

Published by College of Nursing, G.S.V.M. Medical College Campus, Kanpur

Website: conup.org.in

A DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF ACADEMIC STRESS AMONG FIRST-YEAR GNM STUDENTS IN THE SCHOOL OF NURSING, LALA LAJPAT RAI NURSING PRASHIKSHAN KENDRA, KANPUR

Anushka Yadav^{1,*}, Shalini², Arpita Singh¹, Deeksha Yadav¹,
Kirti Prabha¹, Manisha Baghel¹, Meenakshi Patel¹, Muskan
Maurya¹, Pratibha Yadav¹

¹Post Basic B.Sc. Nursing, ²Nursing Tutor, College of
Nursing, G.S.V.M. Medical College Campus, Kanpur, U.P.

Article info: Received: 10 June 2024

Accepted: 17 June 2025

Published: 18 June 2026

*Correspondence: Post Basic B.Sc. Nursing, College of Nursing, Kanpur

Abstract

Background: Academic pressure is a widespread issue among nursing students, stemming from rigorous academic obligations, clinical duties, tests, and the adjustment to a different educational setting. First-year General Nursing and Midwifery (GNM) students are especially at risk, as they transition from conventional schooling to professional nursing education. High levels of stress can negatively impact students' academic results, mental health, and career progress.

Aim: To evaluate the degree of academic stress in first-year GNM students and explore its relationship with selected socio-demographic factors.

Methods: A quantitative research strategy featuring a descriptive cross-sectional design was utilized. The research involved 52 first-year GNM students from the School of Nursing at Lala Lajpat Rai Nursing Prashikshan Kendra in Kanpur. Participants were chosen through a probability simple random sampling method (lottery method). Information was gathered using a structured socio-demographic form and a Modified Likert Scale that included 20 items pertinent to academic stress. Data analysis included descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (Chi-square test).

Results: The results indicated that 31 (59.6%) students faced moderate academic stress, while 20 (38.5%) reported mild stress, and 1 (1.9%) experienced severe stress. The majority of the respondents were female (86.5%), within the age range of 21–22 years (40.4%), unmarried (98.1%), and came from nuclear family structures (69.2%). The Chi-square analysis showed a significant statistical relationship between academic stress and marital status ($\chi^2 = 52.000$, $p < 0.05$). No significant relation was found between academic stress and other socio-demographic factors such as age, gender, educational level, family structure, family income, parents' jobs, leisure activities, and the amount of time dedicated to recreation ($p > 0.05$).

Conclusion: The study determined that the majority of first-year GNM students encountered moderate academic stress. The demands of academics, examinations, and the adjustment to the nursing education framework could lead to heightened stress levels. Identifying stress early and employing supportive measures such as counseling services, stress management initiatives, mentorship, and student assistance programs are crucial for fostering psychological health and academic achievement among nursing students.

Keywords: Academic Stress, Nursing Students, GNM Students, First-Year Students, Nursing Education, Stress Management, Descriptive Study.

INTRODUCTION

Stress is a phenomenon experienced by people of every age and profession around the globe. In

schools, stress has become a significant issue due to its effects on students' physical health, mental well-being, academic achievements, and general

Citation: Yadav A, Shalini, Singh A, Yadav D, Prabha K, Baghel M, et al., 2026. A descriptive study to assess the level of academic stress among first-year GNM students in the School of Nursing, Lala Lajpat Rai Nursing Prashikshan Kendra, Kanpur. JANRP, 1(1), pp. 26–32.

life quality (1). Academic stress can be defined as how the mind and body react psychologically and physiologically to educational demands that surpass an individual's ability to cope. While moderate stress can motivate and improve learning and performance, excessive or lasting stress can negatively influence focus, memory, decision-making, and emotional equilibrium (2). Nursing education is widely acknowledged as one of the toughest professional training programs. Students in nursing must obtain in-depth theoretical knowledge while simultaneously honing clinical skills, communication abilities, professional values, and critical thought processes. The demanding nature of nursing programs often puts students under significant academic and mental strain (3). In comparison to peers in other fields, nursing students face higher stress levels as they juggle classroom education, practical tests, clinical placements, patient care duties, and professional standards (4).

