A Study to Determine the Stress Level among First Semester BSc. Nursing Students Studying in Selected College in Kannur District

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Abstract: Stress is a feeling that arises when an individual perceives that the demands placed on them exceed their personal and social resources, and they are unable to effectively cope with or manage them. Stress is a common feature in our life, like anger or irritability, anxiety and depression. One of the most significant occupations in the extensive field of social welfare is nursing. This study was aimed to assess the stress level among first semester BSc. nursing students studying in a selected college in Kannur district. The study was based on quantitative approach and a non- experimental descriptive research design. A semi-structured questionnaire was implemented to gather sociodemographic facts, and the Perceived Stress Scale was employed to evaluate students' stress levels. All the data has been collected from 50 first-semester BSc nursing samples. The study finding depicted that 78% of students have moderate level of stress, 12% have low stress level and 10% have high level of stress. The study concluded that there is a significant association between high stress level among students and their sleeping pattern.

Keywords: Assess, First Semester BSc Nursing Students, Stress.

I. INTRODUCTION

Stress is an unavoidable part of human life. Stress is a psychological and physiological response to demanding or challenging situations, and helps the individuals to adapt and react effectively. Some kind of stress is beneficial, it pushes people to perform better and stay motivated. Excessive or prolonged stress cause physical and emotional discomfort. Understanding stress and its cause and effect has a crucial role in managing stress. Stress can be reduced by adopting healthy coping mechanisms like tone management, relaxation techniques, social support, and balanced life style.

According to WHO, stress is when you feel tense or worried because of tough situations. It's a natural reaction that helps us deal with challenges in life. Everyone feels stressed sometimes, but how we handle it affects our health. Stress impacts both the body and mind. A little stress can be helpful, but too much can cause problems.

According to Brianna Chu (2021), the latest study found anything that disrupts balance in the body or mind triggers a stress reaction. These triggers are called stressors, and the stress response is the result of changes in behavior and body caused by them.

First-semester students face more problematic stress starting from homesickness, the atmosphere, rules of new college, hostel environment and rules, new friends, new subjects, fear about clinical posting, an overburden of assignments, and language differences. First-hand hospital experience, clinical assignments and coursework, clinical tests and evaluations of nursing skills, and interactions with patients, families, and other medical professionals are some of the elements that might contribute to clinical stress in nursing students.

Clinical training starts in the first year and lasts until graduation in the majority of nursing programs. Since the majority of the nursing curriculum is practical training, stress has been frequently reported by nursing students, particularly during their first few years of study. Stress can, however, have either positive or negative effects on pupils, depending on how they handle it. While some students react better to stress, others experience anxiety and depression.

II. MATERIALS AND METHODS

A quantitative approach was followed to assess the level of stress among first-semester BSc. nursing students studying in selected college of Kannur district who fulfilled the inclusion criteria. A non-experimental descriptive research study was used to assess the stress level among first-semester BSc nursing students. The size of the sample was 50 and convenient sampling technique was used for the study. The conceptual framework used for the study was based on the generic psychosocial model of Saunter and Swanson 1996.

The data collection technique used for the study was a semi-structured questionnaire and perceived stress scale given to the sample, and asked to fill it after obtaining written informed consent. Each session took approximately

2-3 minutes for completion. The institutional review board granted approval and ethical clearance for the study. Information confidentiality was preserved.

The analysis was done using descriptive and inferential statistics. The frequency and percentage distribution was used to describe the sample characteristics and stress level among first-semester BSc nursing students. The statistical test, Pearson Chi-square is used to find the association between the stress level and demographic variables.

III. RESULTS

According to the results in Table 1, 70% of the samples in the 18-year-old age group reported feeling stressed. Eighty-four percent of the samples are members of the nuclear family. Families in the majority of the samples earn between 50,000 and 100,000 per year (48%). Stress was reported by 46% of the individuals with different occupations. The majority of the stressed samples (84%) used the Kerala syllabus for their tenth-grade education. Six to eight hours of sleep (68%) is the most common sleep pattern across the samples. Ninety-four percent of the samples that did not exercise had stress. Most of the samples belonging to profession with their own will (46%) having stress.

Table 1 Reveals the Frequency and Percentage Distribution of Demographic Variables.

DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE (%)
Age in years		
· 17 years	2	4%
· 18 years	35	70%
· 19 years	11	22%
· 20 years	2	4%
Types of family		
· Joint family	7	14%
· Nuclear family	42	84%
· Extended family	1	2%
· Others	0	0
Annual Income		
· <10,000	2	4%
· 10,000 – 50,000	12	24%
· 50,000 -100000	24	48%
· Above 100000	12	24%
Occupation		
· Daily wages	22	44%
· Professional	2	4%
· Business	3	6%
· Others	23	46%
Syllabus		
· State	42	84%
· CBSE	6	12%
· ICSE	2	4%
· Others	0	0

Psychiatric illness		
· Yes	0	0
· No	50	100%
Sleep		
· Less than 6hrs	16	32%
· 6-8hrs	34	68%
· Above 8hrs	0	0
Exercise		
· Yes	3	6%
· No	47	94%
Nursing profession		
· Own will	23	46%
· Parents will	8	16%
· Relatives and friends	3	6%
· Others	16	32%

➢ *Level of Stress among Student Nurses*

The stress level among student nurse is assessed by Perceived Stress Scale. In this study, stress level is categorized by low, moderate and high stress level.
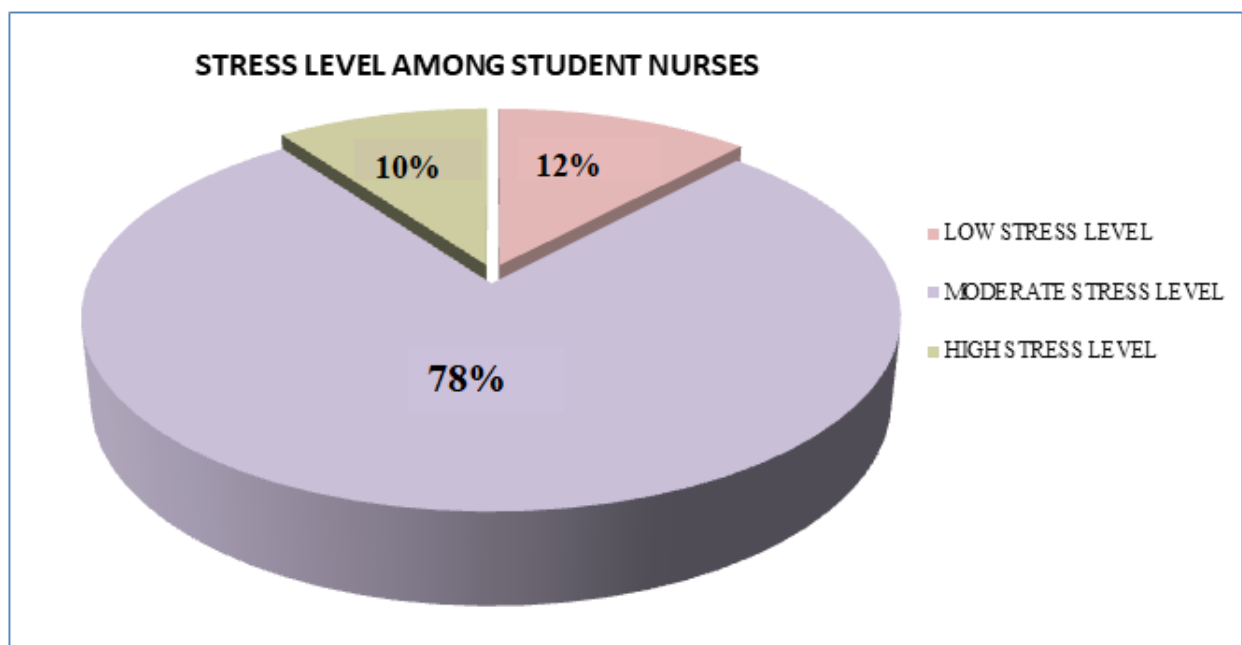

Fig 1 Shows the Level of Stress among Student Nurses.

➢ *Association between Stress Level and Demographic Variables among Student Nurses*

The association between the stress and demographic variables were computed using Chi-square test. The table 2 reveals that calculated chi square value regarding stress among first semester BSc Nursing students and sleeping pattern is higher than the table value at 0.05 level of significance. Hence it is found that there is significant association between sleeping pattern (less than 6 hours) and stress.

Table 2 : Association between Stress Level and Demographic Variables of Student Nurses.

