

A Study to Assess the Stress and Coping Behavior among B.Sc Nursing first year Students at Selected Nursing College in Chengalpet District.

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Abstract

Stress is a natural phenomenon that every individual goes through in his or her life and is caused by causative stress factors or stressors. Constant stress leads to changes in the balance of hormones in the body which can lead to a situation or thought that makes us feel frustrated, angry, nervous or anxious. The objectives of the study are to identify the level of stress and coping behaviour among First Year B.Sc. Nursing Students, to Associate the level of stress and coping with selected Demographic variables among First year B.Sc. Nursing Students. The sample size was 250. The research design used in this study is Cross- Sectional study design. The results study shows that among 250 Based on stress 89% (n=222) had severe stress and 11% (n=28) had Moderate stress. Based on coping 85% (n=213) had good coping skill 10% (n=24) had Moderate coping and 5% (n=13) had excellent coping skill. Regarding Association of Demographic variables with the stress level and coping level, the result shows that there is a significant association between stress level with Sex, Percentage of Higher secondary marks, Leisure Time Activities and state belongs to the student and there is no significance association between stress level with Age, place of residence, education and occupation of father, medium of language in schooling and course chosen by. In coping result shows that there is a significant association between coping level with state and there is no significant association between level of coping with Age, sex, place of residence, leisure time activities, education and occupation of father, medium of language in schooling, course chosen by and percentage of higher secondary marks

Keywords: Stress, Coping, First year Nursing students.

Introduction

Stress is a natural phenomenon that everyone experiences in his or her life and is caused by stress

causing factors or stressors. Stress first coined in the 1930's has in more recent decades has become a common place of popular parlance¹. It occurs when a person has difficulty in dealing with life situations,

problems, and goals. Although everyone has the ability to adapt to stress, not everyone responds to exactly the same stress.²

Stress affects the mind, body, and behavior in many ways, and everyone experiences stress differently. Long-term stress among the student nurse or prolonged stress can cause memory problems and an inability to focus in studies. Sometimes they feel chest pain, fast heartbeat, depression or general unhappiness and sleeping too much, too little or whenever something goes wrong. It may even lead to fatigue. Clinical practice has been identified as one of the most worrisome components of nursing programs. Inexperience, fear of making mistakes, difficulty with patients, discomfort in assessment by faculty, concern about giving the patient the wrong information or medication, and concern about possible harm to the patient are just a few of the stressors a student nurse has.³

The top five stressors among nursing college students were identified as being a change in sleeping patterns, vacations, breaks, a change in eating habits, an increased workload, and new responsibilities. Additionally, stress may be brought on by the transition from a personal to an impersonal academic environment, the structure of the college experience, and the first-time separation from home.⁴

At 2000, Shapiro.S. conducted a meta-analysis study on stress management courses offered to medical students in medical institutions. In stress management programmes, the immune system is strengthened, depression and anxiety are reduced, spirituality and empathy are elevated, knowledge of alternative therapies is increased, positive coping mechanisms are used more often, and role conflict can be resolved.⁵

Newman.S (1983) defined Stress is defined as the interaction between an individual and their surroundings that they see as taxing or outstripping their capabilities. Stressors are obstructive forces that are activated by, or exposed to, a stimuli or stressor. Stress is also how you evaluate or perceive a stressor.⁶

Seward.SM (1992) recognises that stress comes in three forms: eustress, neutress, and distress. Eustress is the first kind of stress that individuals perceive as inspiring or motivating, such as the stress associated with getting married. Stress is regarded as neutral—neither helpful nor bad. The most prevalent and recognisable kind of poor behaviour is distress.

