

# An Exploratory Study to Assess the Factors Affecting Stress and Coping Strategies among 1<sup>st</sup> Year BSc. Nursing Students of Selected Nursing Colleges at Rajasthan

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## Abstract

*Background:* Stress has become serious concern in the present time. Stress in nursing education is acknowledged as one of the most important issues in the modern world. Coping is the process of managing demands that are appraised as taxing or exceeding resource of the person. *Objectives:* (1) To identify the level of stress among 1<sup>st</sup> Year BSc. Nursing students. (2) To assess the factors affecting stress among 1<sup>st</sup> Year BSc. Nursing students (3) To identify the coping strategies adopted by 1<sup>st</sup> Year BSc Nursing students (4) To associate level of stress and coping strategies with selected sociodemographic variables. (5) To correlate level of stress and coping strategies among 1<sup>st</sup> year BSc. Nursing students. *Material and Methods:* A Non-Experimental, Descriptive exploratory survey approach was used for the study. Data was collected from 81, 1<sup>st</sup> year B.Sc. Nursing students who were studying in selected nursing colleges at Rajasthan. Non probability purposive sampling technique was used for selecting the samples. Standardized "Perceived stress scale" and "Coping behavior inventory" adopted by Sheu et al (2002) was used for collecting the data. *Results:* Majority (76.54%) of students were having mild stress. Highest mean score (5.53±2.09) which is (46.08%) of total score was obtained in the area of stress from the environment which falls in the category of mild stress. Majority (66.66%) of students were having moderate coping strategies. There was significant association between number of siblings and level of stress (15.68, P<0.05). There was highly significant association between sex and level of stress (11.79, P<0.05). There is moderately positive correlation (r = 0.32) between level of stress and coping strategies. *Conclusion:* Stress in nursing students is an area of growing concern and it may result in physiological distress, physical complaints, behavior problems and poor academic performance. Coping with stress for student nurse is dynamic and maintenance of the individual integrity. The present study revealed that students have mild level of stress and have moderate coping strategies.

**Keywords:** Assess; Stress; Coping Strategies.

## Introduction

Stress has become a serious concern in the present

time. Stress is basically any physical circumstantial or emotional change that person has to adjust to most of the time. According to Harry Gotesfold "Stress is any interference, which disturbs the functioning of organism at any level and produces a situation natural for organism to avoid" [1].

Stress in nursing education is acknowledged as one of the most important issues in the modern world. The challenges of nursing colleges can be very stressful for students. With busy schedules, critical

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thinking examinations, and clinical experiences at hospitals, students often feel overwhelmed by the many requirements of nursing curricula. All of these elements combined with outside responsibilities such as family, children, and jobs have the potential to create intense stress in students' lives. During nursing education and training, nursing students are frequently exposed to various stressors which may directly or indirectly impede their learning and performance. The nature of clinical education presents challenges that may cause students to experience stress [2].

"Coping is the process of the managing demands that are appraised as taxing or exceeding resource of the person" (Shelley E. Tylor 2008). "How a person copes can influence the degree, duration and frequency of stressful event [1]. Coping strategy is a conscious on effort to solve a personal or interpersonal problem that will help in overcoming, minimizing, or tolerating stress or conflict [3].

Nitasha Sharma, Amandeep Kaur (2011) conducted a study on factors associated with stress among nursing students. The study was done to identify the factors contributing to stress among nursing students. 97% of the subjects had moderate level of stress whereas 3% had severe stress. Among the factors contributing to stress, the environmental factors had maximum contribution (40%) followed by the interpersonal factors (30%). The academic factors had only 19% contribution whereas the intrapersonal factors contributed minimally [4].

