Research Article

A Study to Assess the Anxiety and Coping Strategies among First-year B.Sc. Nursing Students in Selected Institutes of Navi Mumbai

Vishal Powar

Department of Psychiatric, College of Nursing, Bharati Vidyapeeth, Navi Mumbai, Maharashtra, India

ABSTRACT

Background: Students are subjected to different kinds of stressors, such as the pressure of academics with an obligation to succeed, an uncertain future, and difficulties of integrating into the system. Aim: A descriptive study was conducted in selected nursing institutes of Maharashtra to assess stress level and coping strategies among nursing students. A total of 100 1st year nursing students participated in the study. Likert scale was used to assess stress level. Results: Results revealed that 4% of the samples had severe anxiety, 40% had moderate anxiety, 48% had mild anxiety, and 8% of samples have no anxiety. Anxiety levels were significantly higher in females in comparison to males (30.79±7.47 vs. 28.65±7.98; P = 0.036). Coping behavior was comparable in females in comparison to males (53.70±4.62 vs. 53.29±4.40; P = 0.768). Conclusion: Strengthening nursing students’ positive coping skills may be helpful for them to effectively deal with various stressors during their educational experiences while maximizing learning. Implementing empirically tested approaches may be useful to prevent the recurrence of stress and lessen its impact such as stress management counseling, counseling programs, establishing peer and family support systems, and formulating hospital policies that will support nursing students.

Keywords: Anxiety, Coping, Likert scale, Stress level

Address for Correspondence: Mr. Vishal Powar, Department of Psychiatric, College of Nursing, Bharati Vidyapeeth, Navi Mumbai, Maharashtra, India. Email: vishalpawar388@gmail.com

Introduction

Stress is a way of the body’s response to any kind of demand. Coping is the process of managing demands that are considered as challenging to the individual. Stress in nursing students can be triggered from a variety of issues including academics, and financial concerns. According to the nursing curriculum, they must learn theory as well as practical classes at the same time. They face different stressors can be related to academic and clinical as well. Stress affects physically, mentally, and academically. They may feel sad, nervousness, sleeplessness, loneliness, etc. Stress may affect the students’ health and academic performance. However, students experience increased tension before their clinical rotation and written examination especially their finals. In nursing, students experience stress in day to day life.

Stress is a well-documented problem in nursing education that continues to pose a concern to nursing faculty due to its negative consequence on student’s health and well-being. In particular, the clinical practice which is required for the acquisition of nurse competencies has been identified as being highly stressful.[1] Mounting evidence has shown that nursing students face various forms and levels of stress which ranged from moderate to severe.[2] Academic stress among college students has been a topic of interest for many years. College students, especially freshmen, are particularly prone to stress due
to transitional nature of college life, for example, many college students move away from home for 1st time, which can necessitate leaving all previously learned support systems such as parents, siblings, and high school friends. Students may need to develop entirely new social contacts and are expected to take responsibility for their own needs. They may have difficulty in adjusting to more rigorous academic expectations and the need to learn to deal with individuals of different culture and belief. Thus, stress may result from being separated from home for the 1st time, the transition from personal to impersonal academics and the vary structure of academic experience at the college level.

In nursing, students experience increased tension before their clinical rotation and written examination especially their finals. Dhar et al. reported 48.83% mild stress and 11.62% moderate stress among nursing students. Clinical sources of stress include working with dying patient, interpersonal conflict with other nurses, insecurity about clinical competence and fear of failure and interpersonal relations with patients, work overload and are concerned about nursing care given to the patient. Other potential sources of stress are assignment submission, excessive homework, assessment deadlines, unclear assignments, uncomfortable classrooms, and relations with faculty members.

To date, a few studies have compared nursing students’ stress levels and its sources in a multicultural setting. With the increasing diversity of nursing students around the globe, a study of this kind is essential for the advancement of nursing knowledge in this critical area. This study is also important for the development of common perspectives on these concepts and ultimately in formulating empirically tested stress interventions that can be applied in different cultures.

Aim
A study to assess the anxiety level and coping strategies among 1st year B. Sc nursing students in selected nursing institutions of Navi Mumbai.