People either feel stress as acute, which is often brief, or chronic, which lasts for an extended length of time.⁷

According to Frassrand.S (2005), Academic performance can suffer from severe stress, and students who feel they are under a lot of stress may frequently experience depression. Depression has the potential to cause mental health issues, such as severely harmed interpersonal connections.⁸

Coping mechanisms are the person's continually evolving cognitive and behavioural attempts to control particular internal or external pressures that are considered to be taxing or surpassing the person's resources. According to earlier studies, students who use an active coping method experience less psychological suffering.⁹

Need for the Study

According to a study, when students encounter an academic setback like a poor grade, the level of cortisol, often known as the stress hormone, usually increases in their body. A day later, for the majority of pupils, it returns to normal levels, but for some, it stays high. These students struggle to advance because they are stuck on the setback.¹⁰

However, prolonged, chronic stress can cause or worsen many serious health problems, including: Mental health problems such as depression, anxiety and personality disorders, cardiovascular diseases, including heart disease, high blood pressure, cardiac arrhythmias, heart attacks, and stroke, obesity and other eating disorders, menstrual problems, sexual Dysfunctions such as impotence and premature ejaculation in men and loss of sexual desire in both men and women Skin and hair problems such as acne, psoriasis and eczema and permanent hair loss Gastrointestinal problems such as GERD, gastritis, ulcerative colitis and irritable bowel syndrome.¹¹

Research on stress and coping mechanisms was done by Aparjitha Dasgupta et al. (2018). prospective caregivers and concluded that the results showed that perceived stress levels were high among these students and problem solving was the most important coping behavior. Because it is the future care of patients, higher levels of stress can adversely affect patient care in the long term. Therefore, action must be taken to reduce their stress and improve their coping skills by identifying potential stressors early and designing effective interventions in the form

of stress management counselling, peer grouping, altered course schedule, etc., thereby improving their performance.¹²

Johny Kutty Joseph and Babhitha k Devu (2020) conducted a study examined stress and coping mechanisms among nursing students in India and came to the conclusion that low to moderate levels of stress were recorded in all studies, whereas high/severe levels were relatively low. All research identified academic pressures, time management stressors, interpersonal stressors, intrapersonal stressors, familial stressors, and environmental stressors as the main stressors. The majority of studies revealed the utilisation of problem-solving techniques, optimistic thinking/problem/stressor reappraisal, and discovering relaxing techniques. Other typical coping mechanisms included a combination of crying, avoiding stress, daydreaming, seeking other rewards, seeking social support, speaking to friends, spiritual leaders, or parents, living with someone who cares.¹³

Objectives

1. To assess the level of stress among first year nursing students.
2. To assess the coping behavior of first year nursing students.
3. To associate the stress score with selected demographic variable of First year nursing students.
4. To associate the coping behavior score with selected demographic variable of First year nursing students.

Assumption

The present study is based on the assumption that all First Year students will be having stress due to new course and new environment.

Subject and Methods

It covers the research methodology, research design, study setting, population, sample size, sampling technique, sampling criteria, data collection process, tool description, data collection plan, and ethical clearance.

The study used Quantitative Research approach and Cross-sectional study design in this study.

The participants were selected by simple random technique by lottery method. The sample size of 150 was selected at the selected college in Chengalpet district. In the present study, the population was first year B.Sc Nursing Students. The present study was conducted among the students of B.Sc Nursing First year to assess the stress and coping behavior. The samples were selected based on who were willing to participate in the study. Students who are practicing coping techniques regularly are excluded in this study. Stress and coping behavior will be assessed by administration of perceived stress scale and coping behavior scale inventory. The consent was obtained from the participant.

In this present study the researcher assessed the stress level and coping level among first year nursing students. It had 3 sections: A- Demographic Variables includes age, sex, place of residence, occupation of father, medium of language. B- Stress assessed by perceived stress scale (5-point Likert stress scale) invented by Cohen, Kamarack and Mermelstein (1983). C- coping behavior assessed by COPE Inventory invented by Carver (1989). Each question has 5 options. Scoring of stress level consisting 1-25% - Mild stress, 26-50% - Moderate stress, 51-75% - Severe stress, 76-100% - Very severe stress. Scoring of coping level consists of 1-25% Mild coping, 26-50% - Moderate coping, 51-75% - Good Coping, 76-100% - Excellent coping.

Descriptive statistics like frequency, mean, percentage & Chi square were used to analyze the data. Assurance was given that the information collected from the participation in this research was used for study purpose only. Written consent was obtained from the study participants before collecting the information. All the data obtained was confidential. At the end of the data collection, health education will be given on stress coping strategies to the participants.

