

Depression, Anxiety and Stress among Nursing Students in Selected Colleges of Eastern India: A Descriptive Study

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Abstract

Background: Nursing students after enrolling themselves into nursing profession experiences high level of stress and anxiety which later shows signs and symptoms of depression at early age. The present study is undertaken to study the level of stress, anxiety and depression among undergraduate nurses. The objective of the study was to assess the level of stress, anxiety and depression among nursing undergraduates.

Methods: A total of 201 sample were selected using non probability sampling technique. The three domains of mental status was assessed using depression, anxiety and stress scale-21 (DASS-21).

Findings & Conclusion: Majority of the nursing students showed 60.2% of mild anxiety followed by mild depression (57.7%) and mild stress (55.2%). The present study revealed significant presence of anxiety, stress and depression among the nursing undergraduates. These findings are alarming in nature as it may have negative impacts on the mental health of the students. Stress, anxiety and depression among nursing students will adversely affect the academic performance and the quality of care they give to their patients. Students must be made aware to employ different coping strategies, different communication skills, campus connectdness, to deal with the stress, anxiety and depression during their clinical training. Mental health screening is another important preventive strategies to avoid mental disorders.

Keywords: Anxiety, Depression, Stress, Nursing students

Introduction

Psychological distress including stress, anxiety, and depression are current global problems¹. Lifetime prevalence of stress, anxiety, and depression among adolescents and young adults ranges from 5% to 70% globally². Most undergraduate students transitioning to adulthood encounter stressful situations³ that

may be responsible for a high rate of depression and anxiety among them^{4,5}. The literature reveals that the prevalence of stress, anxiety, and depression is higher in developing countries such as India, Sri Lanka, Republic of China, Saudi Arabia, and Brazil as compared with developed countries⁶. Various studies revealed nursing students' self-reported symptoms of stress, anxiety, and depression were

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significantly more severe compared with a mix of university students and the general workforce⁷. Nursing is considered a stressful profession⁸. A high prevalence of stress, anxiety, and depression among nursing students may be due to the dual demands of academic as well as clinical requirements⁹. Indian studies conducted in Delhi and Rajasthan had revealed moderate degree of stress present among 77% and 82% of nursing students respectively¹⁰.

Research Objectives

1. To assess the level of Depression, Anxiety and Stress among the nursing students.
2. To assess the correlation between Stress, Anxiety and Depression.
3. To assess the association between stress with socio demographic variables.
4. To assess the association between anxiety with socio demographic variables.
5. To assess the association between depression with socio demographic variables.

Methods and Materials

A descriptive survey design was adopted to assess the stress anxiety and depression. Non probability convenience sampling. sampling technique was applied to select 201 nursing students. The setting chosen was Gita Ram School and College of Nursing, Berhampore, West Bengal and Nemcare School and College of Nursing, Guwahati and population was 1st yr, 2nd yr, 3rd yr and 4th yr B.Sc Nursing students. A standardized tool DASS-21 was used where the three domains of psychological information over the last week was collected on a Likert scale of 0 to 3. Once completed, each scale has a numerical score associated with each construct such that higher scores are indicative of higher levels of the construct. It has well-established psychometric properties and is reliable in measuring depression, anxiety and stress (at a Cronbach's alpha of 0.83, 0.80 and 0.82, respectively). A pre validated socio demographic data sheet is used to collect the socio demographic variables. The ethical clearance was Institutional Ethics Committee, NEMCARE group of Institutions, Mirza. Written informed consent was obtained from each study subjects.

Inclusion criteria: Students who gave consent to participate in the study.

Exclusion criteria: Students who did not give consent to participate in the study, day scholars students staying at Paying Guest.

Results

Majority of the nursing students, 192(95.5%) were female, 158(78.6%) were aged between 18 – 20 years, 85(42.3%) were studying 3RD year, 181(90 %) were staying at Hostel, 145 (72.1%) were Hindus, 192(95.5%) had no academic failure, 143(71.1%) had no financial difficulty, 192(95.5%) had no relationship crisis with family, 171(85.1%) had no relationship crisis with peer, 110(54.7%) had adequate sleep, 155(77.1%) had not exercised regularly, 189(94%) had no family history of psychiatric disorder, 196(97.5%) had not undergone any psychiatric consultation before, 163(81.1%) had self perceived physical health and 181(90%) had self perceived mental health.

