



Perceived Academic Stress and Sleep Disturbances among Undergraduate Nursing Students in Jaipur: A Descriptive Cross-Sectional Study

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Abstract

Introduction:

Undergraduate nursing students frequently experience academic stress as a result of rigorous coursework, clinical duties, tests, and professional expectations. Academic achievement, physical health, psychological well-being, and sleep quality can all be adversely affected by excessive stress. Because getting enough sleep is crucial for learning, memory consolidation, and making sound clinical decisions, sleep problems among nursing students have grown in importance. The goal of the current study was to evaluate undergraduate nursing students in Jaipur's perceptions of academic stress and sleep disturbances and ascertain the correlation between these factors.

Methodology: 250 undergraduate nursing students from particular nursing colleges in Jaipur participated in a descriptive cross-sectional study. A practical sampling method was used to choose the participants. The Perceived Academic Stress Scale, a Sleep Disturbance Assessment Scale, and a demographic questionnaire were used to gather data. Data analysis was done using both descriptive and inferential statistics.

Results: According to the study's findings, 16.8% of students had low academic stress, 28.4% had high academic stress, and 54.8% had moderate academic stress. In terms of sleep problems, 24.0% reported mild sleep abnormalities, 24.8% reported severe sleep disturbances, and 51.2% experienced moderate sleep disturbances. Academic stress and sleep disruptions were shown to be significantly positively correlated ($r = 0.71, p < 0.05$). Academic stress was shown to be highly correlated with the year of study, while screen time prior to sleep and daily study hours were found to be significantly correlated with sleep disruptions.

Conclusion: The study found that undergraduate nursing students frequently experience academic stress, which has a substantial impact on sleep quality. To support students' academic progress and well-being, regular stress management programs, counseling services, and sleep hygiene instruction are advised.

Keywords: Academic Stress, Sleep Disturbances, Nursing Students, Undergraduate Nursing, Sleep Quality, Student Mental Health, Nursing Education.

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INTRODUCTION

The psychological discomfort brought on by educational expectations that beyond a person's capacity for adaptation is known as academic stress. Because they must balance both theoretical study and clinical instruction, nursing students are especially susceptible to academic stress.¹

Students pursuing nursing education must achieve demanding academic standards, participate in patient care activities, build clinical abilities, and gain a wealth of knowledge. Increased tension, anxiety, and emotional tiredness are frequently caused by these obligations.²

Sleep is a vital physiological activity that is important for memory consolidation, emotional control, cognitive performance, and general wellness. For nursing students to maintain their best academic performance and clinical competence, they must get enough sleep.³

Academic stress has been linked to poor sleep quality, insomnia, delayed sleep onset, daytime drowsiness, and exhaustion among college students, according to several research. Concentration, learning capacity, clinical judgment, and psychological health can all be negatively impacted by sleep disorders.⁴

Due to the rigorous nature of nursing education, students frequently have to juggle their personal obligations, clinical posts, exams, assignments, and classroom instruction. As a result, during their academic careers, many nursing students suffer from sleep deprivation and elevated stress levels.⁵

Developing interventions that promote students' mental health and academic success requires an understanding of the connection between academic stress and sleep problems. Thus, undergraduate nursing students in Jaipur participated in the current study.

OBJECTIVES

1. To assess the level of perceived academic stress among undergraduate nursing students.
2. To assess the level of sleep disturbances among undergraduate nursing students.
3. To determine the relationship between perceived academic stress and sleep disturbances.

4. To determine the association between academic stress and selected demographic variables.
5. To determine the association between sleep disturbances and selected demographic variables.

HYPOTHESES

H₁: There will be a significant relationship between perceived academic stress and sleep disturbances among undergraduate nursing students.

H₂: There will be a significant association between perceived academic stress and selected demographic variables.

H₃: There will be a significant association between sleep disturbances and selected demographic variables.

METHODOLOGY

Research Approach

Quantitative Research Approach

Research Design

Descriptive Cross-Sectional Research Design

Setting

Selected Colleges of Nursing, Jaipur, Rajasthan

Population

Undergraduate nursing students studying in selected colleges of nursing.

Sample Size

250 Nursing Students

Sampling Technique

Convenient Sampling Technique

Inclusion Criteria

- Undergraduate nursing students willing to participate.
- Students available during data collection.
- Students from first to fourth year B.Sc. Nursing program.

Exclusion Criteria

- Students absent during data collection.
- Students diagnosed with severe psychiatric

disorders.

- Students receiving treatment for chronic sleep disorders.

Variables

Independent Variables

Age, gender, year of study, residence, study hours, screen time before sleep, and family income.

