

## A study to assess the relation between stress and coping among the nursing students

Gitumoni Konwar<sup>1</sup>, Amina Ahmed<sup>2\*</sup>

<sup>1</sup>Dean Principal, <sup>2</sup>Assistant Professor, <sup>1,2</sup>Royal School of Nursing, The Assam Royal Global University, Guwahati, Assam, India

**\*Corresponding Author: Amina Ahmed**

Email: aahmed@rgu.ac

### Abstract

Stress has been considered as a major issue of concern in 21<sup>st</sup> century and this has been documented widely among the nursing students but the use of effective coping methods can facilitate them to return to a balanced state. Although the body of evidence is growing on stress over the world, there is very little in the literature to know the relationship between stress and coping among the nursing students of Assam. Researchers conducted this study by using quantitative approach and descriptive survey design among 120 students, selected by using proportionate stratified random sampling technique. Standard tools such as Perceived Stress Scale and Coping Response Inventory were used to collect the data. Data were analyzed by using Software SPSS 16.0 version. Study results showed that majority (70.00%) of the students had moderate stress, 64.5% of students had average coping. Results also showed that no significant associations of stress as well as coping were found with selected demographic variables. The results further revealed that there was positive correlation of stress with acceptance or resignation, emotional discharge and negative correlation with problem solving, cognitive avoidance and positive reappraisal. The study concluded that students need to learn effective stress management techniques and healthy coping strategies in order to reduce the stress as well as maintains overall wellbeing.

**Keywords:** Physical health, Psychological wellbeing, Academic performance, Demographic variable, Nursing college.

### Introduction

Stress is a normal part of our daily life and small amount of stress is desired and beneficial and even healthy. Stress can motivate the individual to obtain results, but on the other hand, non-stop stress can act as a killer in terms of performance.<sup>1</sup> According to World Health Organization report, Stress-related disorders have been estimated to be one of the leading causes of disability by the year 2020.<sup>2</sup>

Stress is defined as mental, physical, emotional, and behavioral reactions to any perceived demands or threats.<sup>3</sup> It is the wear and tear of our minds and bodies experience as we attempt to cope with our continually changing environment.<sup>4</sup> Stress in nursing education is acknowledged as one of the most important issues in the modern world.<sup>5</sup> Several study reports revealed that nursing students experienced higher level of stress<sup>6,7</sup> even they are more prone to stress than any other students.<sup>8</sup>

Labrague LJ<sup>5</sup> conducted a study and findings of his study revealed that nursing students experienced moderate stress, which was mostly from assignments and workload. Emotional symptoms were found the most common response to stress. Findings further revealed that students who reported higher level of stress were significantly more likely to experience poor physical psychological and social health.

Students studying nursing are prone to different types of stressors such as the academic pressure with an obligation to succeed, an uncertain future and difficulties of integrating into the system.<sup>9</sup> It has a detrimental effect not only on the psychical, mental, social health of an individual but also to the wellbeing as a whole. It may lead to develop symptoms like substance abuse and drug dependence, eating disorders, sleep disorders, suicide, absenteeism, mental disturbances and even psychological symptoms. Therefore, undergraduate years for nursing students are considered as

one of the most critical period in their lifespan since learning during these years may be compromised due to effect of stress.<sup>5</sup> Hence it is necessary to handle the stress by effective coping strategies.

Lazarus and Folkman used the term coping to describe the cognitive and behavioral efforts- a person employ to manage stress, generally categorized as emotional- focused and problem- focused coping.<sup>10</sup> Studies have indicated that trainee nurses may become vulnerable to stress because of the use of less effective coping strategies such as avoidance when handling stress.<sup>11</sup> Previous study findings showed that coping plays a central role in adaptation to stressful life events. Coping strategies are the specific efforts both behavioural and psychological that individuals use to master, tolerate, reduce, or minimize stressful events.<sup>12</sup>

Singh C et al reported that high perceived stress levels and lack of effective coping skills could be a barrier to achieve the challenges of profession. Singh further revealed that students were found to cope up stress by using various coping strategies like avoidance, transference, problem solving and optimism.<sup>13</sup>

