Psychiatry



PREVALENCE OF DEPRESSION AMONGST NURSING STUDENTS

Seema Singh Parmar	Assistant Professor, Department of Psychiatry, Teerthanker Mahaveer Medical College & Research Centre, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India.
Shweta Chauhan	Post-graduate Student, Department of Psychiatry, Teerthanker Mahaveer Medical College & Research Centre, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India.

ABSTRACT

Aims & Objectives: To find the rates of depressive symptoms amongst various nursing courses at a nursing teaching and training college in India. Methodology: 500 students studying in various nursing courses at a nursing college in North India were enrolled in the study. A two-part questionnaire was distributed amongst the students, the first part of which included basic sociodemographic details and the second part consisted of Beck's Depression Inventory (BDI) translated to Hindi for ease of understanding of the students. A total BDI (Beck's Depression Inventory) score of \leq 13 was taken as the cut-off value. Results were tabulated using SPSS v20 and independent sample t tests were applied.Results: 48% (n=240) students showed signs of Depression as per the total BDI (Beck's Depression Inventory) score, with mean score of 14.29 ± .377. The highest Scores were seen amongst GNM (General Nursing and Midwifery) III year students. Significant p-value of 0.001 was obtained (Confidence Interval 95%). 122 students showed mild depression, 83 showed moderate and 35 showed signs of severe depression. Conclusion: This study shows similar results as demonstrated by comparable studies done in other countries. This calls for the need of more intervention based follow up studies and education of primary medical care givers in any hospital, in recognizing the signs and symptoms and seeking prompt treatment. Treatment facilities should be made easily accessible to students in view of the stigmatizing nature of mental disorders.

KEYWORDS

Depression, Nursing Students, Beck's Depression Inventory (BDI), India

INTRODUCTION

According to the World Health Organization (WHO; 2010), Depression carries the heaviest burden of disability among mental and behavioral disorders[1]. Almost twice more common in females as compared to males[2], the signs of depression can often be missed as they can be as subtle as a feeling of generalized body weakness and difficulty in concentrating to profound sadness of mood throughout the day. Depression is a very crippling psychiatric disorder as it makes it difficult for the patients to feel happiness in any aspect of his life. Suicide is the most dreaded outcome of depression, with around 60-70% of the attempters suffering from depression at the time of the attempt^[3].

The rates of depression have been seen to be increasing amongst students of all courses but especially those courses related to medical education. This could be attributed to a number of factors like increase in competitiveness, sudden change in environment, academic burden. While students of all curriculum need to adjust to all these changing factors, only medical and nursing students are exposed to certain specific issues like matters of life and death, fear of contracting an infection from a patient and rigorous training schedules. Thus, hospitals are considered to be one of the most stressful working environments. And as nursing staff is generally the first contact a patient has with a medically trained professional at a hospital, it is very essential that nursing staff be at their optimal level of functioning, which can be impaired if they are suffering from Depression. Our study attempts to find the rates of depressive symptoms amongst various nursing courses at a nursing teaching and training college in India.

PATIENTS AND METHODODLOGY

This is a cross sectional study conducted on 500 nursing students studying in the following nursing courses Masters and Bachelors in Nursing (M Sc and B Sc Nursing respectively, General Nursing and Midwifery (GNM) and Auxiliary Nurse Midwife (ANM) across various years. A self-reporting questionnaire was distributed amongst various students. The questionnaire was divided into two parts. The first part consisted of basic socio-demographic details of

the students without disclosing their name, the year and the course of nursing they were pursuing and any history of psychiatric illness in the family. The second part consisted of Beck's Depression Inventory (BDI)[4] translated into the local language of the area (hindi) for the ease of the students. The BDI (Beck's Depression Inventory) is a validated and approved self-rating scale for depression. All the students were given a time of 15 minutes to complete and return the questionnaire forms.

Statistical analysis was done using SPSS v20 and the means were analysed and independent sample t tests were done on the data collected. The cut-off levels for no depression were taken as a total BDI (Beck's Depression Inventory) score \leq 13. A total BDI (Beck's Depression Inventory) score of 14-19 was taken to be as mild, 20-28 as moderate and 29-63 as severe depression.

RESULTS

The mean age of the sample is 19.50 with standard deviation of 2.33. Out of the total 500participants, 156 were male and 344 were females. The course and year wise distribution of the sample is shown in Figure 1.



Figure 1 showing the distribution of students amongst the various nursing courses.

56 of the students were married and 444 were unmarried. Only 15 students admitted to having a positive family history of psychiatric disorder, rest 485 said that there was no history of any psychiatric disorder in the family. Out of the total 500 students, 260 scored \leq 13 on total BDI score, 122 showed signs of mild depression (total BDI [Beck's Depression Inventory]score 14-19), 83 scored moderate depression (total BDI [Beck's Depression Inventory]score 20-28) and 35 showed signs of severe depression (total BDI [Beck's Depression Inventory] score 29-63). Pessimism was the most common symptom to be reported on the BDI while suicidal thoughts Beck's Depression Inventory were the least common amongst students. Figure 2 shows the frequency of each individual item on the BDI (Beck's Depression Inventory) questionnaire.

