

E-ISSN: 2469-4339

*Management and Economics Research Journal, Vol. 6, Iss. 2, Pgs. 9, 2020*

# Original Research Article

## Insights from Clinics: Stress among Nursing Students

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# Insights from Clinics: Stress among Nursing Students

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Received: Feb 22, 2020; Accepted: May 8, 2020

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**Citation:** Khan NA, Parveen S. 2020. Insights from clinics: Stress among nursing students. Management and Economics Research Journal, 6(2): 9900004. <https://doi.org/10.18639/MERJ.2020.9900004>

## Abstract

This study was carried out to report on the factors promoting nursing students' stress and their strategies to cope up with the stress situation. Questionnaires were manually distributed to first-year, second-year, third-year, and intern students to check their stress level. The sample was composed of 75 nursing students. Items were rated on a five-point Likert Scale. Stress among nursing students and interns was measured using the Perceived Stress Scale (PSS) and Coping Behavior Inventory (CBI). The researchers also gathered data through open-ended questions from 18 intern nursing students. These students were at the completion of their course. This study addresses key issues that will be of interest and benefit to nursing schools that want to tackle and remove the problems of stress among nursing students. It discusses the importance of providing a good environment to students promoting a favorable study experience. This experience may be enhanced by assigning different duties to different departments, which would help in the development of their multitasking skills. This would not be possible without enough support from colleagues and teachers.

**Keywords:** Nursing students; Stress; Social factors; Academic development; Personal life; Coping strategies.

## 1. INTRODUCTION

Selye (1956), a Canadian physician, conceptualized the "stress response" and conducted a study on how it worked after observing patients' responses to the stress of hospitalization. In addition to coping with the day-to-day stress, nursing students must deal with stress specific to their roles and situations. Their stress is evident through work overburden, financial issues, lack of free time, work overload, relationship issues, and wrong career choices. Although some level of stress is normal and can be a motivator for some people in certain circumstances, not all find stress constructive and helpful (Koochaki *et al.*, 2011).

Shanker (2017) explained through his research that Americans were under great stress. They were found registering on the American Psychological Association's anxiety meter more often about their stress issues due to different factors. There were three main reasons for stress: money, work, and the economy. These factors clearly had a direct impact on the citizens. Younger people were found worried about financial issues, older ones about their job retirement, and it seems that everyone is worried about the economic prospects of the upcoming generation.

## 2. STRESS AMONG NURSING STUDENTS

D. Allen proposed that 170,000 nurses, doctors, and other medical employees suffered from mental health problems each year, with a total loss of 80 million working days in the United Kingdom (News Report, 1993). Hence, it can be said that the issue of stress is an important area among nursing students for research, as

nurses play a vital role in the medical workforce. They are not only responsible in the hospital formally, but also undoubtedly are engaged in the care of patients, and many processes are involved in this activity (Timmins and Kaliszer, 2002; Pulido-Martos *et al.*, 2012).

One study showed that students enrolled in associate nursing programs in Taiwan were aged between 17 and 20 years when they first began their clinical practice. During this tenure, they went through various stressful situations (Jimenez *et al.*, 2010). At the same time, these nursing students had taken only a few basic medicine and nursing courses prior to actual clinical practice. In other words, these students lacked enough information and skills to complete their tasks while on duty and could not provide adequate care to patients. Therefore, their initial clinical practice may be the most stressful period of their nursing career (Sheu *et al.*, 2002; Seyedfatemi *et al.*, 2007).

The nursing practice needs to be approached and taught properly. Nursing practice comprises vital learning portions and also hectic schedules; thus, it can be stressful to students. Students at their learning stage may face varying complexities, such as using different equipment while also dealing with technologically advanced tools, managing sudden changes in patient's condition, and so on (Elliott, 2002; Gorostidi *et al.*, 2007). There are various other factors also involved, such as irresponsibility on the faculty's side, teachers not being well organized in their work and teaching, the family being less supportive, and the student's own personal life being mismanaged (Torregosa *et al.*, 2016). Such aspects of a nursing student's life give birth to stress, and when the condition is prolonged, it can lead to negative effects on learning, engagement, and the health of students (Chan *et al.*, 2009). There is evidence suggesting that stress during basic training may result in psychological or emotional impairment in nurses' professional life and ultimately affect the quality of patient care (Shaban *et al.*, 2012).

