

A Study to Assess the Perceived Stress among Nursing Students during COVID-19 Lockdown

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ABSTRACT

Introduction: While a global pandemic has been a looming risk for decades, COVID-19 has come as a shock. Lockdown imposed has not only interrupted a normal routine of the human being but also has caused an adverse impact on individual's mental health. Students, the most vulnerable group are at high risk of developing mental issue and thus in turn will affect the future of a country.

Objectives: The study aimed to find out association between perceived stress level and selected socio demographic variable during COVID-19 Lockdown.

Materials and Methods: The study adopted cross sectional descriptive design. The study was conducted through online mode in three School of Nursing, Assam for a period of 2 weeks among 244 nursing students who were selected using convenient sampling technique after taking the consent. Tool Perceived Stress scale (10) was used.

Results: It was found that most of the female nursing students belong to mean age of 21 years out of which majority of the students that is 83% were showing moderate perceived stress level during this lockdown. There was no significant association found between selected socio demographic variable and perceived stress level.

Conclusion: It was found that because of sudden disruption in the normal activity of life due to COVID-19 pandemic has affected the coping ability of the nursing students and thus increased the perceived stress level.

Keywords: Pandemic, Lockdown, Perceived Stress, Nursing students

INTRODUCTION

Health is a well being of physical, mental, social and spiritual aspects and this all aspects is required for the development of a country. ^[1] Mental disorder is a psychological factor reflected in the behavior and the main reason behind this may be the mechanical way of life or stress and strain among youth. ^[2] Stress is a conscious or unconscious feeling of psychological pressure which is highly individualized and depends on variables. Stressors are the agent which can be internal or external producing eustress or distress. Stress can intensify morbidity from anxiety disorders. ^[3]

Presently in the world, stressor is novel corona virus causing COVID-19 which was declared pandemic by WHO on 30, January. It has caused significant distress around the globe. Globally millions of infection and death has occurred that had a deep impact on the world. ^[4] In an order to decrease the spread of infection full lockdown was imposed and India, too has implemented a nationwide lockdown. ^[5] Crisis due to disease and imposed lockdown had lead to distressing emotions which is a common risk factor for psychological distress and symptoms of mental illness among general populations and for the students. ^[6]

Stress in nursing education is consistent and very old phenomena and is considered as one of the most important issue which leads to burn out. The

prevalence rates of stress among health professional are estimated to be around 14.3%-56% globally. [7-8]

Research has also shown that health professions like nursing students are exposed to additional stressful factors such as fear of being infected during any pandemic or epidemic condition like in case of SARS and MERS. [9-10]

Currently in COVID-19 pandemic, there were higher significant scores of perceived stress among women, youth, students, [11] and there is also a report of sharp rise of mental health problems, including anxiety, depression, stress, sleep disorder as well as fear, among its citizens, that eventually increased the substance use and sometimes suicidal behavior. [12]

Stress among health care profession existed from before and now stress due to pandemic situation has surplus the amount of stress. As we know stress is among one of the cause of mental disorder, so we need to identify and correct this phenomena as early as it can be. Thus the investigator decides to analyze the association between the socio demographical variables and perceived stress among nursing students during COVID-19.

MATERIALS AND METHODS

The investigators used cross sectional descriptive design to assess the perceived stress among nursing students of selected nursing school, Assam during COVID-19 Pandemic Lockdown. Data was collected through online mode from 11th August 2020 to 18st August 2020 from 244 GNM students after obtaining permission from respective school authority. Non probability convenience sampling technique was used for the study. A Goggle form of questionnaire was created and circulated through WhatsApp, on receiving and clicking the link, the participants got auto directed to the information about the study and informed consent. After their acceptance to take the survey they filled up the answer. Tools used in the study were tool I for socio-demographic variables and

Tool II was Perceived stress scale (10) by Cohen Sheldon [13] which is 5 point Likert scale for assessing perceived stress. It is having option of never, almost never, sometimes, fairly often and very often. Ethical consideration was followed by maintaining confidentiality of information obtained and the respondents willingly participated in the survey.

