

A Comparative Study of Attitudes Toward Psychiatry Among Nursing Students Across Successive Training Years

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ABSTRACT

Context: Psychiatry nurses are an integral component of a multidisciplinary mental health-care team. **Aim:** The current study aimed at understanding the attitude of undergraduate nursing students toward psychiatry. Additionally, the attitudes toward psychiatry have been compared across the training years among these students. **Materials and Methods:** The study was carried out at a tertiary care nurse-training institute. All the nursing students enrolled with the institute at the time of the study constituted the sample frame. The study questionnaire used in the current study was a 29-item questionnaire that assessed attitudes toward psychiatry. **Statistical Analysis:** The data were analyzed using SPSS ver 17. **Results:** Overall, the majority of the nursing students from all four groups had a favorable response to the statements of the Likert scale. Most of the significantly positive responses (as assessed by the Kruskal-Wallis analysis of variance of the rank order) were from the third-year and internship students. These findings were supported by the significant correlation between these statements and ranked order of the nurse-training years. **Conclusions:** The findings of the current study present some interesting insights into the attitude of nursing students toward psychiatry.

Key words: Attitude, developing countries, mental health resources, nursing training, psychiatry

INTRODUCTION

Psychiatry nurses are an integral component of a multidisciplinary mental health-care team. They play a plethora of roles ranging from that of a case manager to a source of compassionate support in the therapeutic process.^[1] Over the years, choice of psychiatry as a profession has been found to be low among

undergraduate nursing students.^[2,3] Internationally, the shortage of psychiatry nurses is attributed to negative attitudes of nursing students toward mental illness and the subsequent decision to elect out of psychiatric placements.^[4] Such negative attitudes have been shown to have a profound effect on the therapeutic relationships and treatment outcomes.^[5]

According to a World Health organization (WHO) report, there are 0.05 psychiatry nurses per 100,000 people in India.^[6] This ratio has not changed over the years, which suggests that in spite of an increase in the absolute number of psychiatry nurses, the number of nurses per unit population has not improved in the country.^[7] A decline in the number of graduates who choose a career in psychiatry nursing has been reported from developed countries as well.^[8,9]

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The attitude of nursing students toward mental illness has been studied in great detail. However, barring a few questions related to choice of future career, these studies have not explored the 'attitude of nursing students toward psychiatry as a discipline'. The current study aimed at understanding the attitude of undergraduate nursing students toward psychiatry. Additionally, the attitudes toward psychiatry have been compared across the training years among these students.

MATERIALS AND METHODS

The study was carried out at a tertiary care nurse-training institute in India. It is a university-affiliated training program attached to an approximately 1,000 bedded multispecialty hospital. The training in nursing is a bachelor-level program of four years' duration. All the nursing students enrolled with the institute at the time of the study constituted the sample frame. We used a questionnaire-based survey. The nursing students in the different training years were approached after their lectures. They were explained about the study and voluntary nature of the survey. Additionally, they were assured of the confidentiality and anonymity of the information collected during the study. Those consenting to participate in the study were given the study questionnaire.

Study questionnaire

The study questionnaire used in the current study is the one developed by Balon *et al.*^[10] Permission to use the questionnaire was obtained from the authors. It is a 29-item questionnaire that assesses attitudes toward psychiatry across six domains. All the items are rated on a Likert scale scored from 1 (strongly disagree) to 4 (strongly agree). This questionnaire has been used in different studies across different countries and has been found to be a reliable and valid instrument.^[11,12]

The data were analyzed using SPSS ver 17. Between-group analysis was carried out for the different training years, namely, first year, second year, third year, and internship. Analysis of variance (ANOVA) with Bonferroni correction was used to compare the different groups for continuous variables. The Likert scale scores were compared using Kruskal-Wallis ANOVA of the rank order. Additionally, a Chi-square test was performed for ascertainment of between-group differences for different items on the Likert scale. Mann-Whitney U test was used for ANOVA for the items scored only for the third year and internship groups, as these items pertained to the experiences during clinical rotation in psychiatry. Spearman's rho correlation coefficient was calculated to find the correlation between the training year groups and

the individual items of the Likert scale. The level of statistical significance was kept at $P < 0.05$ for all the tests.

RESULTS

A total of 166 nursing students returned the survey questionnaire. It included 43 first-year (25.9%), 39 second-year (23.5%), 49 third-year (29.5%), and 35 (21.1%) internship students. The response rates were 86, 80, 92, and 81% for the first-year, second-year, third-year, and internship groups, respectively.

