satisfying	3.76	4.59	0.001*
Insurance plans should cover patients like this to the same degree that they cover patients with other conditions	4.63	4.53	0.18
There is little I can do to help patients like this	2.54	2.62	0.55
I feel especially compassionate toward patients like this	4.38	4.11	0.04*
Patients like this irritate me	3.59	4.71	0.001*
I wouldn't mind getting up on call nights to care for patients like this	3.65	3.30	0.009*
Treating patients like this is a waste of money	5.06	5.07	0.96
Patients like this are particularly difficult for me to work with	3.68	4.38	0.001*
I can usually find something that helps patients like this feel better	4.61	4.48	0.29
I enjoy giving extra time to patients like this	4.20	4.26	0.60
I prefer not to work with patients like this	4.43	4.71	0.04*
Total	44.25	46.75	0.14

\* $p<0.05$ , MCERS: Medical Condition Regard Scale

**Table 3:** Comparison of attitude towards mental illness and tuberculosis among nursing students

MCRS items	Mental illness (mean score)	Tuberculosis (mean score)	p value
Working with patients like this is satisfying	3.76	3.29	0.001*
Insurance plans should cover patients like this to the same degree that they cover patients with other conditions	4.63	4.39	0.77
There is little I can do to help patients like this	2.54	2.85	0.02*
I feel especially compassionate toward patients like this	4.38	3.74	0.001*
Patients like this irritate me	3.59	4.08	0.002*
I wouldn't mind getting up on call nights to care for patients like this	3.65	3.38	0.06
Treating patients like this is a waste of money	5.06	4.85	0.11
Patients like this are particularly difficult for me to work with	3.68	3.55	0.33
I can usually find something that helps patients like this feel better	4.61	4.14	0.001*
I enjoy giving extra time to patients like this	4.20	3.54	0.001*
I prefer not to work with patients like this	4.43	4.02	0.003*
Total	44.25	41.83	0.07

\*p&lt;0.05, MCRS: Medical Condition Regard Scale

**Table 4:** Comparison of attitude towards diabetes mellitus and tuberculosis among nursing students

MCRS items	Diabetes mellitus	Tuberculosis	p value
Working with patients like this is satisfying	4.59	3.29	<0.001*
Insurance plans should cover patients like this to the same degree that they cover patients with other conditions	4.53	4.39	0.13
There is little I can do to help patients like this	2.62	2.85	0.04*
I feel especially compassionate toward patients like this	4.11	3.74	0.001*
Patients like this irritate me	4.71	4.08	<0.001*
I wouldn't mind getting up on call nights to care for patients like this	3.30	3.38	0.52
Treating patients like this is a waste of money	5.07	4.85	0.046*
Patients like this are particularly difficult for me to work with	4.38	3.55	<0.001*
I can usually find something that helps patients like this feel better	4.48	4.14	0.004*
I enjoy giving extra time to patients like this	4.26	3.54	<0.001*
I prefer not to work with patients like this	4.71	4.02	<0.001*
Total	46.75	41.83	<0.001*

\*p &lt; 0.05, MCRS: Medical Condition Regard Scale

individuals.[19] Hence, studies across the globe shows mixed results on attitude towards mental illnesses among nursing students.

Overall MCRS assessment in our study showed no significant difference in the biases, emotions, and expectations of the nursing students between patients with mental illness and with chronic medical conditions such as diabetes mellitus and as also reported by Hemanthkumar *et al.*[20] In their study, the sample population comprised of interns, who preferred working with diabetic patients. In our study, the nursing students felt more compassionate and sensitive towards the mentally ill compared to diabetic patients. This may be due to prior exposure during their clinical training. Work satisfaction was more in case of treating diabetic patients than mentally ill, which was significant. Yadav *et al.* [21] and Usha *et al.*[22] conducted similar studies on

interns and medical students, where improvement in their attitudes towards psychiatric illness was observed. It was clear that the attitude improves over a period of time, increasing with the number of exposures to patients with mental illness.

