

The Relationship between Coping Strategies and Stress Levels among Undergraduate Nursing Students

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Abstract

Introduction: Nursing students commonly experience high levels of stress during clinical practice in hospital settings. This stress is often caused by academic pressures, complex clinical tasks, time constraints, and the need to adapt to professional responsibilities in real healthcare environments. Coping strategies are considered an important factor that may influence how nursing students respond to stressful situations during clinical practice.

Objective: This study aimed to determine the relationship between coping strategies and stress levels among undergraduate nursing students during clinical practice in hospitals.

Method: This study employed a descriptive correlational design with a cross-sectional approach. The sample consisted of 33 sixth-semester undergraduate nursing students selected using a total sampling technique. Data were collected using validated questionnaires to measure coping strategies and stress levels. Bivariate analysis was conducted using the chi-square test with a significance level of 0.05.

Result: The findings showed that the majority of respondents were female (57.6%) and above the average age (63.6%), with all participants enrolled in the sixth semester. Among students with poor coping strategies, 15 respondents (60%) experienced mild stress, while 5 respondents (71.43%) experienced moderate stress. Statistical analysis using the chi-square test revealed a p-value of 0.581, indicating that there was no statistically significant relationship between coping strategies and stress levels among nursing students during clinical practice ($p > 0.05$).

Conclusion: This study concluded that there is no significant relationship between coping strategies and stress levels among undergraduate nursing students during clinical practice in hospitals. These results suggest that stress experienced by nursing students may be influenced by various factors beyond individual coping strategies. Therefore, a holistic approach involving academic support, effective clinical supervision, and psychological interventions is recommended to help nursing students manage stress more effectively.

Keywords: adolescent, fathers, mental health, parenting

Introduction

Stress is a psychological condition that occurs when individuals perceive that environmental demands exceed their personal resources or capacity to cope effectively. In higher education settings, stress has become a growing concern, particularly among students in health-related disciplines that require high academic achievement, emotional stability, and professional responsibility (Rasheed et al., 2020). Nursing education is consistently reported as one of the academic programs with a high prevalence of student stress, especially during clinical practice in hospital settings, where students are exposed to real patient care and complex clinical situations (Turner & McCarthy, 2021).

Clinical practice is a fundamental component of undergraduate nursing education, designed to bridge the gap between theoretical knowledge and real-world application. Through clinical practice, nursing students are expected to develop clinical competence, critical thinking skills, professional attitudes, and effective communication with patients and healthcare teams (Kim & Park, 2021). Despite its essential role in professional development, clinical practice is widely recognized as a major source of stress for nursing students due to increased responsibilities, performance evaluation, and unfamiliar clinical environments (Sulistiyorini & Marfuah, 2021).

During clinical practice, nursing students face numerous stressors, including heavy workloads, time pressure, fear of making mistakes, exposure to patients' suffering, and the expectation to perform clinical procedures accurately and independently (Alsaqri, 2020). Additionally, students must adapt to hospital routines, interact with multidisciplinary healthcare teams, and meet the academic expectations of clinical instructors simultaneously (Turner & McCarthy, 2021). These demands can generate significant emotional and psychological pressure, particularly among students who lack confidence or experience difficulty adapting to clinical settings (Kim & Park, 2021).

Prolonged exposure to stress during clinical practice can have serious consequences for nursing students' academic performance, psychological well-being, and physical health. Several studies have reported that high stress levels among nursing students are associated with decreased concentration, impaired learning, sleep disturbances, anxiety, and reduced motivation (Utami & Puspitasari, 2020). If stress is not properly managed, it may lead to burnout, emotional exhaustion, and disengagement from learning activities, which can negatively affect students' clinical competence and future professional performance (Rasheed et al., 2020). Moreover, unmanaged stress may compromise students' ability to provide safe and effective patient care during clinical training (Alsaqri, 2020).

One of the most important factors influencing how students respond to stress is coping strategy. Coping strategies refer to cognitive and behavioral efforts used by individuals to manage internal and external demands perceived as stressful (Biggs et al., 2021). Coping strategies determine how individuals appraise stressful situations and regulate emotional responses, thereby influencing stress outcomes (Turner & McCarthy, 2021). In nursing education, coping strategies are particularly relevant because clinical practice involves not only technical challenges but also emotional, interpersonal, and ethical demands (Kim & Park, 2021).