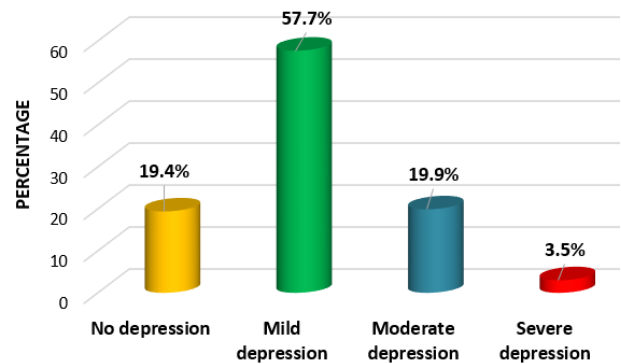


Fig-1: Distribution of level of depression among nursing students

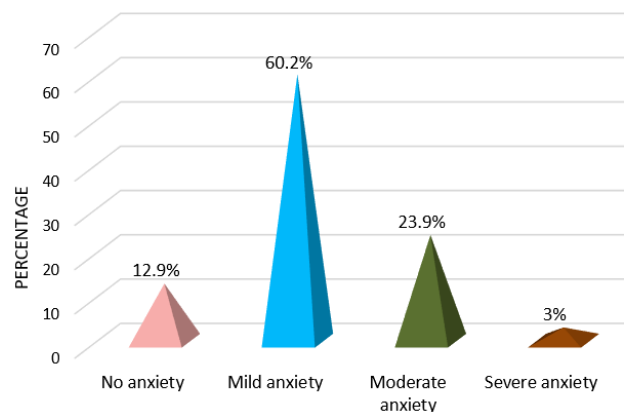


Fig-2: Distribution of level of anxiety among nursing students

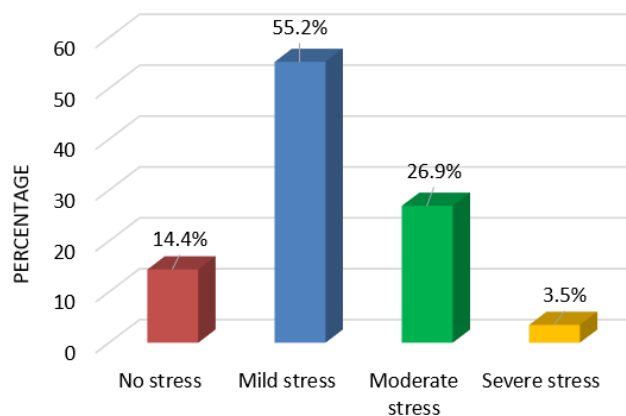


Fig-3: Distribution of level of stress among nursing students

The current study found that 60.2% of nursing students have mild anxiety (Fig 1) followed by mild depression (57.7 %) (Fig 2) and mild stress (55.2%) (Fig 3). The findings in the current study is relevant with Alahmadi systematic evaluation in Saudi Arabia that comprised 19 publications and revealed that the prevalence of anxiety among students ranged from 34.9% to 65%. In the study conducted by Baruah C et al ¹¹ out of 214 students, 22.9% had mild depression, 24.9% had moderate depression, 6.1% had severe depression and only 1.9% had extremely severe depression. The current study findings is in contrary and higher than the findings of Wong et al ¹² conducted a large scale web-based survey of 7915 first-year tertiary education students in Hong Kong using the 42-item Depression Anxiety Stress Scales. Depression, anxiety and stress levels of moderate severity or above were found at incidences of 21%, 41% and 27%, respectively. The method employed to quantify anxiety, the sample size, and the existing Sociocultural differences between the countries may all be possible causes for the observed variances.

The current study findings shows positive correlation between Stress, Anxiety and depression (table 1) which clearly infer that when stress among the nursing students increases which ultimately results in the increase in the level of anxiety and depression(Fig 4, Fig 5, Fig 6) among them. Wilson et al ¹³ also reported a similar findings in their study. There was a positive correlation between stress and depression in our study, which showed a positive Pearson’s correlation (R) of 2.97, similar to the finding of a study done in the USA where R-value was even higher at 0.7.

Table 1- Correlation between stress, anxiety and depression among nursing students

Coorelation	'r' value	'p' value
Stress and Anxiety	0.766	0.001*
Stress and Depression	0.797	0.001*
Anxiety and Depression	0.742	0.001*