C Viji Prasad, Amruthasuresh, Dina K Thomas, MK Pritty, Sumaida Beebi, VJapura Multazim (2013) conducted study on the level of stress and coping mechanism adopted by 1<sup>st</sup> year B.Sc. nursing students, Mangalore, India. The result showed that only one student (1.75) has severe stress, 46.7% has moderate stress and remaining 51.6% has mild stress, and majority of students (100) has average coping. There was no significant correlation (-1.167) between stress and coping mechanism of 1<sup>st</sup> Year B.Sc. nursing students [5].

With the professional and personal experiences, the investigators found that students who are newly admitted in nursing are not always prepared to deal with the challenges of the classroom and clinical practice settings. They have pressure to study new subjects, excel in examination, getting practical experiences in caring for patients etc. They may have healthy or unhealthy method to coping with stress. Hence, investigators felt to do present study to identify factors affecting stress and methods of coping strategies used by 1<sup>st</sup> year B.Sc. nursing students.

## Methodology

Non-experimental, Descriptive design with Exploratory survey approach was used for present study. The present study was conducted in selected nursing colleges of Rajasthan. The sample for the present study was 81 1<sup>st</sup> Year B.Sc. Nursing students. The sample size for the present study was calculated using software Raosoft. Non-probability purposive sampling method was used for collecting data. The samples included were all students who were studying in 1<sup>st</sup> Year B.Sc. Nursing. Students who were year back in 1<sup>st</sup> Year B.Sc. Nursing were excluded from the study.

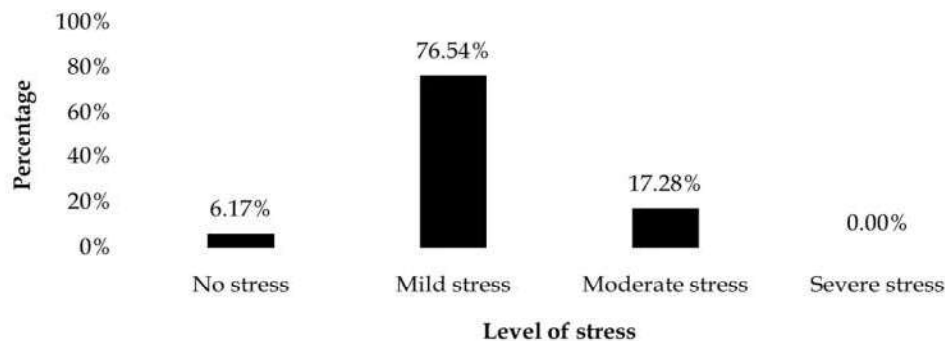
The tool consists of *Section A-* Socio demographic variables of 1<sup>st</sup> Year nursing students like age, sex, marital status, types of family, family income per month, place of residence, No. of siblings, spend leisure time, aim of selecting nursing profession, selection/choice of course, hours spent for study and related works and sharing of problems and issues *Section B-* consists of rating scale of "perceived stress scale" was developed by Sheu et al. (2002) to assess the factors affecting stress. It is a five-point Likert-type scale that consists of 29 items grouped into six factors, labeled as follows: 'Stress from taking care of patients' (8 items), 'Stress from teachers and nursing staff' (6 items), 'Stress from assignments and workload' (5 items), 'Stress from peers and daily life' (4 items), 'Stress from lack of professional knowledge and skills' (3 items), and 'Stress from clinical environment' (3 items). Each item is rated on a five-point Likert scale (0=never, 1=almost never, 2=sometimes, 3=fairly often and 4=very often). *Section C-* consists of rating scale of "coping behavior inventory" was developed by Sheu et al. (2002) to assess coping strategies. It is a five-point Likert-type scale that consists of 19 items grouped into four factors, labeled as follows: Avoidance behaviors' (6 items), 'Problem-solving behaviours' (6 items), 'Optimistic coping behaviours' (4 items) and 'Transference behaviours' (3 items). Each item is rated on a five-point Likert scale (0=never, 1=almost never, 2=sometimes, 3=fairly often and 4=very often) [6]. Ethical approval was obtained from Ethical and Research Committee of Global Hospital and Research Centre, Mount Abu and administrative approval was obtained from Principals of various colleges. The data was collected from 05 August 2016 to 11 August 2016. The purpose of the study was explained to the respondents and their consent for participation in the study was taken. The investigator collected the data from the samples with the help of structured questionnaire and instructions were given to them to fill it. The collected data was analyzed by using

descriptive and inferential statistics.

