

ORIGINAL ARTICLE

Exploring Shifts in Nursing Students' Attitudes Towards Mental Illness through Pre- and Post-Psychiatric Training: An Interventional Inquiry

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ABSTRACT

Introduction: Mental health awareness is crucial for nursing students to provide quality patient care. This study examined the impact of psychiatric training on nursing students' attitudes toward mental illness, focusing on reducing stigma and boosting empathy. **Methods:** The study involved 80 first- and third-year nursing students at a hospital in Kanchipuram. Students received 60 hours of psychiatry training, and attitudes were measured using the CAMI Scale. **Results:** Results showed mixed improvements in nursing students' attitudes post-psychiatric training. Benevolence ($p < 0.01$) and Social Restrictiveness ($p < 0.01$) improved significantly, whereas Authoritarianism and CMHI showed limited change. Correlation analysis revealed consistent relationships in benevolent attitudes ($r=0.742$, $p<0.001$), socially restrictive attitudes ($r=0.655$, $p<0.001$), and community mental health ideology ($r=0.584$, $p<0.001$) between 1st-year and 3rd-year students. **Conclusion:** Psychiatric training boosted empathy and reduced restrictive attitudes in nursing students. However, its impact on authoritarian views and community ideology was limited. A more comprehensive curriculum could help reduce stigma and promote compassionate care.

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INTRODUCTION

Mental health awareness is a fundamental aspect of effective healthcare delivery, with nursing students' attitudes towards mental illness playing a significant role in determining the quality of care they provide (1). Approximately one in four individuals worldwide experience a mental disorder at some point in their lives, underscoring the importance of nurses, as frontline caregivers, in identifying and managing psychiatric conditions with compassion (2-4). However, stigma and misconceptions persist among healthcare trainees, negatively impacting patient outcomes (5,6). To mitigate these biases, incorporating psychiatric training into nursing education is essential (7).

This study assesses the impact of psychiatric training on nursing students' attitudes using the Community Attitudes Towards Mental Illness (CAMI) scale, which evaluates changes in Authoritarianism, Benevolence,

Social Restrictiveness, and Community Mental Health Ideology (8, 9). Recent studies (2020-2024) emphasize that sustained exposure and experiential learning can significantly improve empathy and reduce stigma (10-12). This research investigates whether structured psychiatric training can effectively alter nursing students' beliefs and attitudes towards mental illness.

MATERIALS AND METHODS

Study Design and Setting

This cross-sectional comparative study was conducted at a Nursing College affiliated with a Tertiary Care Hospital in Kanchipuram, India. The study was designed to examine the impact of psychiatric training on nursing students' attitudes towards mental illness by comparing first-year students (pre-training group) with third-year students (post-training group).

Study Population and Sampling

This study utilized a total population sampling method to recruit 80 nursing students, divided into two distinct cohorts: Group 1 (Pre-training), consisting of 40 first-year students yet to receive psychiatric training, and Group 2 (Post-training), comprising 40 third-year students who

had completed their psychiatric curriculum. Participants were eligible if they were regular B.Sc. Nursing students, provided written informed consent, and were present on the day of data collection. Conversely, the study excluded individuals with prior mental health training or work experience, as well as those with a personal or family history of mental illness, to ensure the reliability of the results. Students who were absent, declined to participate, or withdrew their consent were also excluded from the final analysis.

Intervention: Psychiatric Training Module

Integrated into the second-year nursing curriculum as part of the Mental Health Nursing course (13), this comprehensive 60-hour psychiatric training module consisted of a 52-hour theoretical component and an 8-hour clinical practicum. The theoretical instruction covered foundational topics, including the history and stigma of mental health, and detailed examinations of common psychiatric, substance use, and neurodevelopmental disorders. Specialized segments were dedicated to therapeutic communication skills—utilizing role-play to build empathy—and psychopharmacology, focusing on medication mechanisms and nursing responsibilities. Additionally, students received training in crisis intervention, suicide risk assessment, and community mental health models. The clinical practicum provided supervised exposure within psychiatric units, involving patient-nurse observations, therapeutic activities, and reflective case discussions. To enhance student outcomes, the module employed diverse teaching methodologies, such as lectures, case-based learning, video demonstrations, and group discussions.

Study Instrument

The Community Attitudes towards Mental Illness (CAMI) scale is a widely used and reliable instrument designed to assess attitudes towards mental illness, comprising 40 items distributed across four distinct subscales: Authoritarianism, which reflects views of persons with mental illness as inferior and requiring coercive handling; Benevolence, representing a paternalistic and sympathetic view towards individuals with mental illness; Social Restrictiveness, measuring beliefs that persons with mental illness are a threat to society and should be restricted; and Community Mental Health Ideology, assessing acceptance of community-based mental health services and integration of persons with mental illness into the community.

The CAMI scale uses a 5-point Likert scale, with higher scores indicating more positive attitudes on Benevolence and Community Mental Health Ideology subscales and more negative attitudes on Authoritarianism and Social Restrictiveness subscales, and has demonstrated good internal consistency (Cronbach's alpha 0.68-0.88) and validity across diverse populations (14).