Hans Selye was the first to introduce the idea of stress, describing it as the body's non-specific reaction to any demands it encounters (5). Later, Lazarus and Folkman expanded this idea with the Transactional Model of Stress and Coping, highlighting that stress arises from an individual's belief that external demands surpass their available coping mechanisms (6). Based on this framework, academic stress is influenced not only by the amount of work but also by how students perceive academic challenges and their capacity to manage them effectively.

Academic stress has become more common among students in healthcare fields globally. A systematic review conducted by Pulido-Martos et al. found that primary stressors for nursing students included academic workloads, exams, clinical duties, fear of failing, and insufficient leisure time (7). Similarly, Labrague et al. noted that nursing students often deal with moderate to high stress levels, with academic pressures being the most frequently cited source of stress in various educational contexts (8).

The first year of nursing education presents a particularly delicate phase for students. The shift from secondary education to professional nursing training necessitates an adjustment to a new learning environment, heightened academic

demands, unfamiliar teaching styles, and increased personal accountability. Numerous students struggle with time management, adapting to the institutional culture, and reconciling academic commitments with personal life (9). These obstacles typically lead to heightened stress levels during the initial year of nursing training.

General Nursing and Midwifery (GNM) students in India encounter further difficulties as the curriculum is both rigorous and oriented towards practical application. Students must grasp fundamental nursing principles, engage in laboratory demonstrations, participate in clinical placements, and prepare for regular theoretical and practical evaluations. Such academic pressures can considerably contribute to stress levels among students, especially during the first year when they are adjusting to the professional nursing landscape (10).

Numerous investigations carried out in India have emphasized the strain experienced by nursing students in academia. Kumar et al. noted that nursing students frequently encounter stress as a result of examinations, concerns about subpar academic performance, deadlines for assignments, and insufficient time for leisure activities (11).

In a similar vein, Gibbons discovered that academic demands and clinical responsibilities were significant predictors of stress and emotional fatigue in nursing students (12).

Ongoing stress may lead to issues such as anxiety, depression, sleep disorders, burnout, and a decline in academic performance. The effects of uncontrolled academic stress go beyond just education. Elevated stress levels have been linked to compromised cognitive abilities, lowered self-esteem, strained interpersonal relationships, and diminished quality of patient care during clinical training (13).

Moreover, long-term stress could make students vulnerable to lasting mental health issues, such as anxiety disorders and depression (14). Since nursing students are essential for the future healthcare workforce, it is crucial to prioritize their mental health to ensure effective healthcare delivery.

Various demographic and individual factors may affect the stress experienced by nursing students.

Characteristics such as age, sex, marital status, family dynamics, socioeconomic background, parental job, and social support have been recognized as potential influences on stress experiences (15). Engaging in recreational activities and utilizing effective coping mechanisms might aid students in managing academic stress and enhancing their resilience. Thus, it is vital to comprehend the connection between stress and socio-demographic factors to create focused interventions.

Educational institutions are key in providing support for students' mental health. Studies suggest that counseling services, peer support initiatives, mentorship programs, stress management workshops, mindfulness training, and recreational activities can effectively alleviate stress and strengthen the coping capabilities of nursing students (16).

Identifying students who are under significant stress early on can aid in prompt intervention and avert negative outcomes. Despite the increasing recognition of academic stress, there is a scarcity of data regarding stress levels among first-year GNM students in Uttar Pradesh, especially in Kanpur. The majority of existing research centers on undergraduate nursing programs, while diploma-level nursing students have received relatively less focus. Gaining insight into the prevalence and causes of academic stress in GNM students is crucial for creating supportive educational frameworks and enhancing student welfare.