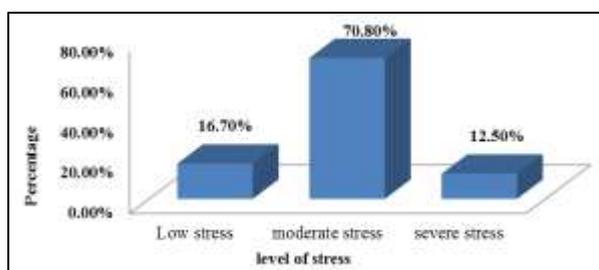
The researcher felt that stress is a very important issue among the students and there are very few studies have been conducted among the nursing professionals in Assam. Hence, the researcher felt it necessary to identify the relation between stress and coping among the nursing students and also the association of stress and coping with the selected demographic variables so that its findings can be used to implement different stress management techniques and effective coping strategies in the nursing curriculum which will not only help the students in maintaining the good health but also will improve their academic performance.

**Materials and Methods**

The researchers carried out a correlational study by using quantitative approach. This study was conducted among the B Sc nursing students from selected nursing colleges of Guwahati, Assam. A total of 120 samples were selected by using stratified proportionate random sampling technique. Standard as well as self structured tools were used to collect data which consisted of Part A: Demographic performa (self structured), this part consisted of six (6) items for obtaining personal identification of the student includes age, sex, religion, education, economic support and choice of study. There was no scoring for these items, Part B: the Perceived Stress Scale (PSS) developed by Cohen S.<sup>14</sup> It was a five point likert scale comprised of 10 items with the options like never, almost never, sometimes, fairly often and very often and for the item numbers 1,2,3,6,9 and 10, score were given 0,1,2,3,4 and for the item numbers 4, 5,7 and 8 score were given 4,3,2,1, 0. Higher score means higher level of stress and Part C: The Coping Response Inventory (CBI), it has total 48 items with 6 items in each subscale and the option were like, does not used (0), used somewhat (1), used quite a bit (2) and used a great deal.<sup>3</sup> It consisted of 8 types of coping strategies which were logical analysis, positive reappraisal, seeking guidance and support, problem solving, cognitive avoidance, acceptance or resignation, seeking alternative rewards and emotional discharge. Coping strategies with high score indicates maximum use. To interpret the score of both the scale Mean ± SD formula was used. The data analysis has been done by using SPSS, version 16.0. Before data collection, permission was taken from concerned authority and an informed consent was obtained from each participant after explaining every detail about the study.

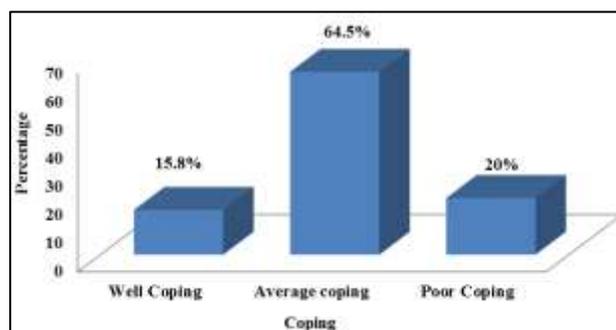
**Results**

Analysis is done based on the objectives of the study and both descriptive and inferential statistics were used. The researchers collected data from 120 students. Among 120 students, majority (55.83%) were found in the age group 21-24 years, 100% were female and most of them (51.67%) were the followers of Hindu religion. With respect to educational status, most of the students (29.17%) were studying in 2<sup>nd</sup> years B. Sc. Nursing. Regarding financial assistance, majority of the students (92.5%) were financed by their home. On considering the choice of the course, majority (89.17%) had chosen this course by themselves.