Review of literature

Abeer Abd El-Aziz Mohamed Madian et al (2019) conducted a descriptive study on stress and coping strategies. The study was aimed to assess the stress and coping strategies among nursing students at Damanshur University, Egypt. Descriptive cross-sectional study was used in this study. The sample size was 1311 nursing students. Student's profile structured self-administered questionnaire was used

for this study. Students perceived moderate level of stress, most commonly attributed to transportations and academic. The most frequently used coping mechanism was religious & acceptance. The study found that gender and living with family are good predictors of coping strategies.

A descriptive study on stress levels and coping mechanisms was carried out by Emad Shdaif et al. in 2017. The purpose of the study was to evaluate the stress levels and coping mechanisms among nursing students. This study employed a descriptive cross-sectional design. 286 pupils made up the study's sample. The Coping Behaviors Inventory was used to measure the Perceived Stress Scale (PSS) and the types of coping mechanisms (CBI) During this study, was used. Students reported feeling moderate levels of stress, which they attributed to workload and tasks, teachers and nursing staff, classmates and daily life, and patient care. Problem solving was the most popular coping technique. Age, GPA, educational attainment, and place of residence were revealed to be reliable indicators of the use of transference.

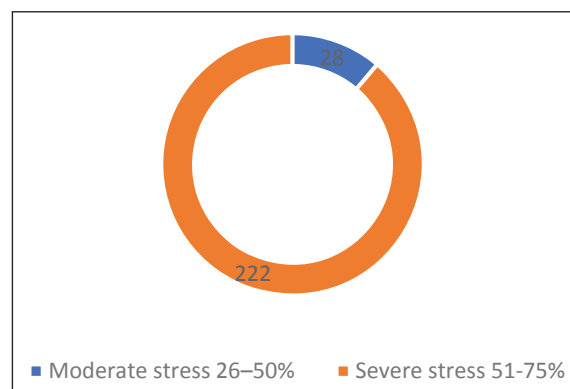
The amount of stress and coping were the subjects of a quasi-experimental study by jancy jRachel Daisy R (2012). The study's objectives were to measure the degree of stress and coping mechanisms among student nurses at particular Tamil Nadu institutions and to assess the efficacy of chosen coping mechanisms. Purposive sampling was used to choose the study's 245 participants. By using an unpaired "t" test, the scores of coping and stress management were compared between the two groups. The results showed a significant difference between control 2nd - post and interventional 1st, 2nd post-test stress scores, with the obtained overall 't' value 13.66 being greater than statistical table value and 'p' value being 0.000 at P 0.001 level. They also showed a significant difference between control 2nd - post and interventional 1st, 2nd post-test coping behaviours. the computed total 't' value was 7.99, higher than the value in the statistical table, and the 'P' value was 0.000 at the P 0.001 level. As a result, it can be concluded that the interventional group scored higher than the control group. These results demonstrated that, compared to the control group, students in the interventional group experienced a statistically significant reduction in stress and an increase in coping practises. A negative correlation between the two variables was seen when looking at the post-test correlation score.

Result:

1. Distribution of Sample based on their demographic variables.

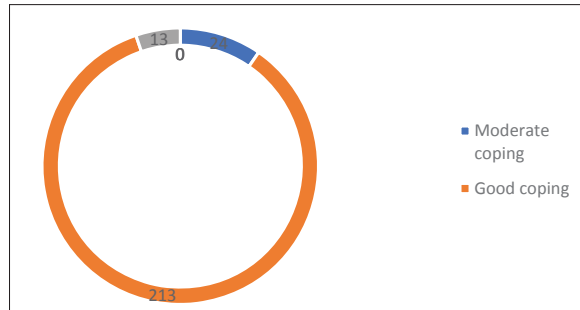
Shows the frequency and percentage distribution of sample based on demographic variables. On the basis of Student's age 54% (n=135) were belonging to 18 years, 38% (n=95) were belonging to 19 years and 8% (n=20) were belonging to 20 years or more than. Considering the sex mostly 71% (n=177) were belonging to Female and 29% (n=73) were belonging to Male. Regarding place of Residence 54% (n=135) were belonging to Day-scholar and 46% (n=115) were belonging to Hostel. Considering Education of Father, 18% (n=45) had primary Education, 33% (n=82) had Secondary education, 25% (n=63) had Higher secondary and 24% (n=60) had Graduate. Regarding Occupation of Father, 46% (n=116) were working as coolie, 20% (n=46) were working in Government, 25% (n=62) were working in private, and 9% (n=23) were in Business. Considering Percentage of Higher secondary marks of students, 9% (n=22) had 51%-60%, 27% (n=68) had 61%-70%, 34% n=84 had 71-80% and 30% (n=76) had 81-90%. Considering Medium of language 31% (n=77) had Tamil language and 69% (n=173) had English language. Considering Leisure Time Activities, 12% (n=29) are Reading books, 20% (n=51) are watching tv, 49% (n=122) are listening to music, 17% (n=42) are Drawing and 2% (n=6) are doing any other activities in leisure time. Regarding State, 71% (n=177) belonging to Tamil Nadu, 23% (n=58) belonging to other state (Kerala) and 6% (n=15) belonging to NRI. Regarding Course Chosen by, 48% (n=121) chosen by the participants, 37% (n=89) chosen by Parents, 12% (n=31) chosen by Friends and 4% (n=9) chosen by Relatives.