Methodology
A non-experimental, descriptive design was used in the study using self-administered questioners for assessment of anxiety level (Likert scale). This research design was selected for this study as it is convenient, less expensive, and not a time-consuming means of gathering data.

Samples and setting
Sample size consists of 100 1st year B.Sc nursing students from selected institutes of Navi Mumbai.

Development of tool
A tool was developed to assess anxiety among 1st year B.Sc nursing student as well as coping strategies among students. The tool consisted of two sections:

Section-I the demographic data collection
We developed this tool as per the objectives of this study, 13 demographic variables selected for the association of the study, i.e., age, sex, marital status, monthly family income, students education, and fathers education.

Section-II self-administered questioners for assessment of anxiety level
Likert scale.

Data collection
The data gathering began on January. The researcher visited the Mahatma Gandhi Mission College of nursing and Bharati Vidyapeeth College of nursing. The data collection process and obtained permission from the authorities to conduct the study. The researcher introduced themselves and explained about the study and the purpose and the process. Thereby, a rapport was developed to confirm whether the samples met the inclusion criteria selected for the study. The contents of consent were explained and each participant was respected to confirm his/her written consent before the study commenced. The researcher encouraged to give a rating about the anxiety and coping strategies questionnaires. Any doubt while filling the questionnaires was clarified, they were requested to answer the entire question. This session lasted for 30 min.

Statistical analysis
Data were presented as frequency, percentages, mean, and standard deviation. Quantitative variables between two groups were compared using Student t-test. The relation between two variables was evaluated using the Pearson correlation coefficient. P < 0.05 was considered significant. Statistical analysis was performed using SPSS v21.

Results
Demographic variables
Demographic variables of the subjects have been shown in Table 1. We observed that 87% of samples were of age between 17 and 19 years. Only 3% of samples were aged >21 years. 92% of the samples were females. Female to male ratio was 5.1:1. 68% of the samples belonged to urban areas. 96% of the samples have completed senior secondary education (10+2) and only 4% were graduate.
65% of samples’ fathers and 58% of samples’ mothers have completed secondary level education. Nearly 45% of the samples’ fathers occupation was government job while only 10% were working in the agriculture field. 14% of the samples’ mothers occupation was government job while 71% were housewives. 71% of the samples were Hindu and 25% were Christian. 61% of the samples’ family income was up to 20,000.

66% of the samples were living in a nuclear family. 96% of the samples were single and 4% were married. 58% of the samples belonged to Maharashtra.

Table 1: Demographic variables

| Particulars         | Frequency (%) |
|---------------------|---------------|
| Age (years)         |               |
| 17–19               | 87 (87)       |
| 19–21               | 10 (10)       |
| >21                 | 3 (3)         |
| Sex                 |               |
| Male                | 18 (18)       |
| Female              | 92 (82)       |
| Locality            |               |
| Urban               | 68 (68)       |
| Rural               | 32 (32)       |
| Fathers’ education  |               |
| Illiterate          | 6 (6)         |
| Primary             | 8 (8)         |
| Secondary           | 65 (65)       |
| Graduate and above  | 21 (21)       |
| Mothers’ education  |               |
| Illiterate          | 8 (8)         |
| Primary             | 15 (15)       |
| Secondary           | 58 (58)       |
| Graduate and above  | 19 (19)       |
| Father occupation   |               |
| Service             | 45 (45)       |
| Business            | 35 (35)       |
| Agriculture         | 10 (10)       |
| Not working         | 1 (1)         |
| Any other           | 9 (9)         |
| Mother occupation   |               |
| Service             | 14 (14)       |
| Business            | 7 (7)         |
| Agriculture         | 3 (3)         |
| Housewife           | 71 (71)       |
| Any other           | 5 (5)         |
| Religion            |               |
| Hindu               | 71 (71)       |
| Muslim              | 5 (5)         |
| Christian           | 25 (25)       |
| Any other           | 2 (2)         |
| Family income (Rs.) |               |
| 5000–10000          | 30 (30)       |
| 10,000–20,000       | 31 (31)       |
| 20,000–30,000       | 22 (22)       |
| 30,000 and above    | 17 (17)       |
| Type of family      |               |
| Nuclear             | 66 (66)       |
| Joint               | 32 (32)       |
| Extended            | 1 (1)         |
| Broken              | 1 (1)         |
| Marital status      |               |
| Single              | 96 (96)       |
| Married             | 4 (4)         |
| Widow               | 0 (0)         |
| Divorcee            | 0 (0)         |
| Distribution on the basis of state |       |
| Maharashtra         | 58 (58)       |
| Non-Maharashtra     | 42 (42)       |