Our study found no statistically significant difference in the overall MCRS assessments between the attitude of nursing students towards mental illness and tuberculosis. However, there were significant differences in terms of satisfaction, helping patients, compassion, and sensitivity towards mentally ill patients. The students enjoyed working with mentally ill patients and found it satisfying. This may be due to the hesitance from nursing students due to the communicable nature of tuberculosis.[11] To the best of our knowledge, there are no reports of MCRS assessment on tuberculosis. In a similar study, self-administered questionnaires were used instead of MCRS assessments by Lertkanokkun *et al.*, [23]



where it was found that healthcare providers from Thailand have a negative attitude towards tuberculosis patients. In another study, Acharya *et al.*[11] found nursing and medical students showing positive attitude towards patients with tuberculosis who were assessed by the amount of knowledge they possessed on tuberculosis.

Findings from this study based on ASMI and MCRS assessments indicate that the attitude of nursing students was similar towards all patients, including mentally ill. This implies that certain factors like knowledge, training, and exposure possibly have a role in deciding their attitude towards any type of patients. There is a need to dismiss myths of mental illness so as to bring a positive attitude in nursing students about mental illness and chronic medical conditions.

### Strength of the study

This is the first study of its kind wherein we looked at attitude/perception of nursing students towards mental illness and compared it with a communicable (tuberculosis) and a non-communicable (diabetes mellitus) medical condition. These diseases are commonly encountered by nursing students in their daily routine practice. Validated scales have been used which provides us with objective evidence regarding attitude towards illnesses.

### Limitations of the study

The shortcomings of the study are that the power of the study could not be calculated as the sampling method adopted was universal sampling. As the sample size is small, results cannot be generalised. Although the scales administered were in English, the understanding of the questions may be limited probably due to persons coming from regional language medium schools. Experience of these students suffering from diabetes mellitus or tuberculosis and working with family members with these chronic medical illnesses was not taken into consideration which could have influenced study results. As the assessment was done in groups, the possibility of copying responses should not be ignored.

### Conclusion

The overall attitude towards mental illness was comparable with diabetes mellitus and tuberculosis. Further studies need to focus on exploring the different aspects of nursing training which could help in developing a positive attitude towards all patients irrespective of their illness.

### AUTHOR CONTRIBUTIONS

**CP:** Concepts, design, definition of intellectual content, literature search, clinical studies, data acquisition, data analysis, statistical analysis, manuscript preparation, manuscript editing, and manuscript review. **BSS:** Concepts, design, definition of intellectual content, literature search, clinical studies, data acquisition, data analysis, statistical analysis, manuscript preparation, manuscript editing, and manuscript review. **AKK:** Concepts, design, definition of intellectual content, literature search, clinical studies, data acquisition, data analysis, statistical analysis, manuscript preparation, manuscript editing, and manuscript review.