## Results

### *Findings Related to Socio-Demographic Variables of 1<sup>st</sup> year B.Sc Nursing Students*

Percentage wise distribution of demographic variables of 1<sup>st</sup> year BSc. Nursing students shows that majority of the students were belongs to 18 years of age (38.20%). Out of 81 students, 72.80% were males students. 98.76% of students were singles. Maximum (55.55%) students belongs to nuclear family. Majority (82.70%) of students were having per year family income more than 10,000. 59.25% of students were currently stay in hostel and 21% stay in own house. 39.50% have more than two siblings and 34.56% were having two siblings. 48.14% of students spent leisure time in listening music.



**Fig. 1:** Bar diagram showing percentage wise distribution of 1<sup>st</sup> year B.Sc. Nursing students according to their level of stress

### *Findings related to Area wise comparison of mean, SD and mean % of factor affecting stress among 1<sup>st</sup> year B.Sc Nursing students.*

Table 1 findings shows that the highest mean score (5.53±2.09) which is 46.08% of the total score was obtained in the area of stress from the environment which falls in the category of mild stress; However the other areas like stress from taking care of patients

Maximum (50.61%) students were having aim of service people and 39.50% of students were selected nursing because of job security. Regarding selection/choice of course, majority (82.71%) of students were having own choice/interest. 54.32% of students spent less than 2 hours/Day for study and related works and 38.27% of students spent 3 to 4 hours/Day for study and related works. Maximum (58.02%) of students used to share most of their problems to friends.

### *Findings Related to Assessment of Level of Stress among 1<sup>st</sup> year B.Sc Nursing Students*

Figure 1 shows that highest percentage (76.54%) of students were having mild stress, 17.28% of students having moderate stress and 6.17% of students having no stress. None of the students having severe stress.

(13.19±3.96), stress from assignment and workload (8.67±2.99), stress from lack of professional knowledge and skills (4.85±2.24), stress from peers and daily life (6.58±2.96), stress from teachers and nursing staff (9.08±3.32) were falling in the category of mild stress. It is interpreted that, stress from the environment is the major type of stress observed in students.

**Table 1:** Area wise comparison of mean, SD and mean % of factor affecting stress among 1<sup>st</sup> year B.Sc. Nursing students

S. No.	Area	Max. Score	Mean	SD	Mean%
1.	Stress from taking care of patient	32	13.19	3.96	41.20%
2.	Stress from assignment and workload	20	8.67	2.99	43.35%
3.	Stress from lack of professional knowledge and skills	12	4.85	2.24	40.41%
4.	Stress from the environment	12	5.53	2.09	46.08%
5.	Stress from peers and daily life	16	6.58	2.96	41.12%
6.	Stress from teachers and nursing staff	24	9.08	3.32	37.83%
	<b>Over all</b>	<b>116</b>	<b>47.93</b>	<b>11.81</b>	<b>41.30%</b>

### *Findings related to assessment of level of coping strategies among 1<sup>st</sup> year B.Sc. Nursing students.*

Figure 2 shows that majority (66.66%) of students

have moderate coping. 30.86% of students have mild coping and only 2.46% have poor coping. None of students have good coping.