In recent years, the mental health and negative effects on the physical health of nursing students have become a source of increased research. However, there is still a dearth of research for progressive discovering of ideas and procedures that can eliminate the issues of stress among nursing students (Sutherland and Cooper 1990; Tully, 2004; Warbah *et al.*, 2007).

### 3. SCOPE OF THE STUDY

The purpose of this research is to explore stressors among nursing students of JN Medical College, Aligarh Muslim University, Aligarh. The study also emphasizes on investigating the effect of stressors and students' opted measures to reduce stress during their course in college.

### 4. REVIEW OF LITERATURE

A literature review was done to examine the factors responsible for stress generation among students in nursing school.

#### 4.1. Reviews: Stress among Nursing Students

Baker (2012) focused on the issue that students enrolled in nursing keep on complaining about their stressful situations. The author designed this study to evaluate the stress levels in the light of demographic factors. Results showed that gender, marital status, age, domicile, children, employment status, GPA (grade point average), income, cultural background, habits, and hours of sleep were the factors involved. It was found that GPA and study time had effect on the stress level of nursing students.

Sharma and Kaur (2011) identified factors affecting nursing students' life at school. About 37 nurses participated in the survey for assessment of the factors involved at different levels, that is, from moderate to severe stress levels. About 97% of the nurses reported moderate level of stress and 3% of the total reported severe stress. It was also found that the working environment had a major impact on the nurses' stress levels. Secondly, interpersonal variables contributed to 30%, and only a 19% contribution was observed from the academic side.

Edwards *et al.* (2010) portrayed in their study that self-esteem is an important predictor of stress in the journey of nursing students. The study revealed various factors affecting stress levels and levels of

self-esteem during their 3-year tenure of the educational program. Results showed that during the first year, self-reported stress was higher and the self-esteem level was at the lowest; at the time of training and internship, self-esteem levels were lowest while they are engaged in duties in different departments.

Gibbons *et al.* (2008) studied both the situations of distress and eustress and gave suggestions to help students deal with their stressful conditions during their studies. In this study, data was analyzed under the themes such as support, learning, clinical experience, teaching experience, and program structure. Many factors came into light causing stress for nurses; among them, the structure of program/courses and the demand for more efforts for those courses caused greater stress.

Stark *et al.* (2005) examined nursing students' stress in the light of self-care interventions. The authors revealed in this study that self-care is important to maintain a healthy lifestyle. This study evaluated the effect of the self-care program on nursing students. It was found that students took self-care seriously if given training through self-care programs, which formed a part of their nursing-education course. Sawatzky (1998) reviewed theoretical studies to understand stress factors, coping methods, and adaptation processes among nurses. The study revealed that nurse students were facing problems due to stress due to both internal and external factors.

Mahat (1996) surveyed 104 first-year nursing students in Nepal to evaluate the factors affecting stress and how they managed their stressful situations. Four factors, namely, relationships, their own experiences, feeling helpless at work, and belittling experiences, were observed as stress-creating variables. Around 50% of the stress was caused by interpersonal relationships. The author suggested eight ways of coping with stress: seeking problem-solving methods, accepting responsibility at work, seeking social support from family and friends, maintaining self-control, employing tension-reduction techniques, avoiding unnecessary things, encouraging wishful thinking, and removing negative feelings. The majority of the students used "seeking social support" as their coping strategy.

