**Annals of Human and Social Sciences**
**www.ahss.org.pk**

# Assessing the Factors affecting Stress among Undergraduate Students of Nursing

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**ABSTRACT**

The aim of this study is to assess the factors affecting stress and association between  stress level and demographic characteristics of undergraduate  nursing students. Stress is the body and mind's response to external pressures or challenges. A cross sectional study was conducted at Doctor Hospital Lahore. About 94 students were selected through convenient sampling technique.  Data was analyzed using SPSS Version 25. The study found that most participants were aged 22-26 years, female, unmarried, and urban residents, with 35.1% reporting low stress. Gender, marital status, and education level significantly influenced stress, with females and married individuals experiencing lower stress and first- and fourth-year students facing higher severe stress. Majority of nurses reported low stress level and level of stress is associated with gender, marital status and education level. Nursing institutions should offer stress management programs, counseling, and peer support while adjusting academic workloads to prevent burnout and promote self-care.

| **Keywords:** | Factors, Nurses, Nursing Students,Stress |

## Introduction

Stress is the body and mind's response to external pressures, involving physiological and psychological reactions (Onieva-Zafra et al., 2020). It affects not only nursing students' well-being but also the quality of care they may provide as future healthcare professionals (Masha'al et al., 2020). Globally, 12–50% of college students meet at least one diagnostic criterion for mental disorders, with younger and Asian nursing students reporting higher rates of depression (41% and 43%, respectively) (Ramón-Arbués et al., 2020; Chernomas & Shapiro, 2013).

Nursing education is recognized for its rigorous and demanding nature, combining theoretical learning, clinical practice, and skill development, which creates a challenging environment (Hamaideh et al., 2022; Elsalem et al., 2020). Unique stressors, including academic pressures, clinical demands, and personal responsibilities such as family and jobs, further exacerbate stress (Sanad, 2019; Dr. Abdullah I. Aedh & Mohamed, 2015).

Clinical training of nurses emphacizes the importance of patient care (Ahmed & Mohammed, 2019; Rajab et al., 2020). Stress can effect the working of nurses and also effect patient care. This stress can cause anxiety, depression and disturb the mental health of nurses  (Firth et al., 2019).It is very important to address the stressors to improve the mental health of nurses and patient outcomes (McDermott et al., 2020). Therefore, this study is conducted to assess the factors affecting stress among undergraduate students of nursing and to assess the association between  stress level and demographic characteristics of undergraduate  nursing students.

**Literature Review**

The current study focus on factors affecting stress among undergraduate students of nursing. As a quantitative study was conducted in Taiwan among nursing students. About 64.5% students faced moderate level of stress (Wu et al., 2021). Mao et al. (2021) also conducted a study to identify the personal, institutional, and social factors and identified that social factors negatively effect the development of students.

In Australia, a study of 377 undergraduate nursing students found moderate stress levels influenced by socio-demographic factors and coping strategies (Asturias et al., 2021). Academic pressure, limited leisure time, parental expectations, and financial burdens also emerged as significant stressors.

Masilamani et al. (2019) reported a 25% stress prevalence among nursing students, with clinical stressors scoring the highest, followed by confidence-related stress. Stress management programs were recommended to improve academic performance and prevent stress-related health issues.

Ahmed and Mohammed (2019) identified patient care, assignments, workload, and lack of professional skills as major stressors among 125 nursing students in KSA. Similarly, Bektas et al. (2018) found that clinical experiences were a consistent source of stress for first-year nursing students in Turkey.

**Material and Methodology**

A descriptive correlational study was conducted over four months at Doctor Hospital College of Nursing and Allied Health Sciences, using a sample of 94 nursing students aged 17–35 years, selected through convenient sampling. Inclusion criteria included both genders and willingness to participate, while students with psychotic disorders or prior involvement in similar research were excluded. Data collection involved a demographic questionnaire and a 19-item stress scale on a 4-point Likert scale, categorizing stress levels as low, moderate, or severe. Ethical approval and written informed consent were obtained, ensuring confidentiality and voluntary participation. Data was collected through self-administered questionnaires over two months, with analysis performed using SPSS Version 25, employing chi-square tests and descriptive statistics.

**Results and Discussion**

**Table 1**
**Demographic characteristics of participants**

| Veriable | Frequency | Percentage |
|---|---|---|
| **Age in years** | | |
| 17- 21 | 28 | 29.8 |
| 22-26 | 46 | 48.9 |
| 27- 31 | 20 | 21.3 |
| **Gender** | | |
| Male | 27 | 28.7 |
| Female | 67 | 71.3 |
| **Marital status** | | |
| Married | 28 | 29.8 |
| Un Married | 66 | 70.2 |
| **Area of respondent** | | |
| Urban | 51 | 54.3 |
| Rural | 43 | 45.7 |
| **Education Year** | | |

| First Year | 25 | 26.6 |
| Second Year | 26 | 27.7 |
| Third Year | 17 | 18.1 |
| Fourth Year | 26 | 27.7 |

The table summarizes the demographic data of the participants. Most respondents were aged 22–26 years (48.9%), with females (71.3%) and unmarried individuals (70.2%) constituting the majority. Over half (54.3%) resided in urban areas. Participants were fairly distributed across educational years, with second and fourth-year students each making up 27.7%, followed by first-year (26.6%) and third-year students (18.1%).