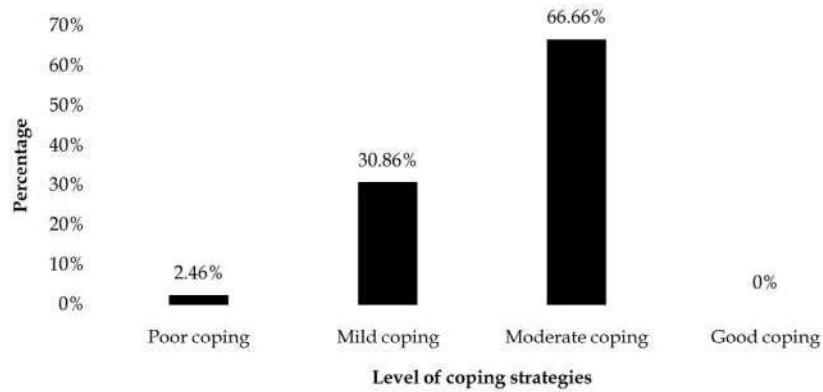


Fig. 2: Bar diagram showing percentage wise distribution of 1<sup>st</sup> year B.Sc. Nursing students according to their level of coping strategies

Table 2: Area wise comparison of mean, SD and mean % of coping strategies adopted by 1<sup>st</sup> year B.Sc Nursing students N=81

S. N.	Area	Max. Score	Mean	SD	Mean%
1.	Avoidance behavior	24	9.38	3.28	39.08%
2.	Problem solving behaviour	24	13.8	4.06	57.50%
3.	Optimistic behavior	16	9.24	2.55	57.75%
4.	Transference behavior	12	7.48	2.31	62.33%
	<b>Over all</b>	<b>76</b>	<b>39.91</b>	<b>8.06</b>	<b>52.51%</b>

Findings related to Area wise comparison of mean, SD and mean % of coping strategies adopted by 1<sup>st</sup> year B.Sc. Nursing students

Table 2 findings shows that the highest mean score (7.48±2.31) which is 62.33% of the total score was obtained in the area of transference behavior which falls in the category of moderate coping. However the other areas like problem solving behavior

(13.8±4.06), optimistic behavior (9.24±2.55) were falling in the category of moderate coping. The lowest mean score (9.38±3.28) which is 39.08% of total score was obtained in the area of avoidance behavior which falls in the category of mild coping. It is interpreted that, transference behavior is the major type of coping behavior observed in 1<sup>st</sup> year B.Sc. Nursing students.

Table 3: Association of level of stress with selected socio-demographic variables of 1<sup>st</sup> year B.Sc. Nursing students N=81

Sr. No.	Sociodemographic Variables	No stress	Level of stress Moderate stress	Mild stress	χ <sup>2</sup> Value	Table value	Df	Level of significance
1.	<b>Sex</b>				11.79	5.99	2	HS
	Male	4	50	5				
	Female	1	12	9				
2.	<b>No. of siblings</b>				15.68	12.59	6	S
	None	2	2	0				
	One	0	14	3				
	Two	1	23	4				
	More than two	2	23	7				
3.	<b>Aim of selecting nursing profession</b>				5.29	12.59	6	NS
	Service of people	4	32	6				
	Job security	1	22	8				
	Just want a degree	0	3	0				
	Any other	0	5	0				
4.	<b>To whom you share most of your problems/Issues</b>				10.35	15.51	8	NS
	Parents	1	12	3				
	Siblings	1	5	0				
	Friends	2	37	9				
	Teachers	0	0	1				
	No one	1	8	1				

P<0.05, NS- Not significant, S- Significant, HS- Highly significant

*Findings related to association of level of stress with selected socio-demographic variables of 1<sup>st</sup> year B.Sc. Nursing students*

Table 3 findings revealed that there was significant association between No. of siblings and level of stress, as the calculated chi-square value is more than the table value at  $P < 0.05$ . There was highly significant association between sex and level of stress, as the calculated chi-square value is more than the table value at  $P < 0.05$ .

Findings related to association of level of coping strategies with selected socio-demographic variables

of 1<sup>st</sup> year B.Sc. Nursing students.

It was found that there was no significant association between level of coping strategies and sociodemographic variables, as the calculated chi square value is less than table value at  $P > 0.05$ .

Findings related to Correlation between level of stress and coping strategies among 1<sup>st</sup> year B.Sc. Nursing students.