Coping strategies are commonly categorized into adaptive and maladaptive strategies. Adaptive coping strategies include problem-solving, seeking social support, positive reframing, and planning, which help individuals address stressors effectively and maintain psychological well-being (Biggs et al., 2021). In contrast, maladaptive coping strategies, such as avoidance, denial, and emotional withdrawal, may temporarily reduce emotional discomfort but often

increase stress levels and psychological distress in the long term (Alsaqri, 2020). The selection and use of coping strategies play a crucial role in determining nursing students' ability to manage stress during clinical practice.

Recent studies have shown that nursing students who predominantly use adaptive coping strategies tend to experience lower stress levels and better adjustment to clinical environments. Research by Sulistyorini and Marfuah (2021) reported that students with effective coping strategies demonstrated greater emotional resilience and confidence during clinical learning. Similarly, Utami and Puspitasari (2020) found that adaptive coping strategies were associated with lower levels of anxiety and improved academic engagement among nursing students. These findings suggest that coping strategies function as a protective factor against clinical stress.

However, empirical findings regarding the relationship between coping strategies and stress levels among nursing students remain inconsistent. Some studies have reported a significant association between coping strategies and stress levels, while others have found no significant relationship, indicating that stress may be influenced by multiple interacting factors, such as individual characteristics, learning environments, and institutional support systems (Rasheed et al., 2020; Turner & McCarthy, 2021). This inconsistency highlights the need for further research to clarify the role of coping strategies in managing stress during clinical practice.

Understanding the coping strategies used by nursing students is essential for nursing education institutions in developing effective interventions to support students' mental health. Educational institutions play a key role in providing academic guidance, clinical supervision, and psychological support to help students cope with clinical stressors (Kim & Park, 2021). Stress management programs, mentoring systems, and coping skills training have been recommended as effective strategies to enhance students' resilience and well-being during clinical practice (Biggs et al., 2021).

Therefore, this study aims to examine the relationship between coping strategies and stress levels among undergraduate nursing students during clinical practice in hospital settings. The findings of this study are expected to contribute to the growing body of evidence on nursing students' mental health and provide a scientific basis for developing comprehensive stress management and coping skills interventions to support nursing students during clinical education.

Objective

This study aims to examine the relationship between coping strategies and stress levels among undergraduate nursing students during clinical practice in hospitals.

Method

This study employed a descriptive correlational design with a cross-sectional approach to examine the relationship between coping strategies and stress levels among undergraduate nursing students during clinical practice in hospitals. The study was conducted at a nursing education institution that implements hospital-based clinical practice for undergraduate students.

The population of this study consisted of all sixth-semester undergraduate nursing students who were undertaking clinical practice during the study period. A total of 33 students participated in the study. Due to the relatively small and homogeneous population,

a total sampling technique was applied, in which all eligible students were included as research respondents.

Data were collected using self-administered questionnaires. Coping strategies were measured using a questionnaire based on the theoretical framework of Lazarus and Folkman, which categorizes coping strategies into adaptive and maladaptive coping. Stress levels were measured using a standardized stress assessment instrument that classifies stress into mild, moderate, and severe categories. Both instruments had undergone prior validity and reliability testing and were deemed appropriate for use in this study.

Data analysis was performed using statistical software. Univariate analysis was conducted to describe respondents' demographic characteristics, coping strategies, and stress levels. Bivariate analysis was carried out to determine the relationship between coping strategies and stress levels using the Chi-square test. The level of statistical significance was set at $p < 0.05$.

Ethical approval for this study was obtained from the relevant institutional authority. All respondents provided informed consent prior to participation. Ethical principles, including voluntary participation, confidentiality, and anonymity of respondents' data, were strictly maintained throughout the research process.