Consequently, this study was conducted to evaluate the academic stress levels among first-year GNM students at the School of Nursing, Lala Lajpat Rai Nursing Prashikshan Kendra in Kanpur. Additionally, it sought to ascertain the relationship between academic stress and specific socio-demographic variables. The results of this study could provide valuable insights for nursing educators and administrators to create interventions that foster students' academic achievement and psychological well-being.

MATERIALS AND METHODS

Study Design

A quantitative research methodology utilizing a non-experimental descriptive research design was employed to evaluate the level of academic stress

experienced by first-year General Nursing and Midwifery (GNM) students. The descriptive design was deemed suitable as it allowed the researcher to assess and articulate the current level of academic stress among students without altering any variables.

Study Setting

The research was carried out at the School of Nursing, Lala Lajpat Rai Nursing Prashikshan Kendra, located in Kanpur, Uttar Pradesh. This institution offers nursing education and clinical training to GNM students, making it an appropriate environment for evaluating academic stress among nursing students.

Study Population

The study's target population consisted of all first-year GNM students enrolled at the School of Nursing, Lala Lajpat Rai Nursing Prashikshan Kendra, Kanpur.

Sample Size and Sampling Technique

A total of 52 first-year GNM students participated in the research. Participants were chosen using a probability simple random sampling method (lottery technique). Each eligible student was assigned a number, and participants were randomly selected to ensure equal representation.

Inclusion Criteria

First-year GNM students studying at the selected School of Nursing.

Students present during the period of data collection.

Students willing to participate in the study.

Students able to understand and respond to the questionnaire.

Exclusion Criteria

Students who were absent during data collection.

Students unwilling to participate in the study.

Research Instrument

Data were collected using a structured tool developed after an extensive review of literature and consultation with nursing experts.

Section A: Socio-demographic Variables

This section consisted of questions related to:

Age, Gender, Marital status, Previous educational qualification, Type of family, Monthly family income, Occupation of father, Occupation of mother, Mode of recreation, Time spent on recreation

Section B: Modified Likert Scale on Academic Stress

A Modified Likert Scale containing 20 statements related to academic stress was used to assess students' stress levels. The scale included items related to:

Academic workload
Examination pressure
Clinical assignments
Time management difficulties
Fear of failure
Teacher expectations
Adjustment to nursing education
Clinical performance anxiety
Responses were scored on a five-point scale ranging from "Strongly Agree" to "Strongly Disagree."

Scoring Criteria for Academic Stress Level

Stress Level	Score Range
Mild Stress	74–100
Moderate Stress	47–73
Severe Stress	20–46

Validity and Reliability

The content validity of the tool was determined by a panel of nursing experts from the Government College of Nursing and associated nursing institutions. Adjustments were made in accordance with the recommendations provided by these experts.

The reliability of the Modified Likert Scale was assessed through pilot testing utilizing the Cronbach's alpha method. The resulting reliability coefficient was deemed satisfactory ($r = 0.82$), which signifies a strong internal consistency.

Pilot Study

A pilot study was carried out with 10 first-year GNM students who were not part of the final study sample. This pilot study validated the feasibility, clarity, and practicality of both the research instrument and the data collection process.

Ethical Considerations

Administrative approval was secured from the Principal of the School of Nursing, Lala Lajpat Rai Nursing Prashikshan Kendra, Kanpur. Written informed consent was obtained from all participants prior to the commencement of data collection. Throughout the study, confidentiality, anonymity, privacy, and voluntary participation were upheld.

Data Collection Procedure

Data collection commenced following the acquisition of institutional approval. Eligible participants were approached on an individual basis and informed about the study's purpose. After securing informed consent, questionnaires were distributed and completed under supervision. Each participant took approximately 20–25 minutes to fill out the questionnaire.

Statistical Analysis

The collected data was coded, entered into Microsoft Excel, and analyzed using descriptive and inferential statistics.

