

Level of Stress and Coping Strategies Adopted by Bachelor Level Nursing Students

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ABSTRACT

Introduction: The life of college have many opportunity for fun and also achieving out the own achievement. But it's not easy for every undergraduate students especially for nursing students has lots of pressure that leads to anxiety, stress and depression. And sometimes it also took life of student either by their assignments or torture or too much clinical work.

Objectives: The aim of the study and collecting data is to identify stressors, assess the level of stress and find out the coping strategies that are adopted by Bachelor level Nursing Students.

Methodology: A quantitative research approach with descriptive survey research design was used in different College affiliated by Purbanchal University. Out of 209 participants, 137 participants were selected by simple random probability sampling technique from three Nursing college of Chitwan. Participants were given demographic questionnaire, stressors, perceived stress Stress(PSS) questionnaire with 29 items, perceived stress Stress(PSS) of 10 items for level of stress and a coping behavior inventory (CBI) scale of 19 items for coping strategies adopted by Nursing students.

Result: The student had perceived moderate level of stress (84%) that is mostly attributed by taking care of patient (14.55±4.25) followed assignment and workload (10.74±2.97). The most frequently used was problem solving (15.96±4.59) followed by stay optimistic (10.24±2.54).

Conclusion: According to the finding of the study, the most common stressors is taking care from patient and also nursing students perceived moderate stress and most of the coping strategy used by nursing students is problem solving. It also

concludes that faculty teachers and clinical instructors need to actively engage with students by providing adequate debriefing or guidance and having them reflect on their daily actions.

I. INTRODUCTION

Looking Period, teens had reported higher level of stress than adult in 2013 and in 2018 they had reported worse mental health and higher level of anxiety and depression than other age group (Divecha, 2019). Mostly, teens are at the university for purchasing their degree. And we can address this stress as epidemic (Conner, 2015). Stress has become mass phenomenon that affected mostly the health of Nursing Students rather than other course as in the same time period they have to work at the hospital areas for collecting their experienced and have theoretical knowledge for their self development and can provide care with scientific rational.

The nursing students of all three year of diploma programme had reported high level of stress from the clinical stressor rather than academic and other external stressors (Singh, Sharma & Sharma, 2011). In the nursing training colleges in the Tamale, Ghana; personal stressors are higher than academic stressors and social stressor in the nursing students. But in the married women academic stressors are higher (Abasimi, Atindabila, Mahamah & Gai, 2015). Even the Baccalaureate nursing student from Saudi Arabia perceived high level of stress who had reported out taking care of patient was significant stressor among them (Mohamed & Ahmed, 2012).

Academic stressors, clinical stressors and personal stressors are the type of stressors that were identified as main group of stressors where clinical stressor was major significant stressor (2.75±0.44) followed by academic stressor (2.55±0.58) among the baccalaureate nursing student in Ghana (Sossah & Asiedu, 2015).

In order to cope with high or moderate level of stress and various studies found stress among nursing students (Goff, 2011; Singh & Kohli, 2015; Bista, Bhattarai, & Khadka, 2017) either it may be from clinical or theoretical class or other personal matter; Nursing students had been using various strategies are like problem focused activities, emotional focused and avoiding (Shrestha, 2013). Effective intervention strategies should be taken from reducing stress among nursing students.

II. METHODS

1.1 Research Design

A descriptive research design was used to find out the level of stress and coping strategies adopted by Bachelor of science of Nursing students.

1.2 Population, Setting and Sampling

The study population for the study was Bachelor of Science of Nursing Students from Chitwan district under the Purbanchal University.

Simple random sampling technique was used.

Sample size was determined by using Slovin's formula:-

$$n = \frac{N}{1 + Ne^2}$$

where,

n = Sample size

N = Population size

e = confidence level = 5% confidence level with a population size of 209

Now,

$$n = \frac{N}{1 + Ne^2}$$

$$= \frac{209}{1 + 209 * 0.0025}$$

$$= \frac{209}{1.525}$$

$$= 137$$

1.3 Research instrument

A structural- self administered questionnaire was used. The tool consists of four parts i.e.

Part I: Related to Socio-Demographic Characteristics.

Part II: Related to PSS -29 item developed by Sheu, Lin, Hwang, Yu, Hu & Lou in 1997

Part II: Related to PSS-10 item developed by Cohen, Karmarck & Mermelstein in 1994

Part III: - Related to CBI developed by Sheu, Lin & Hwang in 2002

1.4 Ethical Considerations

Ethical approval was obtained from the NPI- Narayani Samudayik Nursing college Pvt. Ltd. The purpose of the study was explained to the participants and informed consent was obtained from all participants. Objectives were clearly explained to the participants before data collection. They were assured that they were free to withdraw from participation at any time if they want. Privacy and confidentiality was maintained.

