



Original Article

Anxiety and its Associated Factors Among Undergraduate Nursing Students During Psychiatry Clinical Placement: A Cross-sectional Study in MARDAN Khyber Pakhtunkhwa

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ABSTRACT

The clinical education setting is a complex social unit that affects student skills within the clinical setting. Anxiety influences the student's performance in the clinical setting since it initiates the fight-or-flight response, leading to a positive or negative outcome. **Objective:** This study evaluates anxiety among students when they start rotation in the clinical area. **Methods:** An analytical cross-sectional survey was conducted to determine the anxiety level among undergraduate nursing students during psychiatry/mental health nursing clinical rotations in the psychiatry unit. Participants were recruited through the probability sample method. The sample of the study consists of 93 students of undergraduate level. A self-adapted questionnaire was distributed manually to collect data. **Results:** According to the survey result, 67.7% of students have a normal range of anxiety, whereas 32.3% of students have mild to moderate levels of anxiety during psychiatry clinical rotation. **Conclusions:** The study identifies a significant link between anxiety levels and semester, notably higher in the 6th semester and a marginal association with race. With majority in the normal range and few with mild to moderate anxiety, it suggests targeted support programs for students, especially in high-anxiety semesters.

INTRODUCTION

Nursing is a hands-on field where students must master theoretical and clinical practice, adding to a heavy workload. In nursing students, the prevalence of anxiety is 39.9%. Additionally, it was discovered that female nursing students had substantially higher rates of anxiety than male students [1]. Anxiety is "A psychological and physical response to a threat to self-concept [2]. Various investigations have been carried out to evaluate anxiety levels in nursing students. Numerous research have examined nursing students' anxiety levels in clinical settings. Since they are new to clinical training, undergraduate nursing students identified three scenarios that most anxious them: the fear of making mistakes, being

watched by teachers, and their first clinical experience on a unit [3]. Undergraduate nursing students' anxiety levels are strongly impacted by their clinical placement in psychiatric settings, where they assess violent and irritable mentally ill patients and interview them at the bedside using therapeutic self-talk and verbal and nonverbal communication techniques. The discipline of mental health differs from other clinical specialities[4]. Nursing students and other healthcare professionals learn in the real world and from healthcare professionals in clinical placements [5]. Nursing students' anxiety during their psychiatry clinical placement is investigated through effective communication, pre-exposure information about

the patient's mental illness, and other techniques. Undergraduate nursing students may find it easier to manage anxiety if they are placed in a clinical setting connected to mental health practice [6]. It has been demonstrated that the stress of the educational environment causes anxiety [7]. Clinical placements have a significant impact on students' development of anxiety and associated symptoms [8]. As cited in Salzmann-Erikson et al., (2016), students may encounter a lack of confidence and an incapacity to care for these kinds of patients and behaviours during their mental health clinical placement [6]. Some literature in this context identified that male nursing students face more anxiety on clinical sites than female students [9]. On the other hand, Sanad, 2019 and other relevant studies highlight notable correlations in which women scored higher on anxiety [7]. The preceptor-student connection plays a significant role in students' learning opportunities throughout their clinical assignments in mental health settings [10]. Yet, Cruz Araújo et al., (2022) said that a student might perform better by themselves than in a group with classmates, preceptors, or instructors [11]. Furthermore, compared to students at other health training institutions without a psychiatric section, those with one showed reduced anxiety while interacting with psychiatric patients. Equally important, there was a lower likelihood of psychiatric nursing course enrollment among students who thought that people with mental health conditions were unpredictable [12]. The study reflects high anxiety levels among nursing students during the continuing COVID-19 pandemic [13]. Similarly, another study also found high anxiety [14]. Nonetheless, Kronin (2016) identifies that raising a generation of nurses who want to work with the mentally ill is a challenge for nurse educators [15]. There is a gap for studies in the psychiatry setting for undergraduate nursing students to explore anxiety levels, as recommended by Sanad 2019 [7]. Furthermore, a few research studies related to the given context in Khyber Pakhtunkhwa show the significance of this study. In daily practice, it is seen that undergraduate nursing students have negative opinions regarding a career in psychiatric/mental health nursing [16]. There has also been a reported decrease in the proportion of nursing graduates choosing to work in psychiatric nursing [12]. Nonetheless, perceptions of mental illness have an impact on nursing students' decision to pursue psychiatry as a specialty and their training [17]. Reducing the impact of anxiety among students is feasible through early detection and prevention through the identification of factors that increase the sensitivity of the nursing student population [8].

As the literature shows, many studies were conducted to assess the anxiety level among nursing students in

different places, situations, and clinical settings; this study will fill the gap in determining the level of anxiety among undergraduate nursing students in psychiatric settings.