Charlesworth *et al.* (1981) assessed the impact of the program initiated for stress management among nursing students. This program included relaxation techniques, deep muscle relaxation training, many modified systems for desensitization, and visual imagery techniques. The group in which the stress-management program was initiated showed reduction in their stress and anxiety levels while others showed increments in their stress level and anxiety.

## 5. RESEARCH QUESTIONS

This study points out to the following research questions:

1. What are the factors causing stress among nursing students, and what is their level of stress?
2. What coping strategies do nursing students adopt during stressful situations?

## 6. METHOD(S)

Descriptive research design is used in this study to describe characteristics of nursing students. For the present research, data was collected using a convenience sampling method. For the survey, questionnaires were distributed manually for data collection. Some of the questionnaires were incomplete.

Questionnaires were distributed to first-year, second-year, third-year, and intern students. Nursing students filled the instrument within 10 days of receiving them. The response rate of the students was 90%. The sample was composed of 75 nursing students. The tool was prepared on a five-point Likert scale (0 = never and 4 = very often). Data analysis was done using SPSS 22. Descriptive statistics included frequencies of items, percentages, mean, and standard deviation showing the level of stress.

The Perceived Stress Scale (PSS) and Coping Behavior Inventory (CBI) were used to examine nursing students' stress levels and factors causing stress. This instrument was developed by Sheu *et al.* (2002). To determine the level of stress, the rating was as follows: 3.50–5.00 for high stress; 2.35–3.49 for moderate stress, and 0–2.34 for low stress. Reliability and validity tests of the instrument were also done. In this study, Cronbach's alpha was 0.86 for factors used. The pilot study was also done on some of the students. The researchers also gathered qualitative data through open-ended questions.

## 7. ANALYSIS AND INTERPRETATION

### 7.1. Demographic Output

As shown in Annexure I, the age of the students ranged from 18 to 25 years. The majority of the students (53.3%) were aged between 18 and 21 years. About 35 students (46.66%) were aged over 21 years. Females accounted for 94.7% of the sample. Most of the respondents (68%) were living in their homes. About 32% of students had changed accommodation from nonresident to resident (hosteller). Only 6%

**Annexure I: Demographic Profile**

Variables	N (75)	Percentage (%)
<b>Age</b>		
18–21 years	40	53.33
22–25 years	35	46.66
<b>Gender</b>		
Female	71	94.7
Male	4	5.3
<b>Accommodation Status</b>		
Hosteller	24	32
Day Scholar	51	68
<b>Marital Status</b>		
Married	5	6.7
Unmarried	70	93.3
<b>Level of Course</b>		
First year	19	25.3
Second year	18	24.0
Third year	20	26.7
Internship	18	24.0
<b>Interest in Nursing</b>		
Yes	52	69.3
No	23	30.7

Source: Calculated by the researcher through a questionnaire.

of them found married with responsibilities of their family, and 93.3% were unmarried, out of which many were found to be in a relationship. Of those enrolled, 69.3% were interested in the course as such, but 30.7% of them had attempted the entrance examination for the bachelor of medicine and bachelor of surgery before getting enrolled in this course. At all the levels of the course (first-year, second-year, third-year, and internship), the working time was found to be 45 hours per week (7 hours per day, Friday considered half day).

Table 1 shows the six factors of PSS. Here, items are grouped into factors, and the mean was calculated for each factor. The overall means were then calculated on the basis of the students' mean scores for each PSS role. Data indicated that the most common type of stressor was "Factor 5" (mean = 3.68, SD = 0.89) followed by "Factor 4," (mean = 2.58, SD = 1.20). Meanwhile, "Factor 2" (mean = 2.16, SD = 1.09) was the least reported type of stressor among nursing students.