1.5 Data collection

Data was collected after getting approval from those affiliated Nursing college of Purbanchal University from Chitwan district.

1.6 Data Analysis

After collection of data, checking and compiling was done manually. The data was entered in Epidata version 3.1 and SPSS (Statistical Package for Social Sciences) version 20.0. The collected data was analyzed using descriptive (mean, standard deviation and percentage). The finding was presented in tables.

III. RESULT

3.1 Demographic variables

Table 1

Nursing Students Age Group, Educational Level, Religion, Ethnic Group, Marital Status, Type of family, and Place to Live

Variables	Number	n=137
		Percent
Age group		
16-18	3	2.2
19-21	93	67.9
22-24	40	29.2
25-27	1	0.7
Mean±SD(2.2847±0.51377)		
Education level		
Bachelor of science in nursing FirstYear	34	24.8

Bachelor of science in nursing Second Year	35	25.5
Bachelor of science in nursing Third Year	34	24.8
Bachelor of science in nursing Fourth Year	34	24.8
Religion		
Hindu	124	90.5
Buddhist	6	4.4
Christian	5	3.6
Others	2	1.5
Ethnic group		
Brahmin/Chhetri	107	78.1
Tarai/madheshi other caste	8	5.8
Dalits	1	.7
Newar	9	6.6
Janjati	7	5.1
Others	5	3.6
Marrital status		
Married	12	8.8
Unmarried	125	91.2
Type of family		
Nuclear family	133	97.1
Joint family	4	2.9
Place to live		
Home	86	62.8
Hostel	25	18.2
Room	23	16.8
Others	3	2.2

Table no. 1 shows that out of 137 participants, regarding the age group maximum participants were in the age group 19-21 having 93 (67.9%), followed by 40(29.2%) in the age group 22-24 years. Regarding the educational level, 34 (24.8%) from first, third and fourth year were there and 35 were from second year. Regarding the religion almost all were Hindu 124 (90.4%) and followed by Buddhist 6 (4.4%). In the ethnic group,

107 (78.1%) participants were Brahamin/chhetri followed by newar 9 (6.6%). In the marital status, most of the participants were unmarried 125 (91.272.9%), while remaining 12 (8.8%) were married. Regarding the type of family 133(97.1%) were in nuclear family and 4(2.9%) were in joint family. Regarding the place of residence, most of the participants were stay in home 86(62.8%) followed by 25(18.2%) in hostel.

Table 2

Nursing Students Exposure to Clinical Environment, Income Source, Salary Income, and Economic Status

Variables	Number	n=137
		Percent
Exposure to clinical environment		
Less than 2 month	26	19.0
2-6 month	34	24.8
6-12 month	43	31.4

More than 12 month	34	24.8
Income source		
Agriculture	12	8.8
Civil service	31	22.6
Business	68	49.8
Others	6	4.4
Bank	3	2.2
Abroad	10	7.3
Indian army	2	1.5
Teachers	5	3.6
Salary income		
More than 3 lakh	13	9.5
More than 4 lakh	18	13.1
5-7 lakh	40	29.2
More than 7 lakh	66	48.2
Economic status		
High	6	4.4
Middle	127	92.7
Low	4	2.9

Table no. 2 show that out of 137 participants, regarding expose to the clinical environment, 43(31.4%) participants were expose for 6-12 month, and least was less than 2 month 26(19.0%).Regarding the income source of the participants, 68(49.8%) participants income source

is business followed by civil service 31(22.6%) and least 2(1.5%) followed by india army. Regarding the economic status of the participants, majority of participants belongs to middle class, followed by high class 6(4.4%) and least 4(2.9%) participants economic status is low.

3.2 Perceived stressors by Nursing students

Table 3
Stressors Perceived by Nursing Students.

Stressors	Factor ranking	Mean	SD	n=137	
				Minimum score	Maximum score
Taking care of patients	1	14.55	4.25	1	24
Assignment and workload	2	10.74	2.97	3	20
Lack of professional knowledge and skills	6	5.79	2.22	1	12
Clinical environment	5	5.94	2.38	0	12
Peer and nursing staff	4	7.79	3.63	0	16
Teacher and nursing staff	3	10.70	4.48	0	21

Table no. 3 represent that the mean±SD of stress perceived by the students was 1.68 ±0.30, the most common type of stressors perceived was from taking care of patients, (14.55±4.25), followed by assignment and workload (10.74±2.97) and least were from lack of professional knowledge and skills.