The four groups were comparable for the number of physicians ($F=0.84$, $P=0.48$), surgeons (nil for all groups), and psychiatrists ($F=0.81$, $P=0.49$) in the family, and no significant differences were observed using between-group analysis. Additionally, no differences were observed between the four groups for previous consultation with a psychiatrist for themselves or for a first-degree relative ($\phi=0.16$, $P=0.24$).

The frequency distribution of responses of nursing students from the four groups on different items of the Likert scale has been represented in Figures 1 and 2. Kruskal Wallis analysis and Mann-Whitney U test for rank order comparison for different items of the Likert scale have been represented in Tables 1-6.

Overall merits of psychiatry

Maximum support for the statement "Psychiatric research has made good strides in advancing care of the major mental disorders" was found among first-year nursing students. Similarly, maximum agreement for the statement "Psychiatry is a rapidly expanding frontier of medicine" was also observed among the first-year students. A statistically significant (Chi-square=25.36, $df=3$, $P < 0.005$) lesser disagreement for the statement "Psychiatry is unscientific and imprecise" was reported by the internship students. This statement had a significant negative correlation with increasing years of nursing training ($\rho=-0.17$, $P=0.03$) [Table 1].

Efficacy

Agreement for psychiatric consultation for an emotionally upset family member not improving on his/her own was significantly higher among the first- and third-year students (Chi-square=19.21, $df=3$, $P < 0.005$). This statement was found to have a significant negative correlation with increasing years of nursing training ($\rho=-0.17$, $P=0.03$). A significantly greater agreement for the statement "Psychiatric treatment is helpful to most people who receive it" was found among the third-year students (Chi-square=8.43, $df=3$, $P=0.04$) [Table 2].

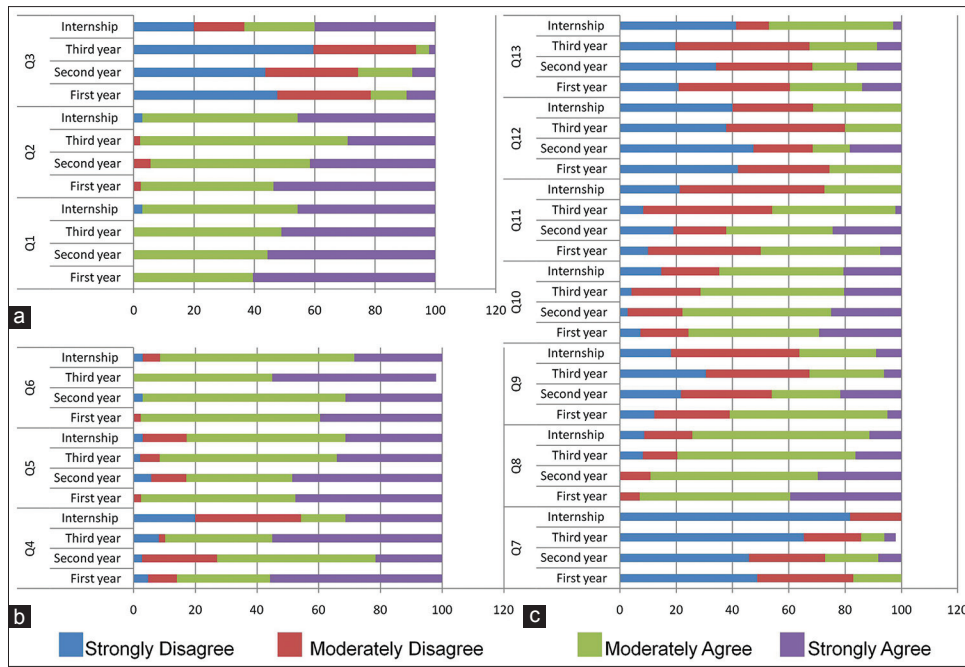


Figure 1: Percentage distribution of responses to statements of the Likert scale : (a) Overall merits of psychiatry; (b) Efficacy and (c) Role definition and functioning of psychiatric nursing professionals

