

Depression, Anxiety and Stress among undergraduate medical students of Nobel Medical College Teaching Hospital, Biratnagar

Subhadra Bhagat and Prakritee Bhattarai

Nobel Medical College Teaching Hospital, Nepal

Background: The aim of medical education is to train students for health promotion and care for the sick. Poor psychological health has been reported nationwide among medical students. There's inadequate knowledge among Nepalese medical students about psychological morbidity. The main aim of this study is to evaluate the depression, anxiety and stress among NoMCTH, Biratnagar undergraduate medical students.

Materials and Methods: A descriptive cross-sectional research design was adopted for the study including students of 1st year and 2nd year. Stratified random sampling technique was used to collect the sample. The Depression, Stress & Anxiety (DAS) scale was used and self-administered questionnaire method was used for data collection. Additional questions regarding demographic variables were also included in the study.

Introduction: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" Many people perceive health as being physically well and free of any diseases, and thus they have neglected the importance of mental health. Therefore, mental health is an irreplaceable aspect of health. Poor mental health will lead to many life threatening diseases such as cardiovascular disease deaths, deaths from external causes or even cancer deaths, which was only associated with psychological distress at higher levels.

Depression, anxiety and stress levels in the community are considered as important indicators for mental health. Failure to detect and address to these emotional disorders will unfortunately lead to increased psychological morbidity with undesirable impacts all through their professions and lives in the future.

Anxiety is a emotion characterized by feelings of tension, worried thoughts and physical changes such as sweating, trembling, dizziness or a rapid heartbeat. Anxiety disorders led to a global total of 24.6 million YLD in 2015. Anxiety disorders are ranked as the sixth largest contributor to non-fatal health loss globally and appear in the top 10 causes of YLD in all WHO Regions.

It is not just undergraduate study period which brings the stress but it may continue later in internship, postgraduate study period and later in physicians' practical life and it may reach burnout level. The estimated prevalence of emotional disturbance was found in different studies higher than in general population.

Methodology: A descriptive cross-sectional study design was used to assess depression, anxiety and stress among the undergraduate medical students. Students studying in MBBS 1st and 2nd year of NoMCTH who met the eligibility criteria was chosen as sample. The college was chosen conveniently, class was chosen purposively and the sample was chosen by probability stratified disproportionate random sampling technique (lottery method). DASS 21 was used to assess depression, anxiety and stress among undergraduate medical students of NoMCTH and data was collected by using self-administered questionnaire. The proposed study was conducted after the approval of institutional review committee of Nobel Medical College and Teaching Hospital. Informed verbal as well as written consent was obtained from each of the respondent.

DASS 21 was used to assess depression, anxiety and stress, among the

undergraduate medical students of NoMCTH, consisting of 21 items rated on a four-point Likert scale from 0 to 3 (0= Did not apply to me at all, 1= Applied to me to some degree or for some of the time, 2= Applied to me to a considerable degree for a good part of time, 3= Applied to me very much or most of the time).

Discussion: The present study for the level of depression is supported by the study done on Psychosocial well Being of Undergraduate Medical Students of King Edward Medical University Lahore Using DASS 21 Scoring System among 505 Undergraduate Medical Students. The study resulted that maximum 30.5% students were normal followed by moderate depression 26.1%. For the level of anxiety also the study was done on Psychosocial well Being of Undergraduate Medical Students of King Edward Medical University Lahore Using DASS 21 Scoring System among 505 Undergraduate Medical Students. The study resulted that maximum respondents 22.4% were moderately anxious followed by normal as 21.4%. Level of stress is supported by the study done on Prevalence of Depression, Anxiety and Stress (by DASS Scoring System) among 66 undergraduate Medical Students in Islamabad, Pakistan. The result showed that half of the respondents i.e. 50% were found normal followed by 24.24% as moderately stressed, 18.18% as mildly stressed, and 7.58% as severely stressed. No very severe stress was found.

In contrast to the association between the level of depression and sociodemographic variable, a study done among 538 Undergraduate Medical Students of Kathmandu University Medical School (KUSMS), Dhulikhel and Manipal College of Medical Sciences (MCOMS), Pokhara, Nepal, Depression was significantly associated ($p < 0.001$) with living condition (living in hostel or rented house). This study is not similar to present study because of the time difference & also due to sample size between these two studies.

Similarly, a study done on Depression, Anxiety and their associated factors among 279 Medical students using beck depression & anxiety inventory scale, Anxiety was significantly associated with female gender, & year of study. This study was not similar to present study because of due to time difference & sample size between these two studies.

A study conducted on Psychosocial well being of Undergraduate Medical Students of King Edward Medical University Lahore Using DASS 21 Scoring System among 505 Undergraduate Medical Students, reported gender difference (female>male) was significantly associated with stress. Again, this study was not similar to present study due to the difference in sample size between these two studies.

For the correlations among scores of Depression, Anxiety & Stress is supported by the study done on Assessment of Depression Anxiety & Stress among 330 undergraduate medical students in Rangaraya Medical College Medial College, Kakinada, Andhara Pradesh, India using DAS scale. The study findings showed that the correlation between depression, anxiety and stress was found to be statistically significant ($p < 0.05$).

Result: A sample of 110 students was included in the study. Overall result reported high frequencies of anxiety (67.3%) followed by depression (45.5%) & stress (30.9%). In relation to depression, 54.5% respondents were normal, 22.7% respondents were moderately

depressed, 14.5% were mildly depressed, 6.4% were severely depressed whereas 1.8% were very severely depressed. In relation to anxiety, 34.5% respondents were moderately anxious, 32.7% respondents were normal, 10.9% were mildly anxious, 10.9% were severely anxious whereas 10.9% were very severely anxious. In relation to stress, maximum 69.1% respondents were normal, 11.8% respondents were moderately stressed, 10.0% were mildly stressed, whereas 9.1% were severely stressed. There was significant correlations ($p < 0.001$) between depression, anxiety and stress.

Conclusion: The higher level of psychiatric morbidity anxiety (67.3%) followed by depression (45.5%) & stress (30.9%) among undergraduate medical students warrants needs for strategic plans to alleviate depression anxiety and the stressors right from the time they join medical school and has to be continued till they finish the course.

Based on the findings of the study, overall result reported high frequencies of anxiety followed by depression and stress. There was no significant association found among level of depression, level of anxiety and level of stress with selected demographic variables, but significant correlation was found among scores of depression, stress and anxiety.

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