Demographic Variables	Stress Level			Degree of Freedom	Chi-Square Calculated Value	Chi-Square Table Value	Significance
	Low	Moderate	High				
Age							
: 17 years	0	2	0				
: 18 years	3	29	3	6	4.039	12.59	Not

							significant
: 19 years	3	6	2				
: 20 years	0	2	0				
Family							
: Nuclear	6	32	4	4	5.656	9.49	Not significant
: Joint	0	6	1				
: Extended	0	1	0				
Income							
: <10,000	1	1	0				
: 10,000-50,000	1	10	1	6	3.334	12.59	Not significant
: 50,000-100,000	3	18	3				
: >100,000	1	10	1				
Occupation of guardian							
: Daily wages	3	16	3				
: Profession	1	1	0				
: Business	0	3	0	6	5.02	12.59	Not significant
: Others	2	19	2				
Syllabus in 10th standard							
: State	5	31	6				
: CBSE	0	6	0	4	2.65	9.49	Not significant
: ICSE	0	2	0				
Psychiatric illness							
: Yes	0	0	0	2	0	5.99	Not significant
: No	6	39	5	2			
Sleeping pattern							
: <6 hours	1	11	5				
: 6-8 hours	5	28	0	4	11.09	9.49	Significant
: >8 hours	0	0	0				
Exercise							
: Yes	0	2	1	2	4.08	5.99	Not significant
: No	6	37	4				
Reason for selecting profession							
: According to own will	3	18	2				
: According to parents will	2	5	1	6	4.39	12.59	Not significant
: Influence of friends and relatives	0	2	1				
: Others	1	14	1				

Level of significance: $P<0.05$, Test statistics: X^2

IV. DISCUSSION

This chapter deals with discussion, conclusion, and implication, of the study to Nursing practice, Nursing education, Nursing administration and Nursing research. This chapter also clarifies the limitation of the study and recommends for the future plan in the study. The finding of the study has been discussed in terms of objectives and hypothesis and comparison was also made with other relevant study findings .The present study showed that majority of subjects had moderate stress 78% and average stress has low stress 12% and some of them have high stress 10%.

The finding of the above study was supported by cross-sectional survey in BSc. Nursing first year nursing students, Jammu by Mr.Frank J C, Ms Bharthi Sharma. According to the survey, 56% of respondents reported moderate stress, 28% reported severe stress, 14% reported mild stress, and 2% reported extreme stress.

The study finding is also supported by cross sectional survey in first year BSc nursing, Dinsha Patel College of nursing by Ms Dhara Yagnang Vyas. The study shows that 23% had mild stress 67% had moderate stress and 10% had severe stress. In the present study there is effect of demographic variables, sleeping pattern on stress level among the first semester BSc. Nursing students. The finding of the present study was supported by descriptive study conducted by Sankappa Gulaganji, Manjunath Patil (2020) to analyze the stress levels of nursing students attending in Meerut's Panna Dhai Maa Subharti Nursing College. The study show that 53 % students are having slight level of stress, 43% students having moderate level of stress, 3% students having high level of stress and 1% students have no stress and in order to determine the degree of academic stress experienced by nursing students at SRM College of Nursing, Kattankulathur, Lydia C., Anchala M., and Hemamalini (2016) carried out another descriptive study. The study's findings showed that 6 students (7.5%) experienced severe academic stress whereas the majority of students (66, or 82.5%) had moderate academic stress.

V. CONCLUSION

Stress is common among every individual between 17-18 years. Stress and the demographic characteristic of sleep pattern are significantly associated. Nursing staff who work in the service industry have the modest opportunity to speak with nursing students, learn about their stress levels, and offer advice. Stress management and enhancing life quality should be major topics in nursing education in order to reduce the life stressors. The evaluation of highly stressed persons may yield educational recommendations. The findings of the study can be used to develop the performance enhancement interventions for reducing the stress and thus improving the academic performance. This also will contribute to the psychological well-being of the student, which will reflect in their personal and professional life. Nursing administration himself or herself engages to study the psychosocial aspect of stress and also encourages other nursing personnel to concentrate on this matter. For further research, the nurse administrator should set aside sufficient cash and time.

The present study findings contributed to the existing body of research on interventions aimed at reducing stress and enhancing academic performance among student nurses. Nurse researchers can conduct further interventional studies in various settings to address stress levels and improve academic outcomes for student nurses. Incorporating these interventions can support the overall improvement of both their personal and professional lives.

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