

## Factors Associated with Stress Levels among Professional Nursing Students at the Institute of Health Sciences Pelamonia Makassar

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### ABSTRACT

**Background:** Professional nursing students are exposed to demanding academic and clinical responsibilities that may increase stress levels and negatively impact mental health, academic achievement, and clinical performance. Identifying stress-related factors is crucial to support students throughout their professional education.

**Objective:** This study aimed to analyze the factors associated with stress levels among professional nursing students at the Institute of Health Sciences Pelamonia Makassar.

**Methods:** This study employed a quantitative analytical approach with a cross-sectional design conducted from August to September 2025. The study population included 112 professional nursing students selected using a total sampling technique. Data were collected through a structured questionnaire measuring stress associated with patient care, clinical instructors and nursing staff, academic tasks and workload, peers and daily life, lack of knowledge and skills, and the clinical practice environment. Stress levels were classified as mild, moderate, and severe. The Chi-square test was used for data analysis.

**Results:** The results demonstrated that stress related to clinical instructors and nursing staff, academic tasks and workload, peers and daily life, lack of knowledge and skills, and the clinical practice environment were significantly associated with students' stress levels ( $p < 0.05$ ). However, stress related to patient care showed no significant association with stress levels ( $p > 0.05$ ).

**Conclusion:** Academic, social, and environmental factors predominantly influence stress levels among professional nursing students. Therefore, strengthening academic support, improving clinical supervision, and fostering a supportive clinical learning environment are recommended to help reduce student stress.

**Keywords:** Clinical Practice Environment, Professional Nursing Students, Stress Factors, Stress Level

### INTRODUCTION

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results. Explain how you addressed the problem and clearly state the aims of your study. As you compose the introduction, think of readers who are not experts in this field. Please describe in narrative format and not using sub-chapter.

Stress is a psychological and physiological response that occurs when individuals perceive environmental demands as exceeding their adaptive capacity (Gunasekera & Perera, 2023; Saleh, 2020). University students are particularly vulnerable to stress due to academic pressure, social adjustment, and future career concerns (Caroline et al., 2024; Dias et al., 2024; Dini et al., 2020). Professional nursing students experience more complex stressors because they must integrate theoretical knowledge with intensive clinical practice that requires emotional stability, technical competence, and professional responsibility (Digie et al., 2024; Lu et al., 2021). Previous studies have reported high prevalence of moderate to severe stress among nursing students globally and in Indonesia (American College Health Association, 2023; Muldianto et al., 2019; Junaedi, 2024). Academic workload, clinical supervision, peer relationships, limited clinical competence, and unsupportive practice environments have been identified as major contributors to stress among nursing students

(Balaguer & Royo, 2018; Pratiwi et al., 2024; Gunes, 2017). Unmanaged stress may negatively affect learning processes, mental health, and the quality of nursing care provided (Abuejheisheh et al., 2024; Goff, 2020). Despite increasing attention to this issue, analytical studies examining multiple stress-related factors among professional nursing students in Indonesia remain limited. Therefore, this study aimed to analyze factors associated with stress levels among professional nursing students at the Institute of Health Sciences Pelamonia Makassar.

### METHODS

This study employed a quantitative analytical design with a cross-sectional approach. The study was conducted at the Institute of Health Sciences Pelamonia Makassar between August and September 2025. The population consisted of all professional nursing students enrolled during the study period ( $n = 112$ ). Total sampling was applied, resulting in all eligible students being included as respondents. Inclusion criteria were active professional nursing students who had undergone clinical practice for at least three months and provided informed consent. Students on academic leave or undergoing psychological treatment were excluded. Data were collected using a structured self-administered questionnaire adapted to measure stress related to patient care, clinical instructors and nursing staff, academic tasks and workload, peers and daily life, lack of knowledge and skills, and the clinical practice

environment. Stress levels were measured using a perceived stress scale and categorized into mild, moderate, and severe. Data were analyzed using descriptive statistics and Chi-square tests to examine associations between independent variables and stress levels. Ethical clearance was obtained from the institutional ethics committee, and all respondents provided written informed consent.

**RESULT**

A total of 112 professional nursing students participated in this study. Most respondents

experienced moderate levels of stress during clinical education. Bivariate analysis showed that stress related to clinical instructors and nursing staff, academic tasks and workload, peers and daily life, lack of knowledge and skills, and the clinical practice environment were significantly associated with stress levels ( $p < 0.05$ ). In contrast, stress related to patient care was not significantly associated with overall stress levels ( $p > 0.05$ ).

**Table 1.** Relationship Between Peer Support and Stress Levels Among Professional Nursing Students

Peer Support	Stress Level						Total		P
	Severe		Moderate		Mild		N	%	
	N	%	N	%	N	%			
Positive	10	34,5%	9	31,0%	10	34,5%	29	100%	0,003
Negative	13	18,3%	48	67,6%	10	14,1%	71	100%	
Total	23	23,0%	57	57,0%	20	20,0%	100	100%	

**Table 2.** Relationship Between Patient Care and Stress Levels

Patient Care	Stress Level						Total		P
	Severe		Moderate		Mild		N	%	
	N	%	N	%	N	%			
Good	5	9,6%	36	69,2%	11	21,2%	52	100%	0,123
Poor	6	12,5%	38	79,2%	4	8,3%	48	100%	
Total	11	11,0%	74	74,0%	15	15,0%	100	100%	

**DISCUSSION**

The findings indicate that academic and environmental factors are the primary determinants of stress among professional nursing students. Stress arising from clinical instructors and nursing staff may reflect communication gaps, high expectations, and inconsistent supervision, as reported in previous nursing education studies (Digie et al., 2024; Pratiwi et al., 2024). Academic workload and tight schedules contribute substantially to psychological pressure, consistent with earlier evidence that excessive academic demands are a dominant stressor in nursing education (Dias et al., 2024; Saifudin et al., 2023; Menon & Remadevi, 2021). Peer relationships and daily life stressors also play an important role, highlighting the influence of social support on students’ mental well-being (Bahry, 2024; Alyousef, 2019; Gause et al., 2024). Lack of knowledge and clinical skills increases anxiety and self-doubt, particularly in high-acuity clinical settings, which aligns with findings on self-efficacy and stress vulnerability among nursing students (Zhao et al., 2019; Mohamed et al., 2022; Komariah et al., 2025). Additionally, unmanaged stress may escalate into panic reactions or emotional instability if coping strategies are inadequate (Li et al., 2024; Branson et al., 2019). Interestingly, patient care itself was not a significant stressor, suggesting that students may perceive direct patient interaction as meaningful rather than threatening when adequate support is

provided (Balaguer & Royo, 2018). These results emphasize the need for supportive learning environments, effective mentorship, and balanced academic workloads to mitigate stress during professional nursing education.

**CONCLUSION**

Academic, social, and clinical practice environment factors are significantly associated with stress levels among professional nursing students, while stress related to patient care is not. Nursing education institutions should strengthen academic support systems, improve clinical supervision, and create supportive practice environments to reduce student stress. Future studies are recommended to explore longitudinal designs and intervention-based approaches to stress management.

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