

# A Descriptive Study to Assess the Level and Factors Contributing to Stress among the Nursing Students of Selected Educational Institute

**Short Title:** A Study to Assess the Level and Factors Contributing to Stress among the Nursing Students.

**Maj Jilmy Anu Jose**

MSc (Med Surg Nsg), Lecturer, College of Nursing, Armed Forces Medical College, Pune-411040, India

**Abstract:** ***Introduction:** Stress is a nonspecific response of the body to any kind of demand made up on it. In nursing, it is a situation that produces anxiety responses, mental distress thereby sleep disturbance. It can affect the whole lifecycle of a nursing student. Paulido-martos, Augusto-landa and Lopez-zafra in 2011 conducted a study to assess the main sources of stress among nursing students, identified academics as the first and clinical practice as the second source of stress among the undergraduate nursing students. **Objectives:** The study objectives were to assess the level of stress and to determine the causative factors for stress among the nursing students of a selected nursing institute. **Methods:** The research design selected for the study is a non experimental descriptive design. The study population consists of students undergoing basic BSc nursing course. Stratified sampling technique was used with a sample size of 60. From each strata of the specified population that is, first year, second year, third year, fourth year, 15 samples were randomly selected. The tool comprised of three sections- socio demographic data, rating scale to assess the levels of stress, a scale to rank the factors contributing to stress. Rating scale was prepared and grouped into 6 domains to assess the levels of stress. Ranking scale was prepared to assess the factors contributing to stress. **Results:** Out of total study samples (n=60), 68.3% were in the age group of above 20, 31.7% were in the age group of below 20, 20.5% of the total samples were graduates where as 95% have got 12th standard as their basic educational qualification. 15% of the sample belongs to joint families and 85% are from nuclear families. Analysis shown that 68% fell in moderate stress group, 27% fell in mild stress group and 5% fell in severe stress group. Among first year students, 35% were under stress due to clinical assignments, in second year 42% were under stress due to theoretical exams, in third year 53% and 54% of the fourth years were under stress due to academic assignments. Out of sample (n=60), 41% of the sample are stressed due to academic assignments, 22% are stressed due to clinical assignments, 18% due to theoretical exam, 13% are stressed due to practical exam, 3% due to Co-Curricular activities and 3% of the sample are stressed due to student nurses association portfolios. **Conclusion:** The present study among the nursing students of a selected nursing institute helped to know the level of stress and factors contributing to stress.*

**Keywords:** Stress, Contributing factors, Level of stress

## 1. Introduction

The concept of stress was introduced by Hans Seyle of Canada who, from the 1930s, worked relentlessly for some three decades on stress<sup>1</sup>. Stress cannot be defined satisfactorily. One way to understand what is stress is to visualize stress as instability of homeostasis. Stress can alter homeostasis of Blood Pressure, body temperature, blood sugar level and many other parameters. There are various forms of stress, mental, injurious, disease etc. In all such conditions, body prevents the threat of destabilization by what is known as "Neuro endocrine response to stress". It is universally agreed that enhancement of endogenous secretion is good and wards off the destabilization.

Academic stress among college students has been a topic of interest for many years. College students are prone to stress due to the transitional nature of college life. For example, many college students move away from home for the first time, which can necessitate leaving all previously learned support system such as parents, siblings and high school friends (McEwen2002&Clarke 2008).

## 2. Background of the Study

Stress is a nonspecific response of the body to any kind of demand made up on it. In nursing, it is a situation that produces anxiety responses, mental distress thereby sleep disturbance. It can affect the whole lifecycle of a nursing student.

A study conducted by Nitasha and Amandeep in 2011, nursing students suffer from stress, pressure of academics with obligation to succeed an uncertain failure and indifference of integration system<sup>2</sup>.

As per the study conducted in the year 1999 by Beck and Trockal, „long hours of study, lack of free time, lack of timely feedback and lack of timely response by teachers leads to stress among nursing students. Other factors include vast nursing course and curriculum, clinical experience, assignments, multiple job responsibilities, lack of personal leisure time, co-curricular activities<sup>3</sup>.

## 3. Methods

A cross sectional descriptive design was adopted for the study. Population consists of undergraduate nursing students of a selected nursing institute in Pune. The sample consisted

of 60 students who were selected by simple random sampling technique.

The instrument developed and used for data collection consisted of rating scale assessing stress in various aspects of student's lives. Rating scale was developed after an extensive search, of literature related to stress among the undergraduate students. Rating scale consisted of six Domains with 4 options in each. The six domains were: Clinical practice, Time management, Interpersonal relationship, Personal habits, Academic performance and Physiological changes over six months.