Data Analysis

The collected data were organised in Excel and analysed using SPSS Version 21 (License No: U2C-9R3X-4M5Y-8Z7P). The analysis involved calculating descriptive statistics (mean ± SD) to summarise the CAMI scale scores. Correlation coefficients were computed to explore relationships between variables, and independent t-tests were used to compare attitudes between first-year and third-year students. A p-value of less than 0.05 was considered statistically significant, indicating the likelihood of observed changes being due to the psychiatric training intervention.

Ethical Considerations

The study received approval from the Institutional Ethics Committee (SMC/IEC/2023/05/040). Before participation, written informed consent was obtained from all nursing students, ensuring they were aware of the study's purpose and their rights. This process safeguarded participant autonomy and confidentiality, aligning with ethical research standards.

RESULTS

Figure 1 shows comparison of CAMI score domain between 1st year (pre) & 3rd year (post) among 4 domains. Significant differences were observed between pre- and post-training groups. Mean (±SD) values were as follows: Authoritarianism: 27.4 ± 4.1 (pre) vs 28.0 ± 3.8 (post), p=0.27, Benevolence: 28.5 ± 3.9 (pre) vs 33.2 ± 4.2 (post), p<0.01, Social Restrictiveness: 24.1 ± 3.5 (pre) vs 19.7 ± 3.8 (post), p<0.01, Community Mental Health Ideology: 30.1 ± 5.3 (pre) vs 31.0 ± 5.2 (post), p=0.31. These findings indicate statistically significant improvements in Benevolence and Social Restrictiveness, while changes in Authoritarianism and CMHI were not significant.

Table I shows the correlation between Authoritarianism (AU) scores of the Community Attitudes towards Mental Illness (CAMI) scale among 1st and 3rd year nursing students, showing a non-significant negative correlation

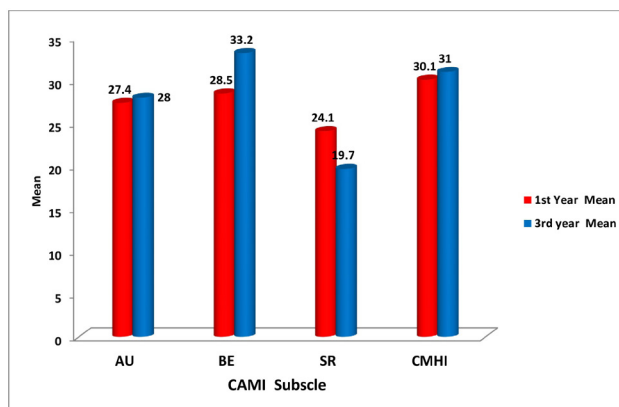


Figure 1: Comparison of CAMI score domain between 1st year (pre) & 3rd year (post) among 4 domains

Table I: Correlation between Authoritarianism (AU) of CAMI score among 1st and 3rd year nursing students

Authoritarianism (AU)	N	r	p - value
1 st Vs. 3 rd Nursing students	40	-0.015	0.928

***Correlation is significant at the 0.01 level (2- tailed)

AU-Authoritarianism

CAMI- Community Attitude towards Mental illness

($r = -0.015$, $p = 0.928$) between the two groups, indicating that the authoritarian attitudes towards mental illness did not differ significantly between the 1st and 3rd year nursing students.

Table II shows a strong positive correlation ($r = 0.742$, $p < 0.001$) between the Benevolence (BE) scores of 1st year and 3rd year nursing students on the Community Attitudes towards Mental Illness (CAMI) scale, indicating a consistent relationship in benevolent attitudes towards mental illness between the two student groups.

Table III shows a strong positive correlation ($r = 0.655$, $p < 0.001$) between the Social Restrictiveness (SE) scores of 1st and 3rd year nursing students on the Community Attitudes towards Mental Illness (CAMI) scale, indicating a significant and consistent relationship in socially restrictive attitudes towards mental illness between the two groups of students.

Table II: Correlation between Benevolence (BE) of CAMI score among 1st and 3rd year nursing students

Benevolence (BE)	N	r	p - value
1 st and 3 rd year nursing students	40	0.742	<0.001***

***Correlation is significant at the 0.01 level (2- tailed)

BE-Benevolence

CAMI- Community Attitude towards Mental illness

Table III: Correlation between Social restrictiveness (SE) of CAMI score among 1st and 3rd year nursing students

Social restrictiveness (SE)	N	r	p - value
1 st and 3 rd year nursing students	40	0.655	<0.001***

***Correlation is significant at the 0.01 level (2- tailed)

SR-Social restrictiveness

CAMI- Community Attitude towards Mental illness

The correlation analysis between CMHI scores among 1st and 3rd year nursing students (N = 40) revealed a weak negative correlation ($r = -0.213$) (Table IV). However, the p-value of 0.187 indicates that this correlation is not statistically significant.