Annexure II shows the elements causing high stress among the nursing students. They are: "Do not know how to help patients with physical–psycho–social problems" (mean = 3.89, SD = .798) followed by "Do not know how to communicate with patients" (mean = 3.72, SD = .980), "Experiencing difficulties in changing from the role of a student to that of a nurse" (mean = 3.65, SD = 1.097), "Lack of care and guidance from

**Table 1. Mean Values: Stressors Perceived by Nursing Students.**

	Mean	Std. Deviation	Ranking
1. Stress from taking care of patients	3.33	1.08	4
2. Stress from assignments and workload	2.16	1.09	6
3. Stress from lack of professional knowledge and skills	2.34	0.99	5
4. Stress from the environment	2.58	1.20	2
5. Stress from peers and daily life	3.68	0.89	1
6. Stress from teachers and nursing staff	3.51	0.98	3

Source: Calculated by the study's researchers through a questionnaire.

**Annexure II: Mean Values: Stressors Perceived by Nursing Students**

	Mean	Std. Deviation
<b>I. Stress from Taking Care of Patients</b>		
Lack of experience and ability in providing nursing care and in making judgments	3.60	.885
Do not know how to help patients with physical–psycho–social problems	3.89	.798
Unable to reach one's expectations	3.78	.799
Unable to provide appropriate responses to doctors', teachers', and patients' questions	3.57	1.055
Worry about not being trusted or accepted by patients or patients' family	3.35	1.033
Unable to provide patients with good nursing care	3.45	.990
Do not know how to communicate with patients	3.72	.980
Experiencing difficulties in changing from the role of a student to that of a nurse	3.65	1.097

(Continued)

**Annexure II: Mean Values: Stressors Perceived by Nursing Students (Continued)**

	Mean	Std. Deviation
<b>II. Stress from assignments and workload</b>		
Worry about bad grades	3.66	1.108
Experiencing pressure from the nature and quality of clinical practice	3.49	1.095
Feel that one's performance does not meet teachers' expectations	3.44	1.107
Feel that the requirements of clinical practice exceed one's physical and emotional endurance	3.39	1.012
Feel that dull and inflexible clinical practice affects one's family and social life	3.53	.991
<b>III. Stress from lack of professional knowledge and skills</b>		
Unfamiliar with medical history and terms	3.39	1.012
Unfamiliar with professional nursing skills	3.24	1.074
Unfamiliar with patients' diagnoses and treatments	3.34	1.107
<b>IV. Stress from the environment</b>		
Feel stressed in the hospital environment where clinical practice takes place	2.97	1.139
Unfamiliar with the ward facilities	3.35	.893
Feel stressed from the rapid change in patient's condition	3.48	1.018
Transportation between home and hospital	3.52	.811
Having to be early in the hospital (7 am)	3.22	.949
<b>V. Stress from peers and daily life</b>		
Experience competition from peers in school and clinical practice	3.59	1.114
Feel pressure from teachers who evaluate students' performance by comparison	3.62	1.141
Feel that clinical practice affects one's involvement in extracurricular activities	3.11	1.085
Cannot get along with other peers in the group	3.44	1.003
<b>VI. Stress from teachers and nursing staff</b>		
Experience discrepancy between theory and practice	3.40	1.151
Do not know how to discuss patients' illness with teachers or medical and nursing personnel	3.19	1.074
Feel stressed that teacher's instruction is different from one's expectations	3.56	1.079
Doctors lack empathy and are not willing to help	3.40	.973
Feel that teachers do not give fair evaluation of students	3.67	1.139
Lack of care and guidance from teachers	4.07	1.095

Source: Calculated by the researcher through a questionnaire.