Dependent Variables

Perceived academic stress and sleep disturbances.

Research Tools

Section A: Demographic Profile

- Age
- Gender
- Year of study
- Residence
- Family income
- Daily study hours
- Screen time before sleep

Section B: Perceived Academic Stress Scale

A structured 30-item Likert scale assessing:

- Examination stress
- Assignment burden
- Clinical posting stress
- Time management difficulties
- Academic workload

Scoring:

- Low Stress: 0–30
- Moderate Stress: 31–60

- High Stress: 61–90

Section C: Sleep Disturbance Assessment Scale

A 20-item Likert scale assessing:

- Sleep duration
- Sleep quality
- Sleep latency
- Night awakenings
- Daytime sleepiness

Scoring:

- Mild Disturbance: 0–20
- Moderate Disturbance: 21–40
- Severe Disturbance: 41–60

Validity and Reliability

Expert review was used to establish content validity. Using Cronbach's Alpha, the reliability of the Academic Stress Scale was $r = 0.88$ and that of the Sleep Disturbance Scale was $r = 0.85$.

Data Collection Procedure

Institutional authorization and ethical clearance were acquired. Every participant provided written informed permission. Self-administered questionnaires were used to gather data.

Data Analysis

Inferential statistics (Pearson correlation coefficient and Chi-square test) and descriptive statistics (frequency, percentage, mean, and standard deviation) were employed.

RESULTS

The study's objectives guided the analysis and interpretation of the gathered data. The following tables display the results.

Table 1: Distribution of Students According to Demographic Variables (N=250)

Variable	Frequency	Percentage
Age 18–20 years	120	48.0
Age 21–23 years	105	42.0
Above 23 years	25	10.0
Male	55	22.0
Female	195	78.0

Table 2: Level of Perceived Academic Stress Among Nursing Students (N=250)

Stress Level	Frequency	Percentage
Low Stress	42	16.8
Moderate Stress	137	54.8
High Stress	71	28.4

Mean Stress Score = 54.2 ± 11.4

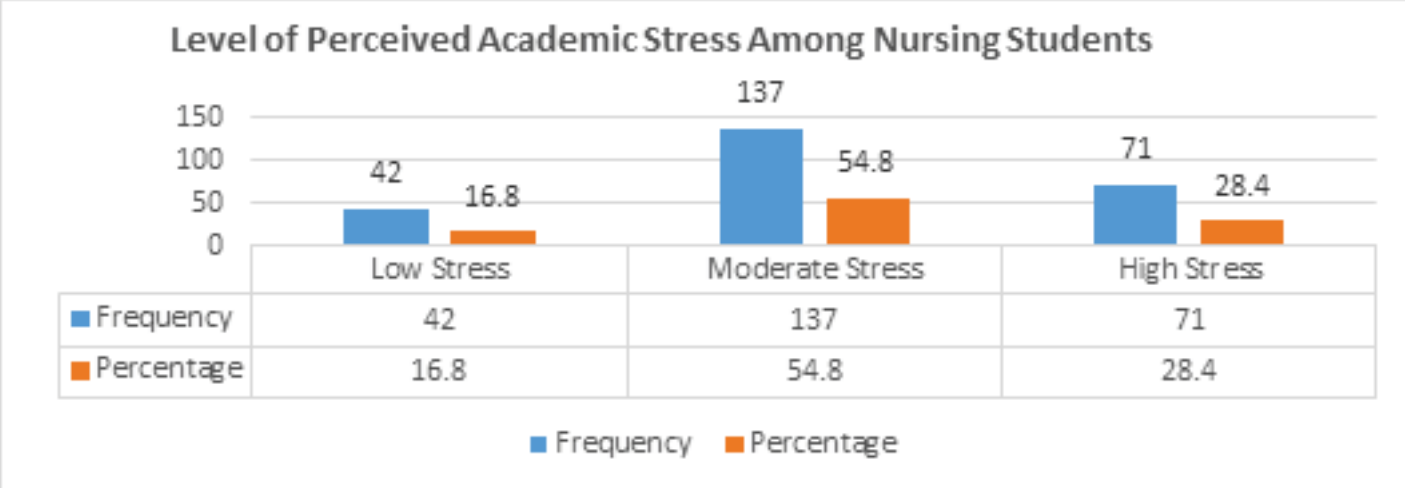


Figure 01: Level of Perceived Academic Stress Among Nursing Students

Table 3: Level of Sleep Disturbances Among Nursing Students (N=250)

Sleep Disturbance Level	Frequency	Percentage
Mild	60	24.0
Moderate	128	51.2
Severe	62	24.8

Mean Sleep Disturbance Score = 33.8 ± 8.5

Table 4: Correlation Between Academic Stress and Sleep Disturbances (N=250)