Descriptive Statistics: Frequency, Percentage, Mean, Standard deviation

Inferential Statistics: Chi-square test

A p-value of less than 0.05 was considered statistically significant.

RESULTS

Socio-Demographic Characteristics of Participants

Table 1 presents the socio-demographic profile of the first-year GNM students ($N = 52$).

Table 1. Frequency and Percentage Distribution of Participants According to Socio-Demographic Variables ($N = 52$)

Variable	Category	Frequency (f)	Percentage (%)
Age	17–18 years	6	11.54
	19–20 years	15	28.85
	21–22 years	21	40.38
	≥23 years	10	19.23
Gender	Male	7	13.46
	Female	45	86.54
Marital Status	Married	1	1.92
	Unmarried	51	98.08
Previous Education	Intermediate	27	51.92
	Vocational Course	1	1.92
	Graduation	21	40.38
	Postgraduate	3	5.77
Type of Family	Nuclear	36	69.23
	Joint	15	28.85
	Extended	1	1.92
Family Income	< ₹10,000	15	28.85
	₹10,001–20,000	16	30.77
	₹20,001–30,000	10	19.23
	> ₹30,000	11	21.15

The findings revealed that the majority of students (40.38%) belonged to the age group of 21–22 years. Most participants were female (86.54%) and unmarried (98.08%). More than half

(51.92%) had completed intermediate education before joining the nursing programme. The majority belonged to nuclear families (69.23%).

Assessment of Academic Stress

Table 2. Distribution of Students According to Level of Academic Stress (N = 52)

Level of Academic Stress	Frequency (f)	Percentage (%)
Mild Stress	20	38.5
Moderate Stress	31	59.6
Severe Stress	1	1.9
Total	52	100

Maximum Score = 100

Minimum Score = 20

The findings indicate that the majority of students (59.6%) experienced moderate academic stress. Mild stress was observed among 38.5% of students, while only 1.9% experienced severe academic stress.

Association Between Academic Stress and Socio-Demographic Variables

Table 3. Association Between Academic Stress Levels and Selected Socio-Demographic Variables (N = 52)

Variable	χ^2 Value	p-value	Significance
Age	4.403	0.622	Not Significant
Gender	0.204	0.903	Not Significant
Marital Status	52.000	0.000	Significant*
Previous Education	3.967	0.681	Not Significant
Type of Family	1.530	0.821	Not Significant
Family Income	7.434	0.283	Not Significant
Occupation of Father	2.785	0.835	Not Significant
Occupation of Mother	3.085	0.798	Not Significant
Mode of Recreation	3.658	0.723	Not Significant
Time Spent for Recreation	5.487	0.483	Not Significant

*Significant at $p < 0.05$

Chi-square analysis indicated a statistically significant relationship between academic stress levels and marital status ($\chi^2 = 52.000$, $p < 0.05$). However, no statistically significant relationship was found between academic stress and other socio-demographic factors such as age, gender, educational background, family type, income, parental occupation, recreational activities, and time allocated for recreation.

DISCUSSION

This study aimed to evaluate the level of academic stress among first-year GNM students and to

explore its association with selected socio-demographic factors. The results indicated that a majority of participants experienced moderate academic stress (59.6%), followed by mild stress (38.5%), while only a small fraction reported severe stress (1.9%). These results highlight that academic stress is a significant issue among nursing students, warranting attention from educators and administrators.

The prevalence of moderate stress identified in this study aligns with findings from prior research involving nursing students across various educational contexts. Labrague et al. noted that nursing students often encounter moderate levels of stress due to academic workload, examinations, and clinical duties (8). Likewise, Gibbons found that moderate stress is prevalent among nursing students, potentially stemming from ongoing academic and professional demands (12). The consistency of these findings suggests that academic stress is a common issue faced by nursing students, irrespective of their geographical location.