Statistical analysis

The data were analysed using the Statistical Package for the Social Sciences statistical software (SPSS-18). The descriptive data related to socio demographic variable were organized, analysed and tabulated as percentage distribution (Table1). The score of perceived stress scale was calculated and categorized to mild, moderate and severe perceived stress level and then it was depicted in frequency percentage in figure 1. Inferential statistical analysis was done for the perceived stress. The mean score for perceived scale was calculated. The association between perceived stress level and selected socio demographic variable was done using Pearson Chi-Square.

RESULTS

Present study was conducted among 244 nursing students and the findings of the study are divided into three sections.

Section I: depicts distribution of frequency and percentage of socio demographic variable of nursing students. Study shows mean age of the students with standard deviation was 22 ± 1.86 . Table 1 shows 100% of female nursing students participated in the study out of which 39% were studying in 1st year GNM nursing. 86% of students were Hindu by religion and 88% of them are living with their nuclear family. 71% of students were from rural area and 68% of the students were staying with their family during lockdown. 89% of them selected the nursing course by themselves out of which 98% were aware about the nursing education. 47% has got information about COVID-19 from Internet.

Majority that is 38% of the parents occupation was cultivation followed by 28% is government service.

Section II: depicts the percentage distribution of Perceived stress level of nursing students during COVID-19 pandemic. Figure 1 shows that 83% of

nursing students are having moderate stress level (14 -26) followed by 13% of them were having low stress level (0-13) and 4% were having high stress level (27-40). The mean value of perceived stress level was found to be 18.92 ± 5.05

Table 1: Frequency distribution of nursing students N=244

Variable	Category	Frequency	Percentage (%)
Gender	Male	0	0
	Female	244	100
Years of education	1 st year GNM Nursing	94	39
	2 nd year GNM Nursing	80	32
	3 rd year GNM nursing	70	29
Religion	Hindu	210	86
	Muslim	23	9
	Christian	7	3
	Others	4	2
Types of family	Nuclear	214	88
	Joint	26	10
	Extended	4	2
Domicile	Urban	70	29
	Rural	174	71
Residing Presently	Hostel	76	31
	With parents	167	68
	With relatives	1	1
Selection of course	By self	218	89
	By force of parents	14	6
	By force of relatives	12	5
Awareness of nursing education	Yes	237	98
	No	7	2
Source of information for COVID-19	Internet	114	47
	Television	43	17
	Peers	1	1
	Others	86	35
Parents occupation	Cultivation	92	38
	Business	57	23
	Home maker	4	2
	Daily wage earner	6	2
	Private employee	13	5
	Government service	68	28
	Unemployed	4	2
Education of father	Primary	54	22
	Secondary	109	45
	Graduation	69	28
	No formal education	12	5
Education of mother	Primary	62	25
	Secondary	129	53
	Graduation	41	17
	No formal education	12	5

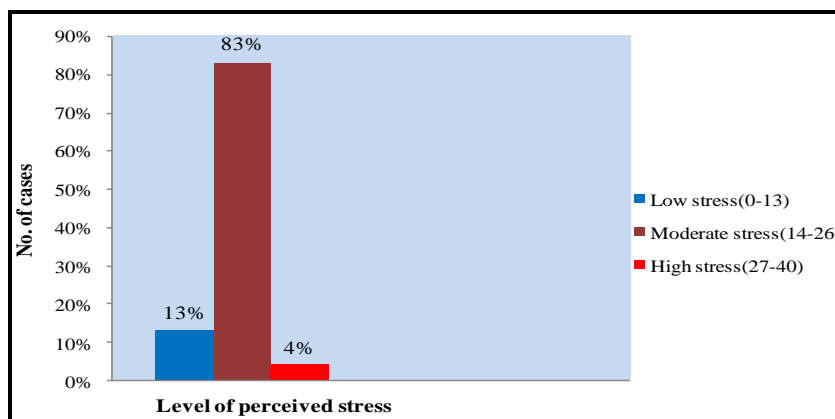


Fig 1: Frequency distribution of perceived stress among nursing students N=244

Section III: It shows the findings related to association between perceived stress and selected socio demographic variable. It was

found in the study that there were no association between the socio demographic variable and the perceived stress level.