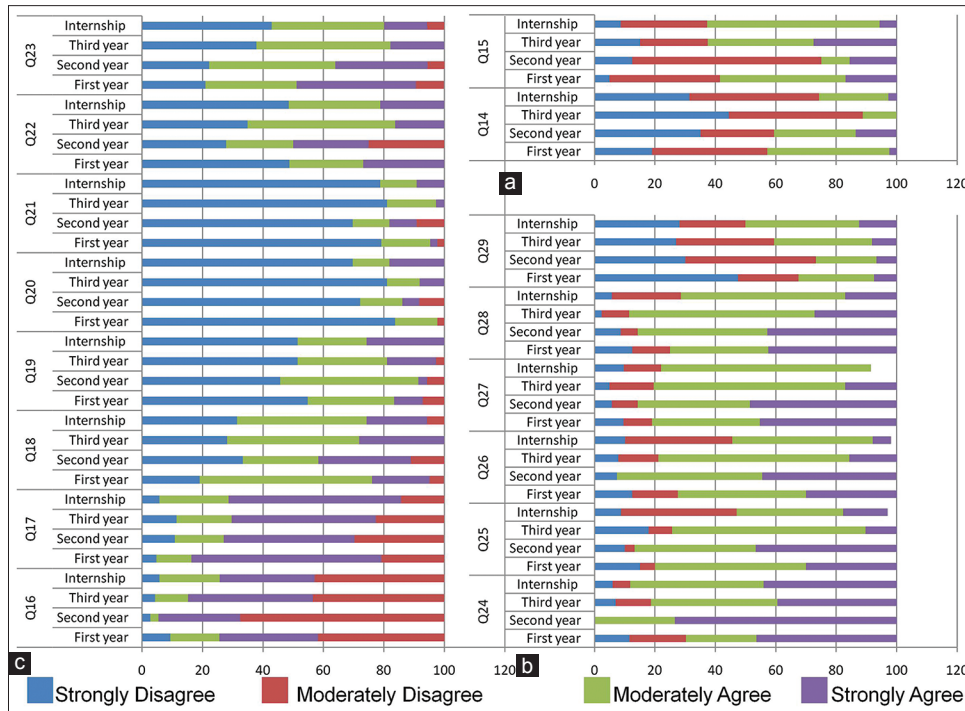


Figure 2: Percentage distribution of responses to statements of the Likert scale: (a) Possible abuse and social criticism; (b) Career and personnel reward and (c) Specific nursing school factors

Role definition and functioning of psychiatric professionals

A significantly greater disagreement for the statement “Psychiatry is not a genuine and valid branch of medicine” was reported by the internship students (Chi-square= 14.38, *df*= 3, *P*=0.002), followed by the third-year students. An overwhelming

majority of the first-year students agreed with the statement “Most psychiatrists are clear, logical thinkers”. It was significantly higher as compared to other groups (Chi-square=14.44, *df*=3, *P*=0.002). Disagreement with the statement “Psychiatrists are too frequently apologetic when teaching psychiatry” was significantly greater among the internship

Table 1: Kruskal-Wallis analysis of variance of the rank order: Overall merits of psychiatry

	Training year	N	Mean rank	Test of significance
Psychiatric research has made good strides in advancing care of the major mental disorders	First	43	87.37	Chi-square=2.08, $df=3, P=0.56$
	Second	36	83.44	
	Third	49	79.82	
	Internship	34	74.44	
Psychiatry is a rapidly expanding frontier of medicine	First	41	89.96	Chi-square=5.06, $df=3, P=0.17$
	Second	36	79.24	
	Third	48	71.15	
	Internship	35	83.54	
Psychiatry is unscientific and imprecise	First	42	83.23	Chi-square=25.36, $df=3, P<0.005^{**}$
	Second	39	79.83	
	Third	47	96.78	
	Internship	30	46.78	

**Statistically significant at $P<0.005$

Table 2: Kruskal-Wallis analysis of variance of the rank order: Efficacy

	Training year	N	Mean rank	Test of significance
If someone in my family was very emotionally upset and the situation did not seem to be improving, I would recommend a psychiatric consultation	First	43	95.59	Chi-square=19.21, $df=3, P<0.005^{**}$
	Second	37	69.55	
	Third	49	95.95	
	Internship	35	61.27	
Psychiatric consultation for medical or surgical patients is often helpful	First	42	89.23	Chi-square=4.25, $df=3, P=0.24$
	Second	35	82.70	
	Third	47	76.62	
	Internship	35	70.77	
Psychiatric treatment is helpful to most people who receive it	First	43	81.23	Chi-square=8.43, $df=3, P=0.04^*$
	Second	35	74.59	
	Third	48	93.75	
	Internship	35	69.64	

*Statistically significant at $P<0.05$, **Statistically significant at $P<0.005$

group (Chi-square=9.7, $df=3, P=0.02$). Spearman's rho coefficient for these three statements and nursing training years were. 27 ($P=0.001$), -0.29 ($P<0.005$), and 0.19 ($P=0.02$), respectively [Table 3].