METHODS

An analytical cross-sectional study was conducted at different nursing colleges in MARDAN. Additionally, it lasted from September 2023 to 8th November 2023. 93 students were recruited through the probability sampling method and included Undergraduate nursing students who performed or are performing their Psychiatry/Mental Health practice in MARDAN. Inclusion criteria comprised undergraduate nursing students currently engaged in their Psychiatry/Mental Health clinical practice within the data collection period. Exclusion criteria encompassed non-nursing students, individuals not involved in Psychiatry/Mental Health clinical placements, and those who declined participation or did not consent. The sample size was calculated on Rao soft software: Margin Error: 10%, Confidence Interval: 95%, Population: 500, Response Distribution: 50%, Calculated Sample Size = 93. Researchers obtained study approval and authorization for data collection before beginning. This approval assures that the study is acknowledged ethically and that the safety and rights of the participants are maintained. Participants were informed about the purpose of the study, the data collection procedure, and their right to refuse or withdraw from the study at any time. Data were collected through Zung's Self-Rating Anxiety Scale and distributed manually. Norms for Zung's Self-Rating Anxiety Scale have been established to help interpret the scores obtained from the test. According to the Zung Self-Rating Anxiety Scale, a score of 20-44 indicates a normal range of anxiety, a score of 45-59 indicates mild to moderate anxiety levels, a score of 60-74 indicates marked to severe anxiety levels, and a score of 75 and above indicates extreme anxiety levels. Students of different nursing colleges who performed or performed duty in psychiatric settings were included. The study tool had two sections. 1st section contains demographic data: Age of the students, gender, race, college name, educational level, CGPA, and current semester and year. 2nd section contains Likert scale questions. They were asked to mark their emotions and share experiences during exposure to the clinical area of each item through a Zung self-rating scale (SAS) to measure the level of anxiety before, during, or after dealing with the psychiatric patient. This is a self-report scale whose 20 items cover a variety of anxiety symptoms, both psychological and somatic symptoms. Responses are given on a 4-point scale ranging from 1-4. scale of a little of the time=1, some of the time=2, a good part of the time=3, and most of time=4. Participants are taught to base their

responses on their negative and positive experiences. The total score was converted into a percentage. The final score is converted to a percentage, and of those participants who responded and scored, most of the students (67.7%) had a normal range of anxiety. Three experts reviewed the tool and calculated the CVI, which is 0.83. and for reliability, a pilot study was conducted on 10% of the sample size, and the calculated Cronbach alpha is 0.84.

Statistical Analysis

The data was analyzed through SPSS Version 26. Percentages and Frequencies were used to describe demographic characteristics and the anxiety level. Approval of the study was obtained from MTI Mardan College of Nursing BKMC/MMC Mardan with reference number (1773/MCNM/2023). Before attempting the questionnaire, the Researcher read the instructions and acknowledged verbal information to the students about the study. Also, informed verbal consent was obtained from each student. The researchers explained the study's purpose and methods to potential participants. Those interested in participating after the initial discussion were given detailed information about the study in a cover letter and what the participation involved. The researchers make sure that the information collected from the participants will be kept confidential and unidentified. Potential participants were also informed of their right to refuse to participate in or withdraw at any stage during the study.

RESULTS

Table 1 presents the frequency and percentage of participants according to the variable, including gender, race, current semester, and college status. Of 93 undergraduate nursing students from different nursing colleges in MARDAN, 74 were in the 6th semester and 19 in the 8th semester. 47 students belonged to Govt colleges, whereas 46 belonged to Private colleges. The mean Age of students was calculated as 22.3. Almost all students were Pashtun, Christian, and Punjabi students. The sample comprised 93 students, 65.% male, and 35% female.

Table 1: Demographic Statistics of the Participants

Variables	Frequency (%)
Race	
Pashtun	91(97.8)
Panjabi	1(1.1)
Christian	1(1.1)
College Status	
Government	47(50.5)
Private	46(49.5)

Current Semester	
6th semester	74 (79.6)
8th semester	19(20.4)
Age (mean)	22.3

Figure 1 shows the result of gender distribution in which 35% are females and 65% are males.

