
A STUDY TO ASSESS THE LEVEL OF STRESS AMONG NURSING STUDENTS IN NURSING INSTITUTIONS IN MIZORAM

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Abstract

Background: Nursing education combines theoretical learning, examinations, clinical training, skill development and patient-care responsibilities. These demands can create stress among nursing students, particularly when students perceive that their coping resources are insufficient for the demands placed upon them. Clinical training may be challenging because students must apply knowledge and skills in dynamic patient-care environments while developing professional competence. Stress during training may affect academic learning, clinical performance, well-being and future professional functioning. The supplied study identified a local evidence gap regarding stress among nursing students in Mizoram.

Aim: To assess the level of stress among nursing students in nursing institutions in Mizoram and to determine the association between stress level and selected demographic variables.

Materials and Methods: A quantitative approach with descriptive survey design was used. The study included 270 nursing students enrolled in GNM and B.Sc. Nursing programmes across Apollo School of Nursing, Blessino Nursing School, BN College of Nursing, College of Nursing Synod, Nursing School Lunglei, Mizoram College of Nursing, School of Nursing Christian Hospital, School of Nursing Thingdawl and RIPANS. Purposive sampling was used. Data were collected using a demographic questionnaire and a modified Perceived Stress Scale developed by Sheila Sheu and colleagues and published in 2002. Validity was ensured through consultation with experts. Frequency and percentage were used for descriptive analysis and chi-square testing was used to examine associations between stress level and selected demographic variables.

Results: Among 270 participants, 63% were aged 20–22 years, 89% were female and 96% resided in hostels. First-year and second-year GNM students each represented 28% of the sample, while second-semester and second-year B.Sc. Nursing students each represented 22%.

Most participants (74%) reported interest in studying nursing. The largest family-income category was ₹15,000–30,000 per month (37%). Regarding stress, 21 participants (7.78%) reported no stress, 170 (62.96%) reported mild stress, 79 (29.26%) reported moderate stress and none reported severe stress. Significant associations were reported between stress level and age ($\chi^2=15.61$, $df=3$, $p<0.05$), level of course ($\chi^2=52.52$, $df=3$, $p<0.05$) and monthly family income ($\chi^2=13.75$, $df=3$, $p<0.05$).

Conclusion: Stress was common among the nursing students studied, with mild stress as the predominant category. The findings support the need for nursing institutions to provide stress-management education, coping-skills training, supportive clinical supervision and appropriate referral pathways. Further research should examine specific stressors, coping mechanisms and the effectiveness of planned interventions.

Keywords

Nursing students; stress; perceived stress; nursing education; clinical training; GNM; B.Sc. Nursing; Mizoram.

INTRODUCTION

Stress is a psychological and physiological response that may occur when an individual perceives that situational demands exceed available coping resources. Nursing education exposes students to multiple demands simultaneously. Students must understand theoretical concepts, prepare for examinations, develop psychomotor skills, demonstrate professional behaviour and participate in clinical learning. Clinical training additionally requires interaction with patients and families, communication with healthcare personnel, adaptation to unfamiliar situations and performance of procedures under supervision.

The transition from classroom learning to clinical practice may be particularly challenging. Students may feel uncertain about their knowledge and skills, fear making errors, or experience anxiety while caring for patients with complex health conditions. Academic workload, clinical responsibilities, relationships with faculty and nursing staff, peer interactions, accommodation and financial circumstances may also influence students' experiences.

Stress is important because persistent or poorly managed stress may interfere with concentration, motivation, learning, clinical performance and professional development. Reviews of nursing-student research have identified academic, clinical and financial issues as common sources of stress, with clinical experiences frequently prominent. Recent systematic reviews and meta-analyses likewise indicate that stress is widespread among nursing students, although prevalence and severity vary according to population, measurement instrument, educational stage and geographical setting.

The present study focused on nursing students in Mizoram and included GNM and B.Sc. Nursing students from several institutions. The supplied study noted a lack of known published work specifically addressing stress among nursing students in Mizoram. Local evidence may assist nursing educators in understanding student needs and planning appropriate support. Accordingly, the study assessed stress level and examined associations with age, gender, accommodation status, course level, interest in nursing and monthly family income.

OBJECTIVES

1. To assess the level of stress among the nursing students.
2. To find out the association between level of stress among nursing students with selected demographic variables (age, gender, accommodation status, level of course, interest in nursing, family income per month).