Symptomatology



Figure 2: Frequency of each item on the Beck's Depression Inventory.

The mean Total score on BDI (Beck's Depression Inventory) was 14.29 \pm .377 with a standard deviation of 8.43. Independent sample t-testing showed a p value of 0.001 (at 95% Confidence Interval). Table 1 shows the mean total scores across various courses of nursing that participated in this study with M Sc (Masters in Science Nursing) I year scoring the least (10.32, n=22) and GNM (General Nursing and Midwifery) III year students showing the highest mean scores of 16.91 (n=76). The highest score observed was 53 and the lowest score observed was 0. The mean scores of all other participating courses in the study are shown in Table 2. In our study 48% (n=24) of students suffered from varying degrees of depression.

year of nursing	Mean	N	Std. Deviation
M Sc I	10.32	22	7.656
ANMI	11.24	59	5.380
BScl	12.06	89	8.947
B Sc II	14.77	70	7.223
GNMI	14.45	86	8.727
GNM II	17.10	96	9.467
GNM III	16.91	76	7.169
Total	14.39	498	8.396

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Table 1: Mean total BDI (Beck's Depression Inventory) scores of all participating students in the study.

DISCUSSION

The findings of our study are in corroboration with most other studies of depression done on nursing students world-wide. A study done in Iran[5] in 113 nursing students showed 57.5% rates of depression amongst students. A similar study done to assess depression, stress, self esteem and emotional support amongst 331 nursing students in Thailand[6] showed rates of 50.1%. a similar study done in South Korean[7] nursing students showed a mean depressive score of 19.23. While most European and western studies showed only 15% rates of depression amongst female nursing students, but a study done on 170 nursing students in Greece[9] showed rates of depression to be as high as 52.4%.

A study conducted by Papazisis G[9] et al also showed that the highest rates of depression were seen amongst final year nursing students as opposed to first and second year students. Similar results have been replicated in our study with highest mean total BDI (Beck's Depression Inventory) scores of depression seen amongst GNM (General Nursing and Midwifery) III year students as compares to the first and second year students.

All these studies show that almost half of nursing students in most countries suffer from depression. While all this data is limited in its accuracy as all of these studies have employed self-rated tools rather than clinician rated scaled, but the scales applied in the above studies have all been thoroughly studied, revised and validated. Thus, the results show an alarming trend of approximately half of the nursing students suffering from depression. These findings are important as depression impairs the ability to focus, causes generalized weakness, decreased interest in work as well as personal life, decreased interest in communication with others to name a few. All these factors lead to decreased productivity, which becomes especially important in hospitals where life-saving decisions are needed to be taken every day.

Depression also impairs the ability of an individual to cope with stress and for nursing staff, who have to work in a stressful environment 24 hours a day, this decreases their ability to work properly leading to increased sick leaves, which is further enforced by the fact that Depression is one of the leading causes of DALY (Disability Adjusted Life Years) in the United States of America[10]. To our knowledge this is the first such study to be conducted in India with a large sample size of 500.

Various factors have been attributed to higher rates of depression amongst students like changing of living conditions, hostel conditions are more stressful as compared to home; the academic schedules are very rigorous and demanding with students struggling to keep up with the ever-changing demands of the medical landscape. Along with that working at a hospital has its own set of drawbacks like fear of contracting nosocomial infections, needle stick injuries, lack of adequate rest, psychological stress of being exposed to morbid outcomes in a daily basis especially in an ICU (Intensive Care Unit) setting.

Thus, these issues need to be addressed by both nonpharmacological and pharmacological methods of intervention, whichever is more suitable to a particular case. Adequate counselling of the nursing staff on how to deal with the stresses of their work environment, needs to be done on a regular basis. Students also need to made aware of the physical signs and symptoms of depression, stress and anxiety, so that they can recognize these disorders not only amongst themselves but also amongst their peers. Information should be made available to all regarding the treatment strategies of these disorders, and such treatment facilities should be made easily accessible to students considering the stigma which is associated with suffering from a psychiatric disorder.

CONCLUSIONS

This study concludes what previous similar studies have shown, which is the alarming prevalence of depression amongst nursing

students. A follow up longitudinal study needs to be planned to assess the impact of outcome of both pharmacological as well as non-pharmacological measures of treatment of depression as such high rates of depression amongst primary care givers in hospital cannot be ignored. Furthermore, as to our knowledge this is the first such study to be conducted in India, more studies need to be planned across various other centres to confirm the findings amongst students of other nursing college as well and to rule out if any regional variation is present.

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