Variables	Mean	SD	r-value	p-value
Academic Stress	54.2	11.4	0.71	<0.05
Sleep Disturbance	33.8	8.5		

Table 5: Association Between Academic Stress and Selected Demographic Variables

Variable	χ^2 Value	p-value	Significance
Year of Study	11.82	0.003	Significant
Gender	2.16	0.142	Not Significant
Residence	1.89	0.168	Not Significant

Table 6: Association Between Sleep Disturbances and Selected Demographic Variables

Variable	χ^2 Value	p-value	Significance
Daily Study Hours	10.65	0.005	Significant
Screen Time Before Sleep	14.28	0.001	Significant
Gender	2.01	0.156	Not Significant

Summary of Results

Most nursing students reported significant sleep difficulties and moderate academic stress. Academic stress was found to be positively correlated with sleep disruptions. Academic stress and the year of study were shown to be highly correlated, while study hours and screen usage prior to bedtime were found to be significantly correlated with sleep disruptions.

DISCUSSION

The current study showed that undergraduate nursing students experience a high level of academic stress. The majority of participants reported moderate levels of stress, which could be related to time management issues, clinical responsibilities, exams, and academic overload. Previous research involving nursing and healthcare students has revealed similar results.⁶

Participants also frequently reported experiencing sleep difficulties. Students' sleeping habits are frequently impacted by the demanding nature of nursing school, which results in shorter sleep durations and lower-quality sleep.⁷

A significant positive correlation between academic stress and sleep disturbances suggests that increasing stress levels contribute to worsening sleep quality. This finding is consistent with previous research indicating that academic stress negatively impacts sleep patterns and psychological well-being.⁸

Sleep disruptions and academic stress are significantly positively correlated, indicating that rising stress levels degrade the quality of sleep. This result is in line with earlier studies showing that academic stress has a detrimental effect on sleep habits and psychological health.^{8,9}

CONCLUSION

The study found that significant academic stress and sleep problems are experienced by undergraduate nursing students. Academic stress has a negative impact on learning outcomes, general well-being, and

sleep quality. To assist nursing students, educational institutions should offer counseling services, stress management programs, and instruction on good sleep hygiene.^{10,11}

Recommendations

1. Workshops on stress management should be held on a regular basis.
2. Nursing courses ought to include instruction on good sleep hygiene.
3. Students who are under stress should have access to counseling services.
4. Programs for relaxation and mindfulness should be promoted.
5. Larger populations should be the subject of similar research.
6. To assess stress-reduction techniques, interventional research may be conducted.

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Conflict of Interest: None

REFERENCES

1. Lazarus RS, Folkman S. Stress, Appraisal and Coping. New York: Springer; 1984.
2. Gibbons C. Stress, coping and burn-out in nursing students. *Int J Nurs Stud*. 2010;47(10):1299-1309.
3. Carskadon MA, Dement WC. Normal human sleep. *Principles and Practice of Sleep Medicine*. 2017.
4. Lund HG, Reider BD, Whiting AB, Prichard JR. Sleep patterns and predictors of disturbed sleep. *J Adolesc Health*. 2010;46(2):124-132.
5. Benavente SBT, Silva RM, Higashi AB, Guido LA, Costa ALS. Influence of stress factors on nursing students. *Rev Esc Enferm USP*. 2014;48(2):298-304.
6. Labrague LJ. Stress, stressors and stress

- responses among nursing students. *J Nurs Educ Pract*. 2013;3(7):15-25.
7. Hershner SD, Chervin RD. Causes and consequences of sleepiness among college students. *Nat Sci Sleep*. 2014;6:73-84.
 8. Almojali AI, Almalki SA, Alothman AS, Masuadi EM, Alaqeel MK. The prevalence and association of stress with sleep quality among medical students. *J Epidemiol Glob Health*. 2017;7(3):169-174.
 9. Polit DF, Beck CT. *Nursing Research*. 11th ed. Philadelphia: Wolters Kluwer; 2021.
 10. Potter PA, Perry AG. *Fundamentals of Nursing*. 11th ed. Elsevier; 2023.
 11. Sharma M, Dekhawat CP, Silwal S, Bharti M, Katiyar S. Academic Stress and Its Impact on Sleep Quality among Undergraduate Nursing Students in Jaipur: A Cross-Sectional Study. *Indian Journal of Health and Allied Sciences*. 2026;1(1):21-25. https://scholar.google.com/citations?view_op=view_citation&hl=en&user=Gp5XhUgAAAAJ&citation_for_view=Gp5XhUgAAAAJ:beqBT5984LEC