HYPOTHESES

H1: There will be significant association between the level of stress among nursing students with selected demographic variables at 0.05 level of significance.

H0: There will be no significant association between the level of stress among nursing students with selected demographic variables at 0.05 level of significance.

METHODOLOGY

A quantitative research approach with a descriptive survey design was employed. The study was conducted among nursing students enrolled in GNM and B.Sc. Nursing programmes in nursing institutions in Mizoram. The participating institutions were Apollo School of Nursing, Blessino Nursing School, BN College of Nursing, College of Nursing Synod, Nursing School Lunglei, Mizoram College of Nursing, School of Nursing Christian Hospital, School of Nursing Thingdawl and RIPANS. A total of 270 students participated through purposive sampling.

The sample included 76 first-year GNM students, 76 second-year GNM students, 59 second-semester B.Sc. Nursing students and 59 second-year B.Sc. Nursing students. The main outcome variable was level of stress. Selected demographic variables were age, gender, accommodation status, level of course, interest in studying nursing and monthly family income.

A demographic questionnaire and a modified Perceived Stress Scale developed by Sheila Sheu and colleagues and published in 2002 were used. The source study states that validity was ensured through consultation with experts. The supplied document does not provide the complete item list, scoring key, reliability coefficient or details of the modification; therefore, those details are not reconstructed here.

Data were compiled using frequency and percentage. The source study categorized students as having no stress, mild stress, moderate stress or severe stress. Chi-square testing was used to determine associations between stress level and selected demographic variables. Statistical significance was interpreted at the 0.05 level, with the source tables reporting a critical chi-square value of 7.82 at three degrees of freedom.

The supplied study document does not state an ethics committee name, approval number, informed-consent procedure or institutional permission. These details should be verified from the original research records before final publication. Participation should be voluntary, confidentiality should be maintained and students should not experience academic disadvantage for declining participation.

RESULTS

A total of 270 nursing students were included. The numerical values in the following tables are retained from the supplied study.

Table 1. Distribution of participants in terms of demographic variables (N=270)

Sl. No.	Demographic variable	Frequency	Percentage (%)
1	Age in years		
	17-19 years	33	12
	20-22 years	170	63
	23-25 years	65	24
	≥ 25 years	2	1
2	Gender		
	Male	30	11
	Female	240	89
3	Accommodation		
	Home	11	4
	Hostel	259	96
4	Level of course		
	1st year GNM	76	28
	2nd year GNM	76	28
	2nd semester B. Sc (N)	59	22
	2nd year B. Sc (N)	59	22
5	Interest in studying nursing course		
	Yes	200	74
	No	70	26
6	Family income per month		
	< 15,000	59	22
	Rs. 15,000-30,000	100	37
	Rs. 30,000-45,000	49	18
	>Rs. 45,000	62	23

The majority of participants (63%) were aged 20–22 years and 89% were female. Most participants (96%) resided in the institute hostel. First-year and second-year GNM students each constituted 28%, while second-semester and second-year B.Sc. Nursing students each constituted 22%. Seventy-four percent reported interest in studying nursing. The largest family-income category was Rs. 15,000–30,000 per month (37%).