Table IV: Correlation between CMHI score among 1st and 3rd year nursing students

CMHI	N	r	p - value
1 st and 3 rd year nursing students	40	-0.213	0.187 (ns)

***Correlation is significant at the 0.01 level (2- tailed)

CMHI-Community Mental Health Ideology

CAMI- Community Attitude towards Mental illness

DISCUSSION

This study aimed to evaluate the impact of a structured psychiatric training module on the attitudes of nursing students towards mental illness, utilising the Community Attitudes towards Mental Illness (CAMI) scale. Our findings reveal a mixed but significant impact: while psychiatric training effectively improved benevolent and reduced socially restrictive attitudes, its influence on authoritarian views and support for community mental health ideology was limited.

Specifically, the statistically significant increase in Benevolence scores ($p < 0.01$) among third-year students compared to first-year students indicates enhanced empathy and a more compassionate, paternalistic view towards individuals with mental illness. Concurrently, the significant decrease in Social Restrictiveness scores ($p < 0.01$) suggests that training helped reduce beliefs that individuals with mental illness pose a threat to society and require segregation. These positive shifts align with recent research emphasizing the role of psychiatric education in fostering empathy and mitigating restrictive attitudes among healthcare professionals (1-3, 15).

However, the training module demonstrated a limited impact on Authoritarianism and Community Mental Health Ideology (CMHI). Although third-year students showed a slight, non-significant increase in mean Authoritarianism scores (28.0 ± 3.8 vs. 27.4 ± 4.1 , $p = 0.27$), and a slight, non-significant increase in CMHI scores (31.0 ± 5.2 vs. 30.1 ± 5.3 , $p = 0.31$), these changes were not statistically significant. The persistence of authoritarian attitudes, which reflect beliefs about individuals with mental illness as inferior and requiring coercive handling, suggests that a 60-hour training period might be insufficient to dismantle deeply ingrained societal biases. This finding is consistent with Valentim et al. (16), who also reported limited changes in authoritarian attitudes despite an intervention. In contrast, other studies, such as by Zingul et al. (17),

found improvements across all CAMI domains, albeit not always statistically significant. This divergence highlights the varied impact of psychiatric education on different attitudinal dimensions and underscores the need for further investigation into curriculum design and pedagogical approaches that effectively target all aspects of stigma, particularly authoritarian and community-oriented views.

The correlation analysis between 1st-year and 3rd-year student scores, while not directly measuring individual change due to the cross-sectional design, provided insights into the consistency of attitudinal patterns across the cohorts. We observed a strong positive correlation for Benevolence ($r = 0.742$, $p < 0.001$) and Social Restrictiveness ($r = 0.655$, $p < 0.001$). This indicates that cohorts that tended to score higher on Benevolence or lower on Social Restrictiveness in their first year maintained similar relative positions in their third year, despite the significant mean shifts observed. The non-significant negative correlation for Authoritarianism ($r = -0.015$, $p = 0.928$) and the weak negative, non-significant correlation for CMHI ($r = -0.213$, $p = 0.187$) suggest a less predictable relationship between the two cohorts for these specific attitudinal dimensions. These correlations, when considered alongside the t-test results, emphasize that while the training successfully shifted average attitudes in certain domains, the underlying distribution or ranking of attitudes for Authoritarianism and CMHI remained largely unaffected or inconsistent between the cohorts.

Given the persistent authoritarian attitudes and limited shift in CMHI, future educational interventions should prioritize strategies that directly challenge rigid perspectives and foster a deeper understanding of community integration. Experiential learning, including extended clinical placements in diverse psychiatric settings and structured role-play scenarios, has been shown to boost empathy and reduce stigma (18, 19). Incorporating peer discussions, patient narratives, and dedicated stigma reduction workshops could provide students with opportunities to critically examine their biases and develop a more nuanced, recovery-oriented perspective. Such approaches could more effectively address lingering authoritarian tendencies and promote greater acceptance of community-based mental healthcare, ensuring that nursing students are equipped to provide truly compassionate and non-stigmatizing care.

The limitations of this study include its focus on a single institution and a small sample size, which together may restrict the broader applicability and generalizability of the findings to other nursing programs. Additionally, the cross-sectional design utilized—rather than a longitudinal approach—means that inherent differences between the first- and third-year student cohorts could have influenced baseline attitudes independently of

the psychiatric training. The results are also subject to self-reporting bias, as participants may have provided socially desirable answers. To address these constraints, future research should employ longitudinal, multi-institutional designs to more comprehensively evaluate the long-term impact of psychiatric curricula on nursing students' professional development.

CONCLUSION

This study examined nursing students' attitudes towards mental illness before and after psychiatric training, revealing mixed outcomes. While Benevolence and Social Restrictiveness significantly improved, indicating more positive and less restrictive views, Authoritarianism and CMHI scores showed limited statistically significant change, highlighting persistent challenges in shifting certain aspects of stigma. The correlation analyses provided insights into the consistency of attitudinal patterns between cohorts. To better understand attitude evolution and ensure comprehensive impact, future research should adopt longitudinal, multi-institutional approaches and refine psychiatric training to address all dimensions of stigma, fostering empathy and promoting truly compassionate, stigma-free care.

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