Social criticism

The statement “Psychiatrists frequently abuse their legal power to hospitalize patients against their will” found a significantly greater disagreement among the third-year and internship students (Chi-square= 11.76, $df=3, P=0.008$). This statement was found to have a significant correlation with increasing years of nursing training ($\rho=0.19, P=0.02$) [Table 4].

Career and personal reward

Second-year nursing students expressed a significantly lesser disagreement (Chi-square= 10.9, $df=3, P=0.01$) with the statement “If a student expresses interest in psychiatry, he or she risks being associated with a group of other would-be psychiatric nurses who are often seen by others as odd, peculiar, or neurotic”.

Table 3: Kruskal-Wallis analysis of variance of the rank order: Role definition and functioning of psychiatric professionals

	Training year	N	Mean rank	Test of significance
Psychiatry is not a genuine and valid branch of medicine	First	41	71.72	Chi-square=14.38, $df=3, P=0.002^{**}$
	Second	37	65.97	
	Third	48	84.73	
	Internship	33	99.14	
Most psychiatric professionals are clear, logical thinkers	First	43	98.70	Chi-square=14.44, $df=3, P=0.002^{**}$
	Second	37	89.69	
	Third	49	73.77	
	Internship	35	67.23	
With a few exceptions, clinical psychologists and social workers are just as qualified as psychiatrists to diagnose and treat emotionally disturbed persons	First	41	68.74	Chi-square=6.98, $df=3, P=0.07$
	Second	37	75.39	
	Third	49	92.17	
	Internship	33	83.50	
Among mental health professionals, psychiatrists have the most authority and influence	First	41	85.33	Chi-square=2.16, $df=3, P=0.54$
	Second	36	85.06	
	Third	49	78.58	
	Internship	34	72.62	
Psychiatrists are too frequently apologetic when teaching psychiatry	First	40	76.18	Chi-square=9.7, $df=3, P=0.02^*$
	Second	37	66.22	
	Third	48	80.04	
	Internship	33	97.64	
Psychiatry is too “biologically” minded and not attentive enough to the patient’s personal life and psychological problems	First	43	82.57	Chi-square=0.25, $df=3, P=0.97$
	Second	38	79.25	
	Third	45	82.59	
	Internship	35	78.93	
Psychiatry is too analytical, theoretical, and psychodynamic, and not attentive enough to patient’s physiology	First	43	75.31	Chi-square=1.40, $df=3, P=0.71$
	Second	38	85.41	
	Third	46	79.63	
	Internship	34	85.12	

*Statistically significant at $P<0.05$; **Statistically significant at $P<0.005$

Table 4: Kruskal-Wallis analysis of variance of the rank order: Social criticism

	Training year	N	Mean rank	Test of significance
Psychiatrists frequently abuse their legal power to hospitalize patients against their will	First	42	66.18	Chi-square=11.76, $df=3, P=0.008^*$
	Second	37	73.73	
	Third	45	96.83	
	Internship	35	81.57	
On an average, psychiatrists make as much money as most other doctors	First	41	79.17	Chi-square=7.29, $df=3, P=0.06$
	Second	32	57.86	
	Third	40	81.94	
	Internship	35	75.74	

*Statistically significant at $P<0.05$, **Statistically significant at $P<0.005$

A significantly greater disagreement was expressed for the statement “I feel uncomfortable with mentally ill patients” by the third-year and internship students (Chi-square= 12.51, $df=3, P=0.006$). This statement was found to have a significant correlation with the increasing years of nursing training ($\rho=0.27, P=0.001$) [Table 5].

Table 5: Kruskal-Wallis analysis of variance of the rank order: Career and personal reward