Table 4 reveals that there was moderate significant correlation ( $r=0.32$ ) between level of stress and coping strategies.

**Table 4:** Correlation between level of stress and coping strategies among 1<sup>st</sup> year B.Sc. Nursing students.

Variables	Karl Pearson Correlation (r)	P value	Level of Significant
Level of stress and Coping strategies	0.32	0.05	Significant

## Discussion

The findings of the present study revealed that majority (76.54%) of students were having mild stress and (17.28%) of students were having moderate stress and (6.17%) students having no stress. The finding is similar to the findings conducted by Rajesh kumar, Nancy (2011) on stress and coping strategies among Nursing students who found that (48.83%) of the students having mild stress and (11.62%) moderate stress among nursing students [7].

The majority (66.66%) of students have moderate coping and (30.86%) of students have mild coping. These findings are supported by study conducted by Henok Shiferaw, N., Susan Anand and Gugsanemera N (2015) who found that majority of nursing students (61.6%) were having healthy coping strategies [8].

The findings shows that there was moderate significant relationship ( $r=0.32$ ), between level of stress and coping strategies. These findings are supported with a study conducted by Carolina Domingues Hirsch, Edison Luiz Devos Barlem, Jamillageri Tomaszewski Barlem et al. (2015) who found correlation between stress and coping strategies adopted by nursing students ( $r=0.40$ ) at a 5% significance level [9].

## Conclusion

Stress in nursing students is an area of growing concern and it may result in psychological distress, physical complaints, behavior problems and poor academic performance. Coping with stress for a students nurse is a dynamic and maintenance of the

individual integrity. The present study revealed that students have mild level of stress and have moderate coping strategies. Nursing education consist of the theoretical practical training provided to nurses with the purpose to prepare them for their duties as nursing care professionals. This education is provided to nursing student by experienced nurses and other medical professionals who have qualified or experienced for educational tasks. Stress in nursing education is acknowledged as one of the most important issues in the modern world. The challenges of nursing colleges can be very stressful for students

## References

1. Ramanjit. Assessing stress and coping strategies among nursing students. *Nightingale nursing times*-2016 April;12(1):12-14.
2. Dr. Abdullah I Aedh, Dr. Nahid Khalil Elfaki, Dr. Itedal Abdel Raheem Mohamed. Factors associated with stress among nursing students. *Journal of nursing and health science*- 2015 Nov- Dec;4(6):33-38.
3. Study.Com. Coping strategies [Internet] 2016 [Updated 2016; cited 2016, May, 27]. Available from <http://study.com/academy/lesson/coping-strategy-definition-lesson-quiz.html> # course info.
4. Nitasha Sharma, Amandeep Kaur. Factors associated with stress among nursing students. *Nursing and midwifery research journal*. 2011 January;7(1):12-21.
5. C Viji Prasad, Amruthasuresh, Dina K Thomas, MK pretty, Samaidabeebi, Vijapura Multazim. The level of stress and coping mechanism adopted by 1<sup>st</sup> year B.Sc. nursing students. *Archives of medicine and*

- health sciences. 2013, Jan- Jun;1(1):19-23.
6. Marie e. Shultz et al. Factors related to stress in nursing students [Thesis]. Florida: University of central florida; 2011.
  7. Rajesh Kumar, Nancy. Stress and Coping Strategies among Nursing Students Nursing and Midwifery Research Journal, 2011 October;7(4).
  8. Henokshiferaw, N. Susan Anand, Gugsanemera N. Stress and coping strategies among generic B.Sc. nursing students. International journal of recent advances in multidisciplinary research 2015 July 31;2(7):0511-0517.
  9. Carolina Domingues Hirsch, Edison Luiz Devos Barlem, Jamillageri Tomaschewski Barlem et al. Predictors of stress and coping strategies adopted by nursing students. Acta paul. enferm. 2015 May-June;28(3).
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