3.3 Level of stress Among Nursing Students

Table 4
Stress Level of Nursing Students
n=137

Level of stress	Number	Percent
Low	8	5.8
Moderate	116	84.7
High	13	9.5
Total	137	100

Table no. 4 shows that most of the (84.7%) nursing students perceived moderate stress followed by high stress (9.5%) and 5.8% perceived low stress.

3.4 Coping Strategies Used by Nursing Students

Table 6
Coping Strategies Used by Nursing Students

Subscales	Factor ranking	Mean	SD	Minimum score	Maximum score
Avoidance	3	9.89	4.04	2	22
Problem solving	1	15.96	4.59	5	24
Stay optimistic	2	10.24	2.54	3	16
Transference	4	7.89	2.73	0	12

Table no. 6 shows the coping strategies used by nursing students, in the avoidance the mean coping level is 9.89, while SD is 4.04, in problem solving mean coping level is 15.96, while SD 4.59, in stay optimistic the mean coping level is 10.24, while SD 2.54 and in transference the mean coping behavior is 7.89 while SD is 2.73. The most common coping behavior is problem solving, followed by stay optimistic and least was in transference.

IV. DISCUSSION

4.1 Stressors Perceived by Nursing Students

In this study the highest reported stressors was stress from taking care of patients (14.55±4.25) which resembles with the study conducted in Taiwan, Jordan and Chandigarh, India as also highest reported stressors i.e. (13.87±3.98) (12.28±4.46) and (23(52.3%) respectively (Chen & Hung, 2014; Alzayyat and Al-gamal, 2014; Singh, Sharma and Sharma, 2011). The second ranking stressor was Stress from assignment and

workload (10.74±2.97) that also resembles with the study conducted in Taiwan & Jordan as second ranking stressors i.e (9.71±3.66) (8.06± 3.88) respectively (Chen & Hung, 2014; Alzayyat & Al-gamal, 2014). Whereas the study that is conducted in Jordan revealed that stress from clinical assignments and workload (2.12±0.88) was highest reported stressors followed by stress from peer and daily life (1.65±0.91) which was completely contrast with the present study because the sample size was 597 which is more than the current research (Khater, Akhu-Zaheya & shaban, 2014). In the current study the lowest reported stressors was stress from lack of professional knowledge (7.89±2.73) which is similar to the result conducted in Jordan and Malaysia (Alzayyat & Al-gamal, 2014; Latif & Nor, 2016).

4.2 Level of stress Among Nursing Students

In this study the more than half (84.7%) of the participants perceived moderate stress. Similarly this finding of the study was supported

by the study conducted in the Pokhara, Nepal and Chandigarh, India revealed that 131(77.5%) of the respondent perceived moderate stress and 21(48.83%) of the participants perceived moderate stress (Shrestha, & Lama, 2014; Dhar, Walia& Das, 2009).

4.3 Coping strategies Used by Nursing Students

In the present study, problem solving is the most utilized coping strategy used by the participants (15.96±4.59) which resembles with the study conducted in Jordan, Saudi Arabia and Taiwan the most common coping strategy used by the participants were problem solving (17.23±4.27), (3.35±0.41) and (10.58±3.42) respectively (Alzayyat& Al-gamal ,2014; Alsaqri,2017; Chen & Hung, 2014). In the present study stay optimistic is second coping strategies that is used by the participants (10.24±2.54) as the finding of the study is supported by the study conducted in Saudi Arabia and Taiwan where stay optimistic (3.01±0.8) was the second coping strategies (Alsaqri,2017; Chen & Hung, 2014). In the present study transference is less frequently used coping strategy. A similar result in Jordan also show transference (Mean=7.31, SD=2.51) as less frequently used coping strategy (Alzayyat& Al-gamal, 2014).

V. CONCLUSION

Based on the result of the study and above discussion it concluded that stress from taking care of patient was the most common stressors perceived by nursing students in the clinical environment. And it also revealed that, most of the participants perceived moderate level of stress. Problem solving was the most commonly used coping strategy by the participants to cope with the stress.

VI. RECOMMENDATION

Based on the finding of the study, the following recommendations are made:

Similar study can be conducted on larger sample size to make the finding generalize to other setting.

A comparative study can be conducted with Nursing, BDS and MBBS students to identify the level of stress and coping strategies used by students.

A comparative study can be conducted with government nursing college and other private nursing college to identify the level of stress and coping strategies used by students

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