	Training year	N	Mean rank	Test of significance
Psychiatry has a low prestige among the general public	First	43	88.69	Chi-square=8.61, $df=3$, $P=0.04^*$
	Second	37	63.30	
	Third	46	83.07	
	Internship	35	87.56	
Psychiatry has a high status among other medical disciplines	First	43	84.99	Chi-square=1.68, $df=3$, $P=0.64$
	Second	37	83.03	
	Third	44	77.35	
	Internship	35	74.00	
Many people who cannot obtain a position in other specialties eventually enter psychiatry	First	42	74.98	Chi-square=0.89, $df=3$, $P=0.83$
	Second	36	72.08	
	Third	39	78.71	
	Internship	35	80.41	
Psychiatry is a discipline filled with international graduates whose skills are of a low quality	First	42	77.17	Chi-square=0.22, $df=3$, $P=0.97$
	Second	35	74.50	
	Third	37	74.89	
	Internship	35	73.01	
My family discourages me from entering psychiatry	First	43	80.57	Chi-square=3.56, $df=3$, $P=0.31$
	Second	36	70.68	
	Third	37	78.11	
	Internship	33	68.97	
Friends and fellow students discourage me from entering psychiatry	First	43	75.16	Chi-square=2.30, $df=3$, $P=0.51$
	Second	33	66.52	
	Third	37	76.93	
	Internship	33	74.47	
If a student expresses interest in psychiatry, he or she risks being associated with a group of other would-be psychiatric nurses who are often seen by others as odd, peculiar, or neurotic	First	41	83.70	Chi-square=10.91, $df=3$, $P=0.01^*$
	Second	36	57.15	
	Third	43	80.43	
	Internship	33	85.86	
I feel uncomfortable with mentally ill patients	First	43	64.33	Chi-square=12.52, $df=3$, $P=0.006^*$
	Second	36	72.44	
	Third	45	91.71	
	Internship	35	91.97	

*Statistically significant at $P<0.05$

Specific nursing school factors

A significantly greater agreement was reported by the third-year students (mean rank=39.91) as compared to the internship group (mean rank=30.27) for the statement "Attending psychiatrists during my psychiatry rotation were good role models" ($z=-2.19$, $P=0.03$) [Table 6].

DISCUSSION

The issue of attitude of nursing students toward mental illness has been widely studied in the West.^[8,13-19] Additionally, a substantial body of literature exists for the choice of psychiatry nursing as a career choice there.^[2,3,20] However, information is limited on 'attitude to psychiatry' among nursing students. Moreover, the information is almost nonexistent on these issues from South Asian countries.

Table 6: Kruskal-Wallis analysis of variance of the rank order: Specific nursing school factors

	Training year	N	Mean rank	Test of significance
Teaching of psychiatry at my nursing school is interesting and of good quality	First	NA		$Z=-0.62$, $P=0.54$
	Second	NA		
	Third	43	69.90	
	Internship	34	75.28	
During my psychiatry rotation, psychiatry residents were good role models	First	NA		$Z=-0.83$, $P=0.41^{\#}$
	Second	NA		
	Third	39	63.64	
	Internship	33	57.82	
Attending psychiatrists during my psychiatry rotation were good role models	First	NA		$Z=-2.19$, $P=0.03^{**}$
	Second	NA		
	Third	38	67.66	
	Internship	32	50.44	
Most psychiatrists at my nursing school are clear, logical thinkers	First	NA		$Z=0.73$, $P=46^{\#}$
	Second	NA		
	Third	41	68.13	
	Internship	34	61.96	
Most nonpsychiatry and house staff at my nursing school are respectful toward psychiatry	First	NA		$Z=-1.84$, $P=0.07^{\#}$
	Second	NA		
	Third	44	78.78	
	Internship	35	63.99	
Although I am interested in psychiatry, no effort was made to encourage my becoming a psychiatric nurse at my nursing school	First	40	78.21	Chi-square=4.00, $df=3$, $P=0.26$
	Second	30	73.15	
	Third	37	65.93	
	Internship	32	61.48	

[#]Mann-Whitney U test of analysis of variance for two independent samples, *Statistically significant at <0.05 ; NA – Not applicable

The findings of the current study present some interesting insights into the issue. Overall, majority of the nursing students from all four groups had a favorable response to the statements of the Likert scale [Figures 1 and 2]. Most of the significantly positive responses were from the third-year and internship students. This was true for all the six categories of statements on the scale used in the study. These findings were supported by the significant correlation between these statements and ranked order of the training years. Lectures in psychiatry and exposure to psychiatric practice during the third year and internship are the likely contributors to these observations. A positive impact of psychiatric clinical postings, lectures, and workshops on the knowledge and attitude parameters have been reported in previous studies as well.^[21-23] However, a surprisingly high rank order for overall merits of psychiatry was observed among the first-year students. In a prospective study by McCann *et al.*,^[24] there was a progressive increase in the favorable attitude toward mental health nursing from the first year through the third year of undergraduate training. A previous study by Surgenor *et al.*^[25] also found that the year of training of the students was an independent predictor of their attitude toward psychiatry.