Institutional ethical committee clearance and permission from head of the institution taken to conduct the study. For the pilot study, tool was administered to 6 random samples to check the clarity of the items, feasibility and practicability. The content validation of the tool was done by 07 experts. Test retest methods helped to assess the reliability of the tool and the study was conducted in Jan 2016.

#### 4. Results

The study conducted on 60 samples of undergraduate students revealed that 68% of the sample had moderate level of stress, 27% had mild stress and 5% suffered from severe stress. Among the six domains; clinical practice, time management, interpersonal relationship, personal habits, academic performance and the physiological changes over six months; clinical practice caused severe stress among the students whereas others contributed moderately. Academic assignments and theoretical exams also contributed significantly towards stress.

**Level of stress:** Out of sample (n=60) 68% had Moderate level of stress, 27% had mild stress and 5% were categorized under severe stress. 62% had moderate stress in time management, and 30% strongly disagreed, 30% disagreed and 15% strongly agreed that they are able to manage time. 67% had moderate stress in interpersonal relationship, 46% agreed that they had good interpersonal relationship. 48% had moderate stress in their personal habit and 33% agreed to it whereas 25% neither disagreed nor agreed to it. 53% of the sample had moderate stress in academic performance, 33% agreed and 24% neither disagree nor agreed to it. 42% had moderate stress due to physiological changes over 6 months, 36% agreed and 27% disagreed to the same.

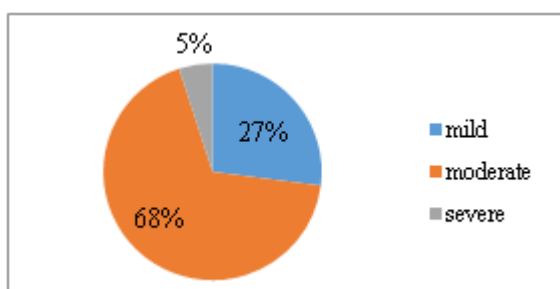


Figure 1: Pie chart depicting overall level of stress (n=60)

**Factors contributing to stress:** Among the first year nursing students clinical assignments and academic

assignment were the major contributing factors. Among the second year nursing students theoretical exams and academic assignment were the major contributing factors. Among third year nursing students, academic and clinical assignment caused much of the stress. Forth year nursing students had academic assignment, practical exam, SNA Portfolio as major contributing factors towards stress. Out of sample (n=60), 41% of the sample are stressed due to academic assignment, 22% are stressed due to clinical assignment, 18% due to theoretical exam, 13% are stressed due to practical exam, 3% due to Co-Curricular activities and 3% of the sample are stressed due to SNA Portfolios.

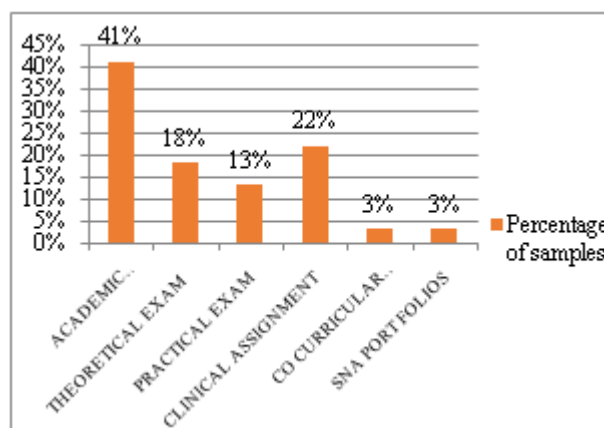


Figure 2: Bar graph depicting various factors contributing to stress among the nursing students

#### 5. Discussion

Moderate amount of stress helps to motivate students and at times increase their performance while too high levels of stress interfere with academic performance. Thus an important factor to be considered when studying stress to explore which sources of stress are motivating and beneficial and which sources of stress are detrimental. The outcome of stress may be dependent upon its sources and severity (Shields, 2001 and Smith 2007)

Potential stressors among nursing students have received much attention in the literature. Nursing students have the same academic stressors as other college students, such as midterm and final examinations, research papers and other assignments. In addition, nursing students experience a clinical component, which is highly stressful. Students have a large amount of preparatory work before their clinical assignments. They often must travel long distances to clinical sites and use highly technical equipment. Furthermore, they must perform procedures that can cause serious harm to their patients, thus enhancing their fear of making mistakes. Studies indicate that nursing students may be more prone to stress than other students.(Wong 2002&Walton 2002).