**Table 2. Coping Strategies Utilized by Nursing Students.**

<b>Particulars</b>	<b>Mean</b>	<b>Ranking</b>
<b>Problem Solving</b>		<b>(1)</b>
To have confidence in performing medical practices	3.16	8
To set up objectives to solve problems	3.25	5
To adopt different strategies to solve problems	3.32	4
To find the meaning of stressful incidents	3.44	1
To employ past experience to solve problems	3.43	2
To make plans, list priorities, and solve stressful events	3.41	3
<b>Avoidance</b>		<b>(4)</b>
To attribute to fate	1.79	17
To avoid difficulties during clinical practice	1.85	16
To avoid teachers	1.98	15
To expect miracles so one does not have to face difficulties	1.75	18
To expect others to solve the problem	2.02	14
To quarrel with others and lose temper	1.70	19
<b>Staying Optimistic</b>		<b>(2)</b>
To have confidence in overcoming difficulties	3.22	6
To keep an optimistic and positive attitude in dealing with everything	3.18	7
To see things objectively	2.82	10
To cry; to feel moody, sad, and helpless	2.08	13
<b>Transference</b>		<b>(3)</b>
To relax via TV, movies, a shower, or physical exercises	2.90	9
To save time for sleep and maintain good health to face stress	2.55	11
To have a big meal and take a long sleep	2.32	12

Source: Calculated by the study's researchers through a questionnaire.

teachers" (mean = 4.07, SD = 1.095), "Worry about bad grades" (mean = 3.66, SD = 1.108), "Feeling pressure from teachers who evaluate students' performance by comparison" (mean = 3.62, SD = 1.141), and "Feeling that teachers do not give fair evaluation of students" (mean = 3.67, SD = 1.139).

Table 2 shows the coping behaviors most commonly used by the students: "problem solving" (M = 3.44), followed by "staying optimistic" (M = 3.33) and "Transference" (M = 2.21). However, avoidance was less frequently utilized by nursing students (M = 1.89). The most common coping behavior of the students was to "to find the meaning of stressful incidents" (M = 3.44), "to employ past experience to solve problems" (M = 3.43), "to make plans, list priorities and solve stressful events" (M = 3.41), "to adopt different strategies to solve problems" (M = 3.32) and "to set up objectives to solve problems" (M = 3.32).



## 8. CONCLUSIONS AND IMPLICATIONS

This study is highly useful and relevant because it has included all the junior and senior nursing students of the JN Medical College of the university. This has helped prevent bias that would have otherwise crept in through random selection. This study suffers from a weakness, which has resulted due to it being conducted among nursing students of a single university. Conducting studies across several universities may result in different results; hence, findings of this study may not be universally applicable. There is a need for teachers to encourage their students to study in groups. This would help them ease their stress and reduce exam-related anxiety.

Senior students should also be encouraged to effectively groom first-year students. This would help first-year students acquire useful study skills that can help them during their course. Teachers should also encourage students to move beyond classroom information and help students acquire knowledge that is otherwise not provided in the college. Studying in this way can help students learn more meaningfully, instead of rote-learning. Mentorship by first-year students also provides crucial support to new students and helps them make effective networks that can come into use in the future (Lombardo *et al.*, 2017). Most of the students felt that their teachers helped them deal with their personal problems. However, some of them were not sure about the genuineness of their teachers' support, and few were sure that their teachers offered no support whatsoever. Supportive teachers helped deal with the stress.

Financial worries became a major source of concern as it manifested itself both in the present—lack of adequate money to finance their current studies—and in the future—concerns about employment opportunities. These concerns were augmented for students who were studying away from home and also because of the fact that they did not have enough money to bear costs arising out of unforeseen circumstances. Prolonged working hours left students with very little leisure time. Students felt that they developed the skills of the dos and don'ts for their personal as well as academic life.

Summing up, it could be said that stress was an inseparable aspect of these students' academic life. The nature of this stress was diverse, such as financial worries, which were a major reason for their stress; the others are time management and concerns about post study employment. A lot of students were able to devise certain methods that enabled them to deal with the stress. The differences in gender did not make much of a variation regarding the occurrence of stress or impact the coping mechanisms for dealing with it. The clash between students' academic responsibilities and their private life was also a reason for stress. All these issues need to be addressed, and researchers suggested launching some development and training programs so that the students could tackle the situations. For proper practice in patients' care, their minds need to be calm and relaxed.

### Author Contributions

Both authors contributed equally to this study.

### Conflict of Interest

None.

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