**Table 2**
**Level of Stress among participants**

| Level of Stress | Frequency | Percentage | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Low stress | 33 | 35.1 | 35.1 | 35.1 |
| Moderate stress | 31 | 33.0 | 33.0 | 68.1 |
| Severe Stress | 30 | 31.9 | 31.9 | 100.0 |

The table illustrates the distribution of stress levels among participants. A majority experienced low (35.1%) or moderate stress (33.0%), while 31.9% reported severe stress. The cumulative percentage indicates that 68.1% of participants experienced stress ranging from low to moderate levels.

**Table 3**
**Association of Level of Stress with Socio Demographic Variables**

| Variable | Level of Stress | | | P-Value |
|---|---|---|---|---|
| | Low Stress | Moderate Stress | Severe Stress | |
| **Age in years** | | | | |
| 17- 21 | 8 | 11 | 9 | |
| 22-26 | 20 | 12 | 14 | 0.520 |
| 27- 31 | 5 | 8 | 7 | |
| **Gender** | | | | |
| Male | 6 | 7 | 14 | 0.029 |
| Female | 27 | 24 | 16 | |
| **Marital status** | | | | |
| Married | 16 | 10 | 2 | 0.001 |
| Un Married | 17 | 21 | 28 | |
| **Residential Area** | | | | |
| Urban | 18 | 15 | 18 | 0.660 |
| Rural | 15 | 16 | 12 | |
| **Education** | | | | |
| First Year | 11 | 4 | 10 | |
| Second Year | 12 | 12 | 2 | 0.019 |
| Third Year | 6 | 5 | 6 | |
| Fourth Year | 4 | 10 | 12 | |

The table examines the association between stress levels and socio-demographic variables. Age and residential area showed no significant association with stress levels (p = 0.520 and p = 0.660, respectively). However, gender (p = 0.029), marital status (p = 0.001), and education year (p = 0.019) were significantly associated with stress levels, indicating that these factors may influence stress among participants.

**Discussion**

This chapter includes discussion of results related to factors affecting stress level among undergraduate nursing students. The discussion below integrates the study findings with existing literature, highlighting similarities and differences.

In terms of demographic characteristics, the current study revealed that majority of students were female and aged between 22- 26 year. This finding is align with existing literature that also reported that majority of participant student were aged between 20-30

year (Asturias et al., 2021). The majority of participants were single and resided in urban areas. This aligns with a prior research in which the majority of participants were single (He et al., 2018).  The present research indicated that students experience the highest levels of stress when they lack sufficient knowledge on their patients' assessments and treatments. This is due to their insufficient professional knowledge and abilities. This conclusion aligns with a prior research indicating that participants experienced heightened stress due to their limited knowledge of patients' diagnosis and treatments (Hamaideh et al., 2022).

The present research revealed that a significant source of stress for students is the perception that their work fails to meet professors' expectations. This conclusion aligns with a prior research indicating that the majority of participants experienced stress due to the need of meeting their professors' requirements (Sanad, 2019). The stress associated with patient care indicates that many individuals experience anxiety due to insufficient knowledge and skills in providing nursing care and making judgements. The findings align with a prior research indicating that the majority of students suffer stress due to insufficient experience or knowledge for delivering nursing care and making choices (Ahmed & Mohammed, 2019).

Practical settings revealed that nursing students mostly experience stress due to their unfamiliarity with the ward's amenities. This conclusion aligns with previous research indicating that students experience heightened stress when they lack familiarity with the clinical environment and its facilities (Elsalem et al., 2020). The research indicates that students' primary concern is the insufficient care and guidance from their professors, stemming from the demands exerted by educators and nursing personnel. This conclusion aligns with another research indicating that students had the highest levels of stress when their professors provided insufficient assistance and support (Asturias et al., 2021).

Peer pressure and everyday influences indicate that the majority of students experience stress due to difficulties in collaborative group work. This outcome aligns with previous findings indicating that interpersonal conflicts and difficulties in peer interactions are significant stressors for students (Hamaideh et al., 2022). The survey findings indicate that the majority of individuals had a moderate level of anxiety. This conclusion aligns with another research indicating that students experience less stress (Sanad, 2019).

A significant correlation existed between gender and stress levels, shown by the association between stress levels and sociodemographic characteristics. This evidence indicates that gender variations significantly influence levels of stress among individuals. This discovery aligns with a prior research (Elsalem et al., 2020), which also indicated that gender is a significant determinant influencing individuals' stress perceptions. The statistics indicate that gender-specific stressors must be addressed, and support strategies in healthcare and educational environments should be adapted to be more gender-sensitive.

## Conclusion

This study thoroughly examines stress among undergraduate nursing students. Research indicates that unmarried status, urban living, and female students are prevalent. Stress is induced by interpersonal conflicts, professional inadequacies, challenges in patient care, and academic pressures. Stress is affected by educational attainment, marital status, and gender. The findings illustrate the impact of environmental, intellectual, and personal factors on stress levels in nursing students. Tailored education, guidance, and support are required to resolve these challenges and improve students' academic performance and well-being. This study aids in recognising stress within nursing education and in formulating approaches for stress alleviation and learning enhancement.

**Recommendations**

- Nursing institutions should incorporate stress management programs into the curriculum, focusing on mindfulness, time management, and relaxation techniques to equip students with effective coping strategies.
- Dedicated counseling services and peer support networks should be established within nursing colleges to provide psychological support and a safe environment for sharing experiences and solutions.
- Academic workloads should be evaluated and adjusted to minimize burnout, ensure a balanced schedule, and allow adequate time for self-care and extracurricular activities.

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