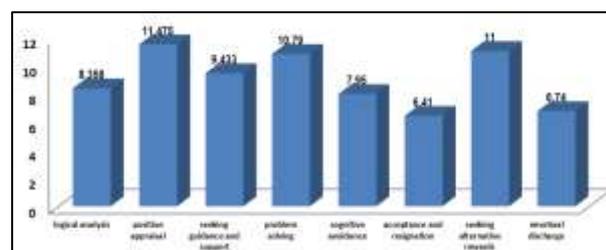
**Fig. 1:** Stress levels among the students (N=120)

Figure 1 portrayed that out of 120 respondents, majority (70.8%) of the students had moderate stress, 16.7% had high stress and 12.5% had low stress.



**Fig. 1:** Coping levels among the students (N=120)

Figure 2 depicted that majority (64.5%) of respondents had average coping, 20% had poor coping and 15.8% had well coping strategies.



**Fig. 3:** The mean score of different coping strategies among the students

Fig. 3 portrayed that students most commonly used coping strategies were as positive reappraisal (mean =11.475), followed by seeking alternative rewards (mean=11), problem solving (mean =10.79), seeking guidance and support (mean =9.433), logical analysis (mean =8.358), cognitive avoidance (mean =7.95), emotional discharge (mean =6.74) and acceptance and resignation (mean =6.41).

The present study results showed no significant associations were found between the stress and selected demographic variables like: age ( $\chi^2 = 1.143, P > 0.05$ ), religion ( $\chi^2 = 3.580, P > 0.05$ ), level of education ( $\chi^2 = 9.631, P > 0.05$ ), economic support ( $\chi^2 = .219, P > 0.05$ ) and choice of course ( $\chi^2 = 1.280, P > 0.05$ ). The findings further showed that no significant associations were found between the coping and selected demographic variables like: age ( $\chi^2 = .513, P > 0.05$ ), religion ( $\chi^2 = 1.099, P > 0.05$ ), level of education ( $\chi^2 = 4.842, P > 0.05$ ), economic support ( $\chi^2 = .791, P > 0.05$ ) and choice of course ( $\chi^2 = 1.572, P > 0.05$ ).

**Table 1:** Correlation between stress and coping strategies (N=120)

Coping strategies	Mean	SD	Stress	
			r- value	P value
Logical analysis	8.35	3.30	-.056	.546
Positive Reappraisal	11.47	3.96	-.229*	.012
Seeking Guidance and Support	9.43	3.85	-.027	.772
Problem Solving	10.79	4.18	-.245**	.007
Cognitive Avoidance	7.95	3.77	.267**	.003
Acceptance or Resignation,	6.41	3.82	.445**	.000
Seeking Alternatives Rewards	11.00	4.37	-.137	.135
Emotional Discharge	6.74	3.90	.307**	.001
Total	71.54	20.62	.058	.555

\* Correlation is considered significant at 0.05 level and highly significant at 0.01 level

Table 1 portrayed that there were positive correlation of stress with acceptance or resignation ( $r = 0.445, p < 0.01$ ) and emotional discharge ( $r = 0.307, p < 0.01$ ) and negative correlation with problem solving ( $r = -0.245, p < 0.01$ ), cognitive avoidance ( $r = 0.267, p < 0.01$ ) and positive reappraisal ( $r = -0.229, p < 0.05$ ). But no relations were found between stress and logical analysis ( $r = -0.056, p > 0.05$ ), seeking guidance and support ( $r = -0.027, p > 0.05$ ), seeking alternatives rewards ( $r = -0.137, p > 0.05$ ) and coping as whole ( $r = 0.058, p > 0.05$ ). This suggested that as stress level increases use of coping strategies like acceptance and emotional discharge increases and use of problem solving, cognitive avoidance and positive reappraisal decreases. But stress was found independent with the logical analysis, seeking guidance and support, seeking alternatives rewards as well as coping as a whole.

## Discussion

The present study found that majority of the students (55.83%) were in the age group 21-24 years, 100% were female and most of them (51.67%) were the followers of hindu religion. With respect to educational status, most of the students (29.17%) were studying in 2<sup>nd</sup> years B. Sc. Nursing. Regarding financial assistance, majority of the students (92.5%) were financed by their home. On considering the choice of the course, majority (89.17%) had chosen this course by themselves.