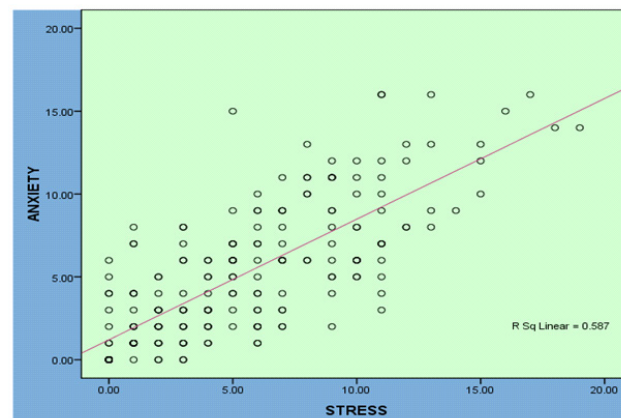


Fig-4: Coorelation between stress and anxiety

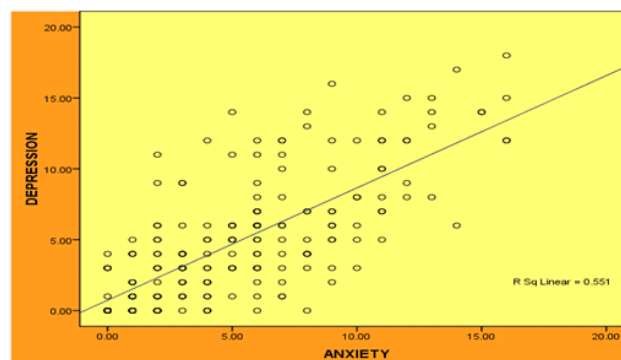


Fig-5: Coorelation between depression and anxiety

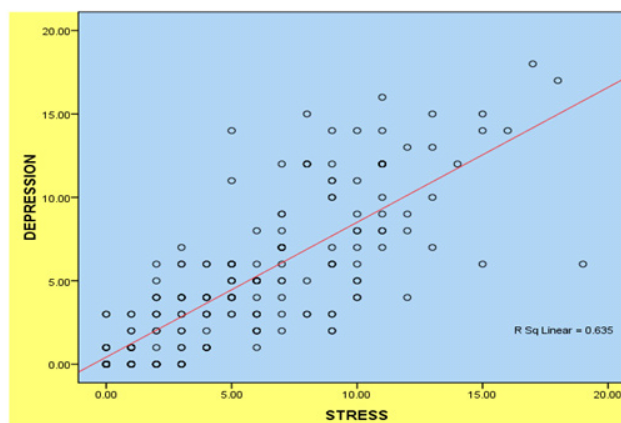


Fig-6: Coorelation between depression and stress

Depression and Correlates

In the present study depression is significantly associated with financial difficulty, relationship crisis with peer, sleep adequacy, exercises, family history of psychiatric disorder, previous psychiatric consultation, self perceived mental health. Andrews and Wilding¹⁴ concur that financial vulnerability may exacerbate depression among university students. Cheung et al¹² conducted a study students who did not exercise at least once a week were 1.6 times more likely to experience depression than those who did. His study results indicate that respondents with sleep problems were 2 times more likely to experience depression than those without. Based on previous study's findings, depression is significantly predicted by a family history of mental illness. This is consistent with research from Germany, India, and New Zealand that found people with family members who have mental illnesses are more likely to experience depression themselves. Cheung et al¹² also reported students who perceived themselves having poor mental health were 27 times more likely to report depression than those with good self-perceived mental health. In an epidemiological studies Paykel ES¹⁵ have reported that poor social support is associated with the onset and relapse of depression.

Anxiety and Correlates

In the present study anxiety was significantly associated with academic failure, relationship crisis with family, relationship crisis with peer, family history of psychiatric disorder, self perceived physical health, self perceived physical health, self perceived mental health. Cheung et al¹² in his study reported students seeing their physical and mental health as poor were, respectively, 3.4 times and 2.9 times more likely to experience anxiety than those with good self-perceived physical and mental health. The result outcome of study conducted by Xu, J.; Wei, Y¹⁶ supports that the presence of family support is thought to be a key component of psychological adjustment, which may help to reduce the pathogenic effects of anxiety. The finding support with the study conducted by Md. Aris Safree Md Yasin & Dzulkifli¹⁷ where students who are satisfied with their education have higher achievement levels than those who are not satisfied and higher achieving students had

lower levels of depression, anxiety or stress. La Greca and Lopez¹⁸ explored the association between peer acceptance and social anxiety. They found that low peer acceptance was significantly associated with social anxiety and accounted for between 10% and 17% in social anxiety scores.

Stress and Correlates

In the present study stress was significantly associated with religion, academic failure, financial difficulty, relationship crisis with peer, sleep adequacy, self perceived physical health, self perceived mental health. Cheung et al¹² study results indicate that respondents with sleep problems were 1.7 times more likely to experience stress than those without. He also reported students who had failed in tests/examinations in the past year were 1.7 times more likely to experience stress than those who had passed. Students in financial difficulty were 1.8 times more likely to report stress than those without money worries. Students with poor self-perceived physical and mental health were 3.3 times and 8.7 times respectively, more likely to report symptoms of stress than those students with good self-perceived physical and mental health. (Abdel-Khalek & Eid¹⁹ Hardy et al²⁰, Koenig²¹ found beneficial effects of religious involvement outcomes associated with stress. Also study conducted by Merrill et al²² found that students' faith provided them with comfort and inspiration that changed their view of life, in that God is aware of their needs and will assist them accordingly. In turn, it minimizes the level of stress and promotes feelings of confidence in one's ability to handle personal problems.

Conclusion

The present study concluded that anxiety, depression, and stress are very prevalent among nursing students. Various socio-demographic traits and anxiety, depression, and stress were related. Hence, nurse educators and administrators should take the initiative to introduce and implement services such as periodic mental health screening and counseling facilities, training on proper application of coping strategies, Campus Connectedness activities which will empower the students in becoming mentally healthy nursing professionals.

Replicating a similar study with a sample from other universities that include colleges in more districts.

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Conflict of Interest: There are no conflict of interests.

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