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### REFERENCES

1. Emrich K, Thompson TC, Moore G. Positive attitude: an essential element for effective care of people with mental illnesses. *J Psychosoc Nurs Ment Health Serv.* 2003;41:18-25.
2. Jadhav S, Littlewood R, Ryder AG, Chakraborty A, Jain S, Barua M. Stigmatization of severe mental illness in India: against the simple industrialization hypothesis. *Indian J Psychiatry.* 2007;49:189-94.
3. Pedrão LJ, Avanci Rde C, Malaguti SE. Perfil das atitudes de alunos do curso de enfermagem frente à doença mental, antes da influência da instrução acadêmica, proveniente de disciplinas de área específica [Profile of undergraduate nursing students' attitudes towards mental disease, before the influence of specific academic education]. *Rev Lat Am Enfermagem.* 2002;10:794-9. Portuguese.
4. Hunter L, Weber T, Shattell M, Harris BA. Nursing students' attitudes about psychiatric mental health nursing. *Issues Ment Health Nurs.* 2015;36:29-34.
5. Björkman T, Angelman T, Jönsson M. Attitudes towards people with mental illness: a cross-sectional study among nursing staff in psychiatric and somatic care. *Scand J Caring Sci.* 2008;22:170-7.
6. Happell B, Gough K. Nursing students' attitudes to mental health nursing: psychometric properties of a self-report scale. *Arch Psychiatr Nurs.* 2009;23:376-86.
7. Dawood E. Impact of clinical placement on nursing students' attitudes towards psychiatry. *J Am Sci.* 2012;8:627-32.
8. Vijayalakshmi P, Thimmaiah R, Chandra R, BadaMath S. Bachelor of nursing students' attitude towards people with mental illness and career choices in psychiatric nursing. An Indian perspective. *Invest Educ Enferm.* 2015;33:138-54.
9. Happell B, Gough Nee Hayman-White K. Undergraduate nursing students' attitudes towards mental health nursing: determining the influencing factors. *Contemp Nurse.* 2007;25:72-81.
10. Happell B. Comprehensive nursing education in Victoria: rhetoric or reality? *J Psychiatr Ment Health Nurs.* 2001;8:507-16.
11. Acharya PR, D'Souza M, Sahoo RC. Tuberculosis knowledge and attitude in aspiring doctors and nurses - is it time for our TB teaching methods to evolve? *Indian J Tuberc.* 2017;64:20-5.
12. Vaz M, Travasso SM, Vaz M. Perceptions of stigma among medical and nursing students and tuberculosis and diabetes patients at a teaching hospital in southern India. *Indian J Med Ethics.* 2016;1:8-16.
13. Ng P, Chan KF. Sex differences in opinion towards mental illness of secondary school students in Hong Kong. *Int J Soc Psychiatry.* 2000;46:79-88.
14. Hinkelman L, Granello DH. Biological sex, adherence to traditional gender roles, and attitudes toward persons with mental illness: an exploratory investigation. *J Ment Health Couns.* 2003;25:259-70.
15. Byrne P. Stigma of mental illness and ways of diminishing it. *Adv Psychiatr Treat.* 2000;6:65-72.
16. Christison GW, Haviland MG, Riggs ML. The medical condition regard scale: measuring reactions to diagnoses. *Acad Med.* 2002;77:257-62.
17. Hamaideh S, Mudallal R. Attitudes of Jordanian nursing students towards mental illness: the effect of teaching and contact on attitudes change. *Coll Stud J.* 2009;43:335-46.
18. Lingewaran A. Psychiatric curriculum and its impact on the attitude of Indian undergraduate medical students and interns. *Indian J Psychol Med.* 2010;32:119-27.
19. Happell B, Platania-Phung C, Bocking J, Scholz B, Horgan A,

- Manning F, *et al.* Nursing students' attitudes towards people diagnosed with mental illness and mental health nursing: an international project from Europe and Australia. *Issues Ment Health Nurs.* 2018;39:829-39.
20. Hemanthkumar BG, Keertish N, Sathyanarayana MT. Is there any difference between attitude of interns toward psychiatric illness and other chronic medical conditions? A comparative study. *Indian J Psychiatry.* 2018;60:195-8.
  21. Yadav T, Arya K, Kataria D, Balhara YP. Impact of psychiatric education and training on attitude of medical students towards mentally ill: a comparative analysis. *Ind Psychiatry J.* 2012;21:22-31.
  22. Usha LV, Sireesha SR, Kumar CS. A cross sectional and comparative study of attitudes in undergraduate medical students towards psychiatric illness, cancer and diabetes mellitus. *IOSR J Dent Med Sci.* 2015;14:82-8.
  23. Lertkanokkun S, Okanurak K, Kaewkungwal J, Meksawasdachai N. Healthcare providers' knowledge, attitudes & practices regarding tuberculosis care. *JITMM2012 Proc.* 2013;2:1-10.

Poornima C, Sachin BS, Krishna Kumar A, Debata I, Suresh VC. Evaluation of attitude and regard towards mental illness in comparison with chronic medical conditions among final year nursing students. *Open J Psychiatry Allied Sci.* 2022;13:15-20. doi: 10.5958/2394-2061.2022.00006.4. Epub 2022 Jan 29.

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