The study also found that majority (70.8%) of students had moderate stress, 16.7% had high stress and only 12.5% had low stress. This finding is corroborated with the study findings conducted by Shrestha S et al.<sup>15</sup>

The present study findings further showed that majority (64.5%) of respondents had average coping, 20% had poor coping and 15.8% had well coping strategies. Most of the students used coping strategies as positive appraisal, followed by seeking alternative rewards, problem solving, seeking guidance and support, logical analysis, cognitive avoidance, emotional discharge and acceptance and resignation. This findings are compatible with the study conducted by Sheu S et al<sup>16</sup> and Prasad C V et al<sup>17</sup> but contradictory with Aedh IA et al<sup>18</sup>

The present study results showed that no significant associations were found between the stress and selected

demographic variables like; age, religion, level of education, economic support and choice of course. Study results further showed that no significant associations were found between the coping and selected demographic variables like: age, religion, level of education, economic support and choice of course. These findings are corroborated with the study findings done by Prasad C V et al<sup>17</sup>

The study findings revealed there was positive correlation of stress with acceptance or resignation and emotional discharge and negative correlation with problem solving, cognitive avoidance and positive reappraisal. But no relationship was found between stress and logical analysis, seeking guidance and support, seeking alternatives rewards and coping as a whole. These suggested that as stress level increases use of coping strategies like acceptance and emotional discharge increases and use of problem solving, cognitive avoidance and positive reappraisal decreases. But stress was found independent with the logical analysis, seeking guidance and support, seeking alternatives rewards and coping as a whole. The findings appear consistent as well as contradictory with the study findings of Prasad C V et al<sup>17</sup> and Tully A.<sup>19</sup>

## Conclusion

The study findings confirm that there was considerable amount of stress experienced by the nursing students. Students had average coping strategies and no significant relations were found between selected demographic variables with stress and coping respectively. The results further clarified that there was both positive and negative correlation of stress with different coping strategies. Hence, the findings indicated that there is an urgent need to look into the matter by the teacher, administrators, policy makers to incorporate effective stress management techniques as well as coping strategies into the nursing curriculum so that stress can be dealt effectively at the early stage for the benefit of student's health and academic performance as whole.

## Acknowledgement

We are thankful to all the students who have participated in this study without them this study would not have been possible.

**Source of Funding:** None.

**Conflict of Interest:** None.

### Ethical Approval

Prior permission has been obtained from the Principal of all the Nursing colleges from where sample has drawn for data collection and an informed consent has been taken from each participant. As it is a descriptive study and no manipulation was done for the sample, hence the researchers did not felt it necessary to get ethical approval.