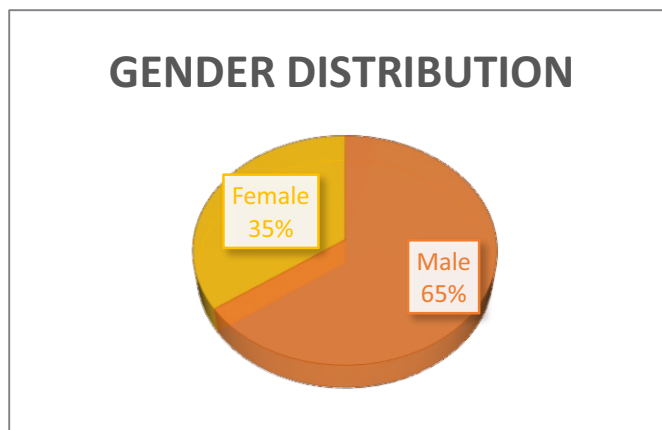


Figure 1: Gender distribution

Table 2 shows that Among the participants, 63 individuals, constituting 67.7% of the sample, fall within the normal range of anxiety. In contrast, 30 individuals, representing 32.3% of the sample, experience mild to moderate anxiety.

Table 2: Anxiety Level among Undergraduate Nursing Students

Anxiety Level	Frequency
Normal Range	63 (67.7)
Mild to Moderate Anxiety	30 (32.3)
Total	93(100.0)

Table 3 shows that Notable findings include a significant association between anxiety levels and the current semester, where the 6th semester shows a higher prevalence of anxiety compared to the 8th semester ($p < 0.001$). Additionally, there is a marginal association between anxiety levels and race ($p = 0.060$). Other demographic factors, such as gender and college status, do not exhibit statistically significant associations with anxiety levels.

Table 3: Anxiety Level Association with Demographic Factors

Variables	Anxiety Level		Total	p-value
	Normal Range	Mild to Moderate Anxiety		
Gender				
Male	43 (70.5%)	18 (29.5%)	61 (100%)	0.170
Female	20 (62.5%)	12 (37.5%)	32 (100%)	

Race				
Pashtun	61(67%)	30(33%)	91(100%)	0.060
Punjabi	1(100%)	0(00%)	1(100%)	
Christian	1(100%)	0(00%)	1(100%)	
Current semester				
6th semester	53(72.6%)	20(27.4%)	73(100%)	< 0.001
8th semester	10(50%)	10(50%)	20(100%)	
College status				
Government	33(70.2%)	14(29.8%)	47(100%)	0.851
Private	30(65.2%)	16(34.8%)	46(100%)	

DISCUSSION

The results disclosed that during Psychiatry clinical rotation, students developed Mild to Moderate Levels of Anxiety that affected their learning at the bedside. Demographic factor has been found to contribute to developing anxiety in students who deal with Psychiatric patients. This evaluation supports both Study objectives. The current findings show that among study participants, 32.3% had mild to moderate levels of anxiety. In this regard, another study conducted in Pakistan found 42% [18]. Another study also found that most undergraduates suffered mild stress [19]. The level of anxiety in undergraduate nursing students during psychiatry clinical placements has previously been studied in different literature. The Current study showed that 32.3% of the students who performed or performed Psychiatry/Mental Health Nursing Clinical rotation in the Psychiatric Unit had developed mild to moderate levels of anxiety. A similar finding was evaluated by [9] that 32.1% of nursing students were in moderate anxiety. Another study found the same result, 36.62% for moderate anxiety [20]. In addition, most students (71.8%) reported feeling anxious, with mild stress accounting for the majority (31.8%). 12.4% of respondents said they were under a lot of anxiety [21]. In contrast, a study found that before the intervention, the majority of the students had high levels of anxiety, but after the intervention, it was reduced [22]. Students' anxiety will be lessened if nursing educators can precisely pinpoint anxious situations and take preventative measures against them [23]. Numerous studies have been done on the anxiety, stress, and exhaustion that nursing students experience while practicing in a clinical setting, and they reported anxiety [23]. The current findings show that gender was not correlated with anxiety. Similarly, another Pakistani study found the same result [24]. Also, [7] points out significant associations where females had higher anxiety scores that supported the nonsignificant gender association with anxiety of the current study. Students have also been reported to be frequently anxious about hurting the patient and to believe that they would not be able to use their skills positively. Yet, it is widely accepted that students affected by anxiety are in increased danger of poor

consequences of clinical performance during their clinical training [2].

CONCLUSIONS

The study's findings reveal a significant association between anxiety levels and the current semester, with the 6th semester exhibiting a higher prevalence of anxiety compared to the 8th semester. A marginal association is also observed between anxiety levels and race. Overall, most of the participants fall within the normal range of anxiety, while few experience mild to moderate anxiety. Notably, gender and college status do not show statistically significant associations with anxiety levels in this study.

Authors Contribution

Conceptualization: S

Methodology: SUR

Formal analysis: LI

Writing, review and editing: AM, AB, SG

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The author declares no conflict of interest.

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