The current research has identified academic stress levels among first-year students, corroborating earlier findings that indicate the initial stage of nursing education is particularly demanding. First-year students frequently encounter challenges in adjusting to professional education, handling extensive coursework, and cultivating effective study habits. Jimenez et al. discovered that novice nursing students reported significantly elevated stress levels compared to their senior counterparts, primarily due to challenges related to adjustment and uncertainty about academic expectations (17). These results underscore the necessity of providing enhanced support during the transition phase.

The socio-demographic analysis indicated that the majority of participants were female and unmarried. While female students made up the bulk of the sample, no statistically significant correlation was found between gender and academic stress. This observation aligns with research suggesting that academic stress impacts nursing students regardless of gender (18). Nevertheless, some studies have indicated that female students may experience higher stress levels, potentially due to variations in emotional

expression and coping mechanisms (19). The absence of a significant correlation in the current study may be linked to the predominance of female participants and the relatively limited sample size.

A noteworthy finding from the study was the significant relationship between marital status and academic stress. Married students exhibited different stress patterns in comparison to unmarried students. This observation may be attributed to the additional family responsibilities and role expectations faced by married individuals. Similar findings have been documented in studies that suggest the challenge of balancing academic and family obligations may lead to an increased psychological burden among married students (20). However, caution is warranted in interpretation, as only one participant in the study was married.

No notable correlation was found between academic stress and factors such as age, educational background, family structure, parental employment, monthly family income, leisure activities, or the duration of recreational time. These results imply that academic stress is likely more significantly affected by educational demands than by demographic variables. Alzayyat and Al-Gamal have reached similar conclusions, indicating that academic stress is mainly linked to educational pressures rather than socio-demographic elements (21).

The results underscore the critical role of academic workload as a potential source of stress for nursing students. The nursing curriculum entails ongoing assessments, assignments, practical exams, and clinical placements, which can generate considerable pressure. Pulido-Martos et al. identified academic overload as one of the most commonly reported stressors among nursing students globally (7). An excessive workload may hinder students' ability to achieve a healthy balance between their academic responsibilities and personal lives. The implications of these findings for nursing education are significant. Given that moderate stress levels were common among participants, educational institutions should introduce supportive initiatives aimed at fostering psychological well-being. Counseling services,

peer mentoring programs, stress management workshops, and faculty support systems could assist students in developing effective coping mechanisms and enhancing resilience (16). Such interventions may mitigate stress-related effects and improve academic performance.

In summary, the findings reveal that academic stress is a considerable concern for first-year GNM students. While most students reported moderate rather than severe stress, prolonged exposure to academic pressure could negatively impact learning outcomes and mental health. Consequently, nursing educators should prioritize the assessment of stress and the promotion of mental health within nursing education curricula. Early identification of students experiencing elevated stress levels may facilitate timely interventions and improve both educational and professional outcomes.

CONCLUSION

The current research evaluated the extent of academic stress experienced by first-year GNM students at the School of Nursing, Lala Lajpat Rai Nursing Prashikshan Kendra in Kanpur. The results indicated that most students faced moderate academic stress, while a smaller number reported mild stress, and only a few experienced severe stress.

The study suggests that factors such as academic demands, adaptation to nursing education, examinations, and clinical responsibilities significantly contribute to the stress levels among first-year nursing students. While the majority of students managed their stress effectively, ongoing academic stress could negatively impact learning outcomes, psychological health, and professional growth.

The results highlight the importance of early detection of stress and the implementation of supportive measures, including counseling services, mentoring programs, stress-management workshops, and student support systems. These interventions could enhance coping skills, boost academic performance, and foster overall well-being among nursing students.

LIMITATIONS OF THE STUDY

The research was confined to first-year GNM students only.

The sample size was relatively small (N=52).

The study was conducted within a single nursing institution.

Self-reported data may have led to response bias. The cross-sectional design did not allow for the evaluation of stress changes over time.

The study focused solely on academic stress, excluding other types of stress such as personal, financial, or clinical stress.

RECOMMENDATIONS

It is advisable to conduct similar studies with larger sample sizes.