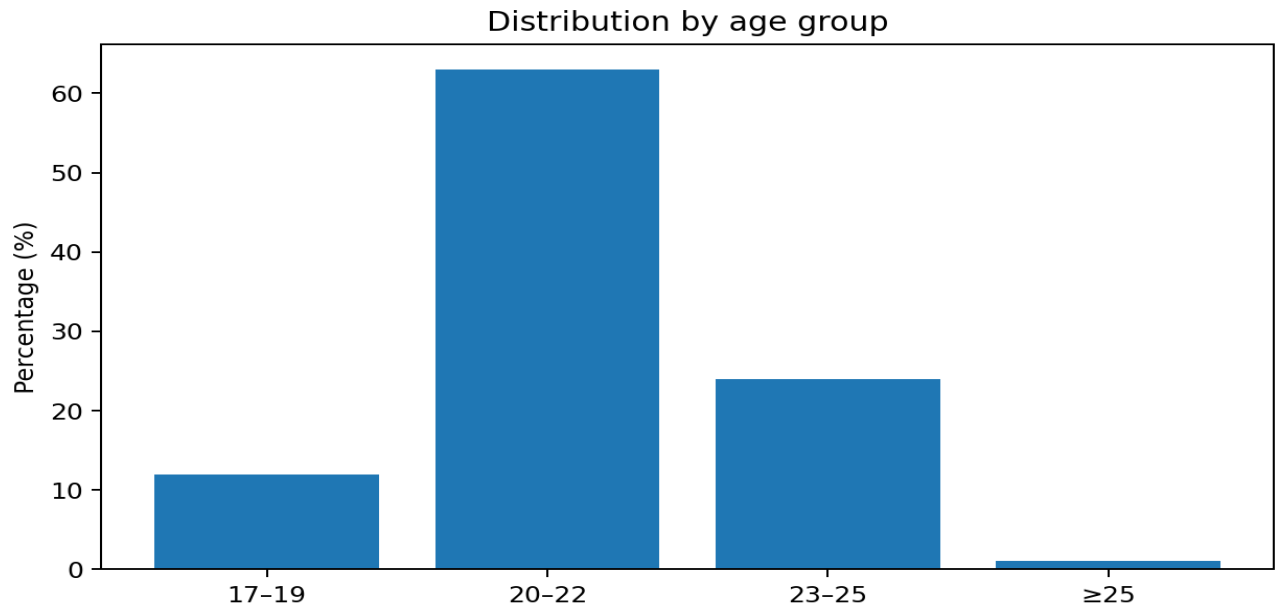


Figure 1. Distribution of participants by age group.

Table 2. Distribution of participants in terms of their level of stress (N=270)

Sl. No.	Level of stress	Frequency	Percentage
1	No stress	21	7.78%
2	Mild stress	170	62.96%
3	Moderate stress	79	29.26%
4	Severe stress	0	0

Mild stress was the predominant category (62.96%), followed by moderate stress (29.26%). Only 7.78% reported no stress and none of the participants experienced severe stress.

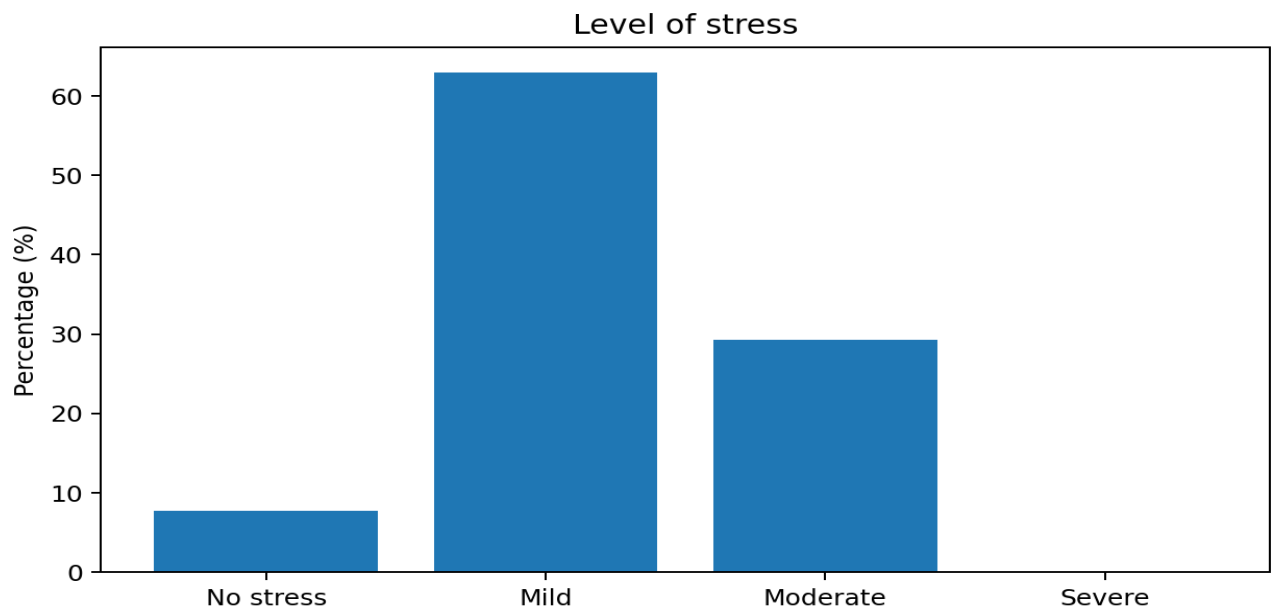


Figure 2. Level of stress among nursing students.