Level of anxiety

Our study observed that 4% of the samples had severe anxiety, 40% had moderate anxiety, 48% had mild anxiety, and 8% of samples have no anxiety [Figure 1]. Our study observed that anxiety levels were significantly higher in females in comparison to males (30.79±7.47 vs. 28.65±7.98; \( P = 0.036 \)) [Table 2]. Our study observed that coping behavior was comparable in females in comparison to males (53.70±4.62 vs. 53.29±4.40; \( P = 0.768 \)) [Table 2].

Relation between anxiety level and coping behavior

Our study observed a very mild and non-significant relationship between anxiety level and coping behavior (\( r = −0.023 \), \( P = 0.874 \)).

Discussion

Stress in nursing students is an area of growing concern and it may result in psychological distress, physical complaints, behavior problem, and poor academic performance.[4] The present study was conducted in a selected nursing college situated in Maharashtra to assess the stress level and coping strategies used by nursing students.

Our study observed that 4% of the samples had severe anxiety, 40% had moderate anxiety, 48% had mild anxiety, and 8% of samples have no anxiety. Our findings were slightly consistent with the study by Nancy[5] revealed that out of 180 nursing students, 34.4% had moderate stress whereas 32.8% and 32.8% fall in the category of low and high stress, respectively, and a study conducted among undergraduates students of CMH Lahore Medical College, Pakistan on 200 students who reported 30.84 overall mean perceived stress.\[6\] Stress level among 1st year nursing student may be higher because the students face more of stressors when they come to college during 1st year of their training because of being placed in an unfamiliar environment, separation from the parents and the demand of making new social groups apart from academic pressures and clinical training. However, the nursing students were constantly facing demands and...
challenges of the curriculum which had being a source of stress during their total training program.

Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, reduce tolerate or minimize stressful events. Coping with stress for a student nurse is a dynamic and ongoing process, aimed at survival, growth, and maintenance of individual integrity.[7] She tries to restore the imbalance and disequilibrium within her by attempted adjustment through the use of various coping strategies which can be healthy or unhealthy. WHO/EHA guidelines have stated that there is no standard for coping strategies; rather they were depending on socioeconomic factors.

In the present study, the majority of subjects tend to use more healthy coping strategies as compared to negative or unhealthy ones. A study among nursing students at Chiang Mai University which revealed that the most frequently used coping strategies were seeking social support (62.25%), Planful Problem Solving (23.73%), and accepting responsibility (8.47%).[9] Another study at the NINE, PGIMER, Chandigarh reported the five most frequently used coping strategies were positive thinking, listening to the music/radio, indulging in creative activities, talk to parents, and pray more.[3] A study done on Iranian students which reported solving family problems and being humorous as the most common and least common used strategy, respectively.[6]

Stress has become a chronic and pervasive condition in the world today.[9] Every person experiences different forms of stress throughout their life; therefore, a student nurse is no exception as she has to adjust to an entirely new environment on joining a training course in nursing.[10]

It has been concluded that the nursing students perceived different levels of stress due to academic, clinical, and other psychosocial factors. Further, they use a mix of coping strategies to overcome stress so as to maintain a balance on a wellness-illness continuum.

Conclusion

Coping with stress for a student nurse is a dynamic and ongoing process, aimed at survival, growth, and maintenance of individual integrity. She tries to restore the imbalance and disequilibrium within her by attempted adjustment through the use of various coping strategies which can be healthy or unhealthy. It is important for nurse educator to find out the sources of stress and coping strategies used by the students so that they can be helped to cope well with upcoming problems and situations.

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Figure 1: Level of anxiety

Table 2: Level of anxiety and coping behavior

| Particulars     | Male          | Female        | P value |
|-----------------|---------------|---------------|---------|
| Anxiety level   | 28.6±7.98     | 30.7±7.47     | 0.036   |
| Coping behavior| 53.3±4.40     | 53.7±4.62     | 0.768   |