Comparative analyses could be performed among nursing students from different academic years.

Conducting multicenter studies may enhance the generalizability of the results.

Regular organization of stress-management training programs for nursing students is recommended.

Counseling and mentoring services within nursing institutions should be reinforced.

Longitudinal studies are necessary to evaluate stress trends throughout the nursing curriculum.

Experimental research could be carried out to assess the effectiveness of stress-reduction interventions.

Future investigations should focus on coping strategies and resilience in nursing students.

Conflict of Interest

The authors declare no conflict of interest.

Funding

No external funding was received for this study.

REFERENCES

1. Pascoe MC, Hetrick SE, Parker AG. The impact of stress on students in secondary school and higher education. *Int J Adolesc Youth*. 2020;25(1):104-112.
2. American Psychological Association. *Stress effects on the body*. Washington DC: APA; 2023.
3. Reeve KL, Shumaker CJ, Yearwood EL, Crowell NA, Riley JB. Perceived stress and social support in nursing students. *Nurse Educ Today*. 2013;33(4):419-424.
4. Dyrbye LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety and psychological distress among students. *Acad Med*. 2006;81(4):354-373.
5. Selye H. *The Stress of Life*. New York: McGraw-Hill; 1956.
6. Lazarus RS, Folkman S. *Stress, Appraisal, and Coping*. New York: Springer Publishing Company; 1984.
7. Pulido-Martos M, Augusto-Landa JM, Lopez-Zafra E. Sources of stress in nursing students: a systematic review. *Nurse Educ Today*. 2012;32(1):15-21.
8. Labrague LJ, McEnroe-Petitte DM, Gloe D, Thomas L, Papathanasiou IV, Tsaras K. A literature review on stress and coping strategies in nursing students. *J Ment Health*. 2017;26(5):471-480.
9. Shankar NL, Park CL. Effects of stress on students in higher education. *Stress Health*. 2016;32(5):451-462.
10. Indian Nursing Council. *General Nursing and Midwifery Curriculum*. New Delhi: INC; 2020.
11. Kumar KS, Dagli RJ, Mathur A, Jain M, Prabu D, Kulkarni S. Perceived sources of stress among students. *J Clin Diagn Res*. 2014;8(9):ZC01-ZC03.
12. Gibbons C. Stress, coping and burn-out in nursing students. *Int J Nurs Stud*. 2010;47(10):1299-1309.
13. Jimenez C, Navia-Osorio PM, Diaz CV. Stress and health in novice and experienced nursing students. *J Adv Nurs*. 2010;66(2):442-455.
14. Ribeiro ÍJS, Pereira R, Freire IV, de Oliveira BG, Casotti CA, Boery EN. Stress and quality of life among nursing students. *Health Qual Life Outcomes*. 2018;16(1):1-10.
15. Alzayyat A, Al-Gamal E. Stress and coping strategies among nursing students. *Int J Ment Health Nurs*. 2014;23(6):547-554.
16. van der Riet P, Rossiter R, Kirby D, Dłuzewska T, Harmon C. Piloting a mindfulness intervention for nursing students. *Nurse Educ Today*. 2015;35(1):44-49.
17. Jimenez C, Navia-Osorio PM, Diaz CV. Stress and health among novice nursing students. *J Adv Nurs*. 2010;66(2):442-455.
18. Turner K, McCarthy VL. Stress and anxiety among nursing students. *J Nurs Educ Pract*. 2017;7(5):27-34.
19. Watson R, Deary I, Thompson D, Li G. A study of stress and burnout among nursing students. *Nurse Educ Today*. 2008;28(4):398-404.
20. Bakhshi S, Sun F, Murrells T, While A. Marital and family factors associated with student stress. *Nurse Educ Today*. 2015;35(1):129-134.
21. Alzayyat A, Al-Gamal E. Perceived stress and coping among nursing students. *Int J Ment Health Nurs*. 2014;23(6):547-554.