There are multiple factors that influence the choice of specialty of nursing students.^[26] Rushworth and Happell^[8] assessed an intake sample of 118 respondents. They found that the psychiatry component of the nursing course improved the attitude of the students toward the discipline. However, a majority of students were not in favor of choosing psychiatry as a career. Twenty-five percent of the students refused to commence psychiatric nursing as a career immediately after graduation despite their interest in psychiatry. Similarly, in a study from Israel, psychiatry was at the bottom of the priority career list of the nursing students.^[27]

Choice of psychiatry as a career option has been found to be low among undergraduate nursing students in developed countries as well.^[2,3,20,28] Limitations of the existing training system has been cited as a reason for such observations.^[6,28] The international shortage of psychiatry nurses can possibly be attributed to the negative attitudes of the nursing students toward mental illness and the subsequent decision to elect out of psychiatric placements when given a choice.^[4] Making a career decision seems to be a complex process among nursing students. A positive attitude observed in the current study suggests the role of additional locally relevant factors during this process.

Attitudes toward mental illness, positive clinical experience, and preparedness for mental health practice have all been considered as factors influencing the views of nursing students about mental health nursing as a career. However, the issue has not been studied in a systematic manner in developing countries.

Studies have shown that nursing students tend to commence their undergraduate teaching program with negative attitudes toward those with psychiatric illness.^[2,8,9,13,14,19] Misperceptions and prejudice toward psychiatry are additional contributors to nonpreference of psychiatry as a career choice. Additionally, a positive influence of exposure to the mental health practice setting was found in these studies. Integration of undergraduate training with mental health services has been shown to improve the perception of nursing students.^[29]

Most of the nursing students entering the undergraduate training program have been shown to have decided on a specialty of nursing practice.^[30-33] However, decision to choose psychiatry as a profession by the nursing students is shaped during the undergraduate training years.^[34] Hence, the years of undergraduate training assume a greater significance as possible detriments to the future choice of students.

Psychiatry has been reported by nursing students to be a boring and unfulfilling area of practice in which

the patients do not get better. Additionally, they have reported a strong sense of fear of the mentally ill, believing them to be dangerous and unpredictable. Also, a negative view of the clientele and the working environment have emerged as possible reasons for the limited choice of psychiatry as a career choice.^[8,20] Negative attitudes toward mental illness have also been implicated in the lack of perceived attractiveness of choosing psychiatric nursing as an area of future specialization.^[35] Such negative attitudes have been shown to have a profound effect on the therapeutic relationships and treatment outcomes.^[5] Additionally, psychiatric nurses are least likely to be described as skilled, logical, dynamic, and respected by the peers.^[36] Negative and stigmatizing beliefs regarding mental health nursing discredit the valuable contributions of mental health nurses.^[37]

Research has shown that negative attitudes of undergraduate nursing students toward psychiatric illness are amenable to appropriate psychiatric training.^[38,39] The role of theoretical teaching in shaping the attitudes of nursing students toward psychiatry has also been established.^[18] However, in the absence of appropriate exposure to mental health-care training, the undergraduate nursing students are likely to pass school with their stereotype, negative perception of mental health care intact.^[40] Hence, it seems imperative to make necessary changes to the existing nursing curriculum. This would help improve the attitude of the nursing students toward psychiatry.

The findings of the current study add to the existing limited international literature. There is a dearth of mental health professionals including psychiatric nurses in India. The findings of the current study help understand the differences in attitude of the students across the training years. This could be of help while planning appropriate modifications to the existing curriculum. Appropriately modified existing models from other settings could be tested to further improve the attitude of these future professionals.

Findings from the current work have important implications globally for different stakeholders in mental health. A large number of qualified nurses from India migrate to the Gulf countries, Australia, New Zealand, Singapore, Ireland, and the United Kingdom.^[41] India is one of the most common countries of origin for the nurses migrating to the United States, Ireland, and Canada.^[42] There are more than 1,000 recognized nurse training centers in India, which together admit nearly 10,000 students every year.^[43] According to some conservative estimates, around 20,000 nurses migrated to other countries over a two-year period.^[44] These nurses carry the attitude shaped during the

undergraduate training. Consequently, an understanding of their attitudes toward psychiatry would be of help to the mental health-care teams in these countries.

While providing some answers, the findings from the current study raise additional questions. The study explored prevalent attitudes of the nursing students toward psychiatry. However, the reasons for not choosing psychiatry as a nursing career among professionals remain unexplored. As with all cross-sectional research designs, this study provides a snapshot. It would be informative to follow up this cohort over the years and observe changes as well as future career choices made by these students.

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