### References

1. Singh A, Chopra M, Adiba S, Mithra P, Bhardwaj A, Arya R et al. A descriptive study of perceived stress among the North Indian nursing undergraduate students. *Iran J Nurs Midwifery Res* 2013;18(4):340-42. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3872872/>
2. Manpreet K, Maheshwari SK. Depression, anxiety and stress among postgraduate nursing students. *Int J Therap Appl* 2015;21:12-8. Available from: [https://www.researchgate.net/publication/309242524\\_Depressi\\_on\\_anxiety\\_and\\_stress\\_among\\_postgraduate\\_nursing\\_students](https://www.researchgate.net/publication/309242524_Depressi_on_anxiety_and_stress_among_postgraduate_nursing_students)
3. Online stress management workshop (online). Available from: <http://www.allaboutdepression.com/workshops/stress/stress02.html>
4. Raja VAJ. A study on stress management in education sector. *Int J Edu* 2016;4(1):01-14. Available from: [http://www.iaeme.com/MasterAdmin/UploadFolder/IJE\\_04\\_01\\_001/IJE\\_04\\_01\\_001.pdf](http://www.iaeme.com/MasterAdmin/UploadFolder/IJE_04_01_001/IJE_04_01_001.pdf)
5. Labrague LJ. Stress, stressors, and stress responses of student nurses in a government nursing school. *Health Sci J*. 2013; 7(4). Available from: <http://www.hsj.gr/medicine/stress-stressors-and-stress-responses-of-student-nurses-in-a-government-nursing-school.pdf>
6. Abasimi E, Atindanbila S, Mahamah MM, Gai X. The experience of stress among nursing students in nursing training colleges in Tamale, Ghana. *Int J Psychol Behav Sci* 2015;5(2):89-97. Available from: <http://article.sapub.org/10.5923.j.ijpbs.20150502.06.html>
7. Younas A. Levels of stress and coping strategies used by nursing students in Asian Countries: An Integrated Literature Review. *J Middle East North Afr Sci* 2016;2(4):50-57. Available from: [https://www.researchgate.net/publication/301764008\\_Levels\\_of\\_Stress\\_and\\_Coping\\_Strategies\\_Used\\_by\\_Nursing\\_Students\\_in\\_Asian\\_Countries\\_An\\_Integrated\\_Literature\\_Review](https://www.researchgate.net/publication/301764008_Levels_of_Stress_and_Coping_Strategies_Used_by_Nursing_Students_in_Asian_Countries_An_Integrated_Literature_Review)
8. Seyedfatemi N, Tafreshi M and Hagani H. Experienced stressors and coping strategies among Iranian nursing. *BMC Nurs* 2007; 6:11. Available from: <https://bmcnurs.biomedcentral.com/articles/10.1186/1472-6955-6-11>
9. Sharma N, Kaur A. Factors associated with stress among nursing students. *Nurs and Midwifery Res J* 2011;7(1). Available from: <http://medind.nic.in/nad/t11/i1/nadt11i1p12.pdf>
10. Lazarus RS, Folkman S: Stress, appraisal and coping. New York: Spinger; 1984.
11. Walton RL: A comparison of perceived stress levels and coping styles of junior and senior students in nursing and social work programs. Doc Edu Diss. College of Graduate Studies, Marshall University; 2002. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.113.9657&rep=rep1&type=pdf>
12. Al-Dubai SAR, Al-Naggar RA, Alshagga MA, Rampal KG. Stress and coping strategies of students in a medical faculty in Malaysia. *Malays J Med Sci* 2011;18(3): 57-64. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3216229/#b15-mjms-18-3-057>
13. Singh C, Sharma S, Sharma RK. Level of stress and coping strategies used by nursing interns of national institute of nursing education, PGIMER, Chandigarh. *Nurs Mid Res J* 2011;7(4). Available from: <http://medind.nic.in/nad/t11/i4/nadt11i4p152.pdf>
14. Cohen S. Perceived stress scale. Available from: <http://www.mindgarden.com/documents/PerceivedStressScale.pdf>
15. Shrestha S, Lama R. On stress/ stressors as perceived by nepalese nursing students. *Int J Nurs Res Prac* 2014;1(2):5-9. Available from: [http://www.uphtr.com/issue\\_files/4%20Sandhya.pdf](http://www.uphtr.com/issue_files/4%20Sandhya.pdf)
16. Sheu S, Li HS, Hwang S. Perceived stress and physio-psychosocial status of nursing students during their initial period of clinical practice: the effect of coping behaviors. *Int J Nurs Stud* 2002;39(2):165-75. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/11755447>
17. Prasad CV, Suresh A, Thomas DK, Pritty MK, Beebi S and Multazim V. the level of stress and coping mechanism adopted by I year B. Sc. Nursing students. *Arch Med Health Sci* 2013;1:19-23. Available from: <http://www.amhsjournal.org/article.asp?issn=2321-4848;year=2013;volume=1;issue=1;page=19;epage=23;aulast=Prasad>
18. Aedh IA, Elfaki KN and Mohamed AI. Factors associated with stress among nursing students. *IOSR J Nurs Health Sci* 2015;4(6):33-8. Available from: <https://pdfs.semanticscholar.org/2ea6/906aae5aef3458ccfa1c8730b0edab4cbf8a.pdf>
19. Tully A. Stress, sources of stress and ways of coping among the psychiatric nursing students. *J Psychiatr Ment Health Nurs* 2004;11:43-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/14723638>

**How to cite this article:** Konwar G, Ahmed A. A study to assess the relation between stress and coping among the nursing students. *J Prev Med Holistic Health* 2019;5(1):48-51.