#### 6. Conclusion

Excessive stress can be harmful to a student's academic performance and students who perceive their stress levels as very high may often become depressed. This depression can lead to mental health problems, such as excessive corrupted interpersonal relationships (Frassrand 2005).Stress has been

identified as a 20th century disorder and has been viewed as a dynamic transaction between individuals and their environment. The present study on assessing the level and contributing factors of stress among the nursing students helped to know the level of stress and factors contributing to stress.

## References

- [1] Chaudhury K Sujit. Concise Medical Physiology. 4<sup>th</sup> ed. Calcutta: New Central Book Agency; 2002. p.278-279.
- [2] Nitasha sharma , amandeep kumar, factors associated with stress among nursing students, Nursing and Midwifery Research journal volume 7, Jan 2011.
- [3] [https://www.researchgate.net/publication/225026146\\_Sources\\_of\\_stress\\_in\\_nursing\\_students\\_A\\_systematic\\_review\\_of\\_quantitative\\_studies\\_pi=7%2CPAGE\\_ID10%2C9865142382](https://www.researchgate.net/publication/225026146_Sources_of_stress_in_nursing_students_A_systematic_review_of_quantitative_studies_pi=7%2CPAGE_ID10%2C9865142382)
- [4] <http://onlinelibrary.wiley.com/doi/10.1046/j.1365-2648.2000.01344.x/abstract>
- [5] Pryjmachuk S, Richards DA. Mental health nursing students differ from other nursing students: Some observations from a study on stress and coping. School of Nursing, Midwifery and Social Work, University of Manchester, Manchester, UK. steven.pryjmachuk@manchester.ac.uk Int J Ment Health Nurs. 2007 Dec;16(6):390-402.
- [6] Snelgrove SR. Occupational stress and job satisfaction: a comparative study of health visitors, district nurses and community psychiatric nurses. Department of Nursing, Midwifery and Health Care, Moriston Hospital, Swansea, UK. J Nurs Manag. 1999 Mar;6(2):97-104
- [7] Bai JY, Suh MJ. Study on work stress perceived by clinical nurses. Journal of Kanho Hakhoe Chi. 1999 Dec;19(3):259-72.
- [8] Keller, K.L. (1990). The management of stress and prevention of burnout in emergency nurses. Journal Of Emergency Nursing. 16(2), 90-95.
- [9] Pancer, S. M., Hunsberger, B., Pratt, M. W., & Alisat, S. (2000). Cognitive complexity of expectations and adjustment to university in the first year. Journal of Adolescent Research, 15, 38-57.
- [10] Greenberg, J. S. (1996). Comprehensive stress management (5th ed.). Chicago: Brown & Benchmark.
- [11] Hudd, S. S., Dumlao, J., Erdmann, D., Murray, D., Phan, E., Soukas, N., & Yokozuka, N. (2000). Stress at college: Effects on health habits, health status and self-esteem. College Student Journal, 34, 217-228.
- [12] Hudson, S. A., & O'Regan, J. (1994). Stress and the graduate psychology student. Journal of Clinical Psychology, 50, 973-977.
- [13] Sapp, M. (1996). Three treatments for reducing the worry and emotionality components of test anxiety with undergraduate and graduate college students: cognitive-behavioral hypnosis, relaxation therapy, and supportive counseling. Journal of College Student Development, 37, 79-87.
- [14] Rittner, B., & Trudeau, P. (1997). The women's guide to surviving graduate school. London: Sage Publications, Inc.
- [15] Nelson, N. G., Dell'Oliver, C., Koch, C., & Buckler, R. (2001). Stress, coping, and success among graduate students in clinical psychology. Psychological Reports, 88, 759-767.
- [16] Nolan G, Ryan D. Experience of stress in psychiatric nursing students in Ireland. Nurs Stand. 2008 Jul 2-8;22(43):35-43. Nursing Practice Development Unit, Health Service Executive West, Limerick
- [17] Saunders, R. P., & Balinsky, S. E. (1993). Assessing the cognitive stress of graduate students. Measurement and Evaluation in Counseling and Development, 26, 192-201.
- [18] Trockel, M. T., Barnes, M. D., & Egget, D. L. (2000). Health-related variables and academic performance among first-year college students: Implications for sleep and other behaviors. Journal of American College Health, 49, 125-132.