Table 3. Chi square value showing the association between level of stress and age (N=270)

Age in years	χ^2
17-19	
20-22	
23-25	15.61*
>25	
$\chi^2 (3) = 7.82, * p < 0.05$	

The reported chi-square value was 15.61, greater than the table value of 7.82 at three degrees of freedom, indicating a statistically significant association between age and stress level at the 0.05 level.

Table 4. Chi square value showing the association between level of stress and level of course (N=270)

Level of course	χ^2
1st year GNM	
2nd year GNM	52.52*
2nd year B. Sc (N)	
2nd semester B. Sc (N)	
$\chi^2 (3) = 7.82, * p < 0.05$	

The reported chi-square value was 52.52, exceeding 7.82 at three degrees of freedom, indicating a statistically significant association between level of course and stress level at the 0.05 level.

Table 5. Chi square value showing the association between level of stress and family income per month (N=270)

Family income per month	χ^2
Rs. 15000	
Rs. 15,000- 30,000	13.75*
Rs. 30,000-45,000	
>Rs. 45,000	
$\chi^2 (3) = 7.82, * p < 0.05$	

The reported chi-square value was 13.75, greater than 7.82 at three degrees of freedom, indicating a statistically significant association between monthly family income and stress level at the 0.05 level.

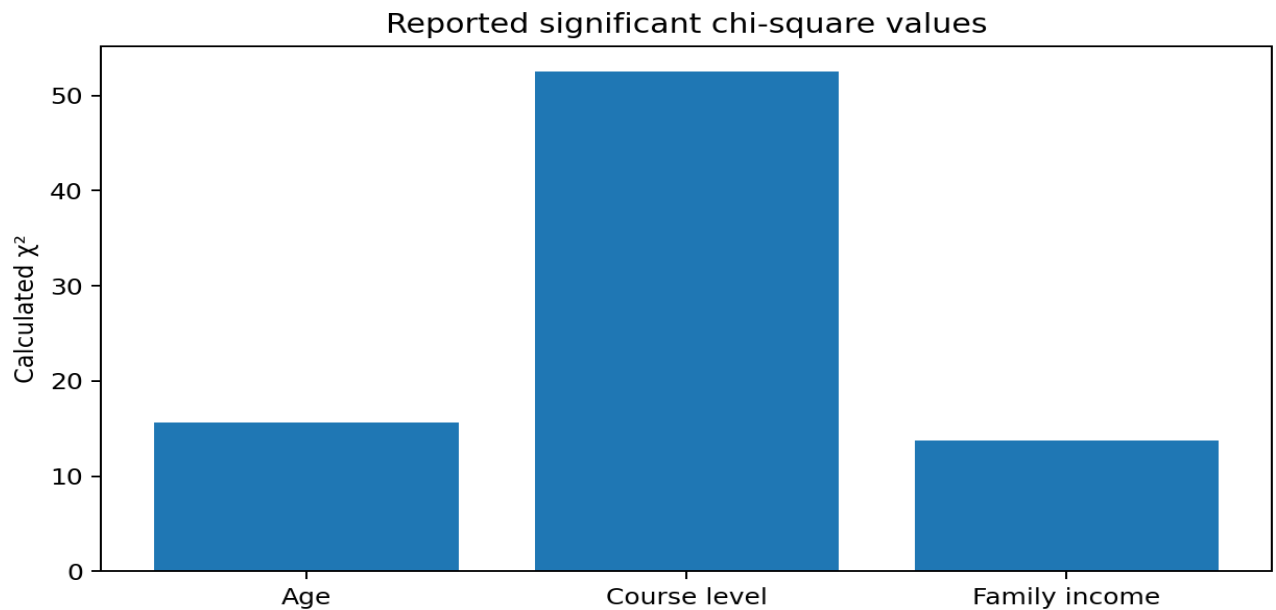


Figure 3. Reported chi-square values for age, course level and family income. The source critical value is 7.82.

The supplied chi-square tables do not provide complete cross-tabulated frequencies for each stress category within each demographic subgroup. Therefore, the manuscript does not infer the direction or specific subgroup pattern of the significant associations.