2. Frequency and percentage distribution of Sample based on the level of stress



Shows the Frequency and percentage of First year B.sc Nursing students based on the level of stress. 89% (n=222) had severe stress and 11% (n= 28) had moderate stress level. The mean of the subject is 2.8880 and Standard Deviation is .31600

3. Frequency and percentage distribution of Sample based on the level of coping.



shows the frequency and percentage distribution of First year B.sc Nursing students based on level of coping. 85% (n=213) had good coping skill 10% (n=24) had Moderate coping and 5% (n=13) had excellent coping skill. The mean of the subject is 2.9560 and Standard deviation is 0.38295

4. Association of stress level with selected demographic variables of Sample

Association of Demographic variables with the stress level and coping level, the result shows that there is a significant association between stress level with Sex, Percentage of Higher secondary marks, Leisure Time Activities and state belongs to the student and there is no significance association between stress level with Age, place of residence, education and occupation of father, medium of language in schooling and course chosen by

5. Association of Coping level with selected demographic variables of Sample.

In coping result shows that there is a significant association between coping

level with state and there is no significant association between level of coping with Age, sex, place of residence, leisure time activities, education and occupation of father, medium of language in schooling, course chosen by and percentage of higher secondary marks.

Discussions

Majority of the student's Age 54% (n=135) were belongs to 18 years. Majority of the student's Sex 71%

(n=177) were belongs to Female. Most of the student's belongs to Day-scholar 54% (n=135). Majority of the student's father education 33% (n=82) were secondary education. Most of the father occupation 46% (n=116) were working as coolie. Most of the 34% (n=84) had 71-80% higher secondary mark. Most of the students 69% n=173 had a English as medium of language in schooling. Most of students 49% (n=122) had listening to music as leisure time activities. Most of students 71% (n=177) belongs to state Tamil Nadu. Most of students 48% (n=121) are selected by his own choice. Most of the students 89% (n=222) had severe stress and 11% (n= 28) had moderate stress level. The mean of the subject is 2.8880 and Standard Deviation is .31600. Most of the students 85% (n=213) had good coping skill ,10% (n=24) had Moderate coping and 5% (n=13) had excellent coping skill. The mean of the subject is 2.9560 and Standard deviation is .38295. In association with stress level there is a significant association between stress level with Sex, Percentage of Higher secondary marks, Leisure Time Activities and state belongs to the student and there is no significance association between stress level with Age, place of residence, education and occupation of father, medium of language in schooling and course chosen by. In coping result shows that there is a significant association between coping level with state and there is no significant association between level of coping with Age, sex, place of residence, leisure time activities, education and occupation of father, medium of language in schooling, course chosen by and percentage of higher secondary marks.

Ethical clearance

1. Institutional ethical committee clearance obtained from principal of Chettinad college of nursing
2. Institutional Human Ethical Committee (IHEC) clearance will be obtained from CARE.
3. Written consent will be obtained from the study participants before collecting the information.
4. The information will be collected about the participant is used for the research purpose only. All the data obtained were maintained with confidentiality.
5. At the end of the data collection, Health education will be given on stress coping strategies to the participants.

Source of funding: Self

Conflict of Interest: Nil

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