Table 2: Association between perceived stress and selected socio demographic variable N=244

Socio Demographic Variable	Categories	Anxiety level		Calculated χ^2	df	P Value	S/NS
		<19	≥19				
Religion	Hindu	93	120	1.36	1	.253	NS
	Others	17	14				
Years of education	1 st year GNM Nursing	44	50	.184	1	0.69	NS
	2 nd year and 3 rd year GNM Nursing	66	84				
Types of family	Nuclear	96	118	.035	1	0.848	NS
	Joint	14	16				
Domicile	Urban	20	30	.656	1	.431	NS
	Rural	90	104				
Residing presently	With Family	79	88	1.05	1	.334	NS
	Without Family	31	46				
Selection of course	By Self	105	113	7.85	1	.006	S
	Others	5	21				
Parents occupation	Salaried	41	48	.005	1	.815	NS
	Not salaried	69	86				
Education of father	Formal education	103	129	.895	1	.344	NS
	No formal education	7	5				
Education of mother	Formal education	103	129	.895	1	.344	NS
	No formal education	7	5				

DISCUSSION

In the present study shows mean age of the students with standard deviation was 22±1.86 years and this findings is similar to the study by Aslan H et al [14] and Sheron D et al [11] where the average age of the students participating in the study were 20.67 ± 1.61 years and between 21-25 years.

In the present study 100% of the student nurse was female and this finding is consistent with the study by Aslan H et al [14] with 71.9% female; Zhi X et al [15] with 89.6% female and Sheron D et al [11] with 97.4% female. The investigator believe that existing prejudice around the image of the profession: historically, nursing is a feminine profession, because the idea of caring and protecting is linked to the history of women. Present study showed 86% of nursing student were Hindu by religion out of which 88% were staying with nuclear family which is consistent with the study by Sheron D et al [11] and Deo PK et al [16] which shows Hindu religion were 81% and 96.2% and nuclear family were 86.2% and 77.7% respectively. Current study showed that 71% of nurses student were from rural family which is similar to the study by Zhi X et al [15] that is 62.7% of nursing students were from rural family. As

per the census rural areas are having more population as compared to urban population. The present study showed 68% of participants were staying with the parents whereas similar finding was found in the study by Subba R et al [17] that is 78.3% were with their parents during lockdown.

In the present study it was found that 83% of students nurse are having moderate stress and this finding is consistent with study by Aslan H et al [14]; Sheron D et al [11]; Subba R et al [17]; Zhi X et al [15] where average score on the PSS was 31.69 ± 6.91; 21.88 (+4.30); 84.1% and 24.47±7.35 indicating that the students had a moderate level of stress. The investigators believe that the reason for this high prevalence of stress is explained by the sudden disruption in normal life, lockdown, isolation, infection, crisis, stigma, limited resources, rural area, and no source of income of parents, negative coping ability and challenges of learning during COVID-19 pandemic.

The findings of the present study reported that there was no significant association between interests in nursing with stress level which is contrast to the study by Nebhinani M et al [8] where interest in nursing was found to have significant association with level of stress.

CONCLUSION

In the current world there is rise in mental health issues and disorders. Mental health needs to be given importance as early as possible. In current study it was found that majority of nursing students are having moderate level of stress. This stress is making them vulnerable to mental issue. Various interventional studies need to be done to know the effectiveness of various techniques which can help to manage the stress level among nursing students and for betterment of country.

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How to cite this article: Begam B, Devi K. A study to assess the perceived stress among nursing students during COVID-19 lockdown. *International Journal of Science & Healthcare Research*. 2020; 5(4): 388-393.