DISCUSSION

The present study found that stress was common among the nursing students studied. Mild stress was reported by 62.96% and moderate stress by 29.26%, while 7.78% reported no stress and none reported severe stress. This pattern is broadly compatible with published nursing-student literature in which stress is frequently reported and moderate levels are commonly observed. A systematic review and meta-analysis by Zheng and colleagues reported substantial psychosocial stress among nursing students, while a later systematic review and meta-analysis found moderate stress to be a common category. [\[cite turn0search1 turn0search7\]](#)

The predominance of mild and moderate stress may be related to the combined academic and clinical demands of nursing education. Students must acquire theoretical knowledge, prepare for examinations, learn practical skills and function in patient-care settings. Reviews have identified academic workload, clinical responsibilities, patient care and interactions with nursing staff and faculty as important sources of stress. An integrative review reported that clinical, academic and financial issues were prominent stressors during undergraduate nursing and midwifery education. [\[cite turn0search5 turn0search10\]](#)

The sample was predominantly female and hostel-based. These characteristics describe the composition of the participants and do not demonstrate that gender or accommodation causes stress. The study specifically reported significant associations with age, course level and monthly family income. Because complete cross-tabulations were not supplied, the direction of these associations cannot be determined.

The strong association reported for course level may reflect differences in academic and clinical expectations across stages of nursing education, although the cross-sectional design cannot establish causality. The significant association with family income similarly indicates a

relationship in this sample rather than proof that income directly produces stress. These findings can nevertheless help educators identify variables that warrant further investigation.

The findings have practical implications for nursing education. Structured orientation, supportive clinical supervision, time-management education, peer support and accessible counselling or referral pathways may assist students in managing stress. Systematic reviews of interventions have reported benefits from approaches that teach coping and stress-management skills, although intervention quality and long-term evidence remain variable.

Future research in Mizoram should examine specific academic, clinical, interpersonal and financial stressors and assess coping mechanisms. Longitudinal research could identify changes in stress across the nursing programme, while controlled intervention studies could evaluate the effectiveness of planned stress-management programmes.

IMPLICATIONS FOR NURSING EDUCATION

Nursing institutions may consider periodic assessment of student stress, structured stress-management education, time-management guidance, peer-support activities, supportive clinical supervision and referral pathways for students requiring professional assistance. Support should be accessible without stigma and integrated into routine student welfare systems.

STRENGTHS AND LIMITATIONS

- The study included 270 nursing students from multiple institutions in Mizoram.
- Both GNM and B.Sc. Nursing students were represented.
- A modified Perceived Stress Scale was used and validity was reported as having been ensured through expert consultation.
- Purposive sampling limits generalizability.
- The cross-sectional design identifies associations but cannot establish causal relationships.
- Complete cross-tabulated frequencies were not supplied for the chi-square analyses, limiting interpretation of subgroup patterns.
- Ethics approval, informed consent and institutional permission details were not included in the supplied document and should be verified.

ETHICAL CONSIDERATIONS

The supplied study document does not specify an ethics committee, approval number, informed-consent process or institutional permission. These details should be obtained from the original research records and added before publication. The study should follow voluntary participation, confidentiality, privacy and the right to withdraw without academic disadvantage.

CONCLUSION

The study demonstrated that stress was prevalent among nursing students in the participating institutions in Mizoram. Mild stress was the predominant category (62.96%), followed by moderate stress (29.26%); 7.78% reported no stress and none reported severe stress. Significant associations were reported between stress level and age, level of study and monthly family

income. The findings support the need for systematic student support, stress-management education and accessible coping resources within nursing education.

RECOMMENDATIONS

- A study can be conducted to assess coping mechanisms of nursing students.
- A similar study could be conducted among another level of nursing course.
- A planned teaching programme on coping mechanisms and stress management could be conducted for nursing students.
- Longitudinal and intervention studies should be considered in future research.

CONFLICT OF INTEREST

The supplied study document does not report a conflict of interest. If no competing interest exists, the author may state: “The author declares no conflict of interest.”

FUNDING

No funding information was provided in the supplied study document. If the study received no external funding, the author may state: “The study received no external funding.”

AUTHOR CONTRIBUTION

The study was authored by Lalramengi Kaipeng. A detailed contribution statement was not provided in the source document and should be confirmed by the author according to journal requirements.

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