Result

Table 1. Sociodemographic

Variable	F/Mean	%
Gender		
Male	14	39.40
Female	19	57.60
Age	20.78	0.60
<Mean	11	33.33
>Mean	21	63.60
Academic Semester		
6	33	100

Table 1 show this study involved 33 sixth-semester undergraduate nursing students who were undertaking hospital-based clinical practice at the time of data collection. Based on respondents' demographic characteristics, the majority of participants were female, comprising 19 students (57.6%), while 14 students (42.4%) were male. Regarding age distribution, most respondents were categorized as above the average age, totaling 21 students (63.6%), whereas 12 students (36.4%) were below the average age. All participants were enrolled in the sixth semester and actively involved in clinical practice.

Table 2. Correlation between variables

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Coping	Stress Level				P-Value
	Mild		Moderate		
	F	%	F	%	
Good	10	40.00	2	28.57	0.581
Poor	15	60.00	5	71.43	

Table 2 show The assessment of stress levels revealed that most students experienced mild stress during clinical practice. A total of 25 respondents (75.8%) were classified as having mild stress, followed by 7 respondents (21.2%) who experienced moderate stress, and 1 respondent (3.0%) who experienced severe stress. These findings indicate that although stress was commonly experienced, the majority of students reported stress levels within the mild category.

In terms of coping strategies, most respondents were identified as using maladaptive coping strategies rather than adaptive coping strategies. Further analysis showed variations in stress levels across coping strategy categories. Among respondents who employed maladaptive coping strategies, 15 students (60.0%) experienced mild stress, while 5 students (71.43%) experienced moderate stress. Students who utilized adaptive coping strategies tended to report lower stress levels, although differences across groups were not pronounced.

Bivariate analysis using the Chi-square test was conducted to examine the relationship between coping strategies and stress levels among undergraduate nursing students. The results indicated a p-value of 0.581, which exceeded the predetermined significance level ($\alpha = 0.05$). This finding demonstrates that there was no statistically significant relationship between coping strategies and stress levels among nursing students during hospital-based clinical practice.

Overall, the results suggest that while differences in stress levels were observed across coping strategy categories, coping strategies were not significantly associated with stress levels in this study population. Stress experienced by nursing students during clinical practice may therefore be influenced by other factors beyond coping strategies, such as clinical workload, learning environment, and individual psychological characteristics.

Discussion

The results of this study indicate that the majority of undergraduate nursing students experienced mild stress during their clinical practice in hospital settings. This finding suggests that although clinical practice presents various academic and professional challenges, most students were still able to manage their stress within a relatively manageable range. This result is consistent with the findings of Fitriyani, Nurul, and Handayani (2022), who reported that nursing students commonly experience mild to moderate stress during clinical practice, particularly in the early phases when students are still adapting to hospital environments, clinical routines, and professional expectations. The adaptation process requires students to adjust cognitively, emotionally, and behaviorally, which may initially trigger stress responses before stabilization occurs (Fitriyani et al., 2022).

The present study also found that most respondents tended to use poor or maladaptive coping strategies, such as avoiding problems, suppressing emotional responses, or withdrawing from social interactions. These coping patterns are generally considered less effective in managing long-term stress, as they do not directly address stressors or promote emotional regulation. Descriptively, respondents who used maladaptive coping strategies were more likely to experience mild to moderate stress levels. However, statistical analysis showed no significant relationship between coping strategies and stress levels ($p = 0.581$). This finding suggests that coping strategies alone may not be sufficient to explain variations in stress levels among nursing students during clinical practice.

One possible explanation for the absence of a significant relationship is the subjective nature of stress perception and coping selection among students. Nursing students may differ

in how they perceive stressors and evaluate their own stress levels, which can influence both reported stress and coping behavior (Nugraheni & Lestari, 2021). Additionally, students' coping skills may still be developing, particularly among those who are experiencing clinical practice for the first time, resulting in coping responses that are inconsistent or situational rather than stable patterns (Nugraheni & Lestari, 2021).

Furthermore, the lack of a significant association between coping strategies and stress levels may be influenced by contextual and environmental factors within the clinical learning setting. Supportive clinical environments, including guidance from clinical instructors, mentors, and healthcare staff, may buffer the negative impact of stress regardless of the coping strategies used by students. Sitorus, Hidayah, and Prasetyo (2023) emphasized that strong mentorship and supportive supervision during clinical practice can help students feel more secure, confident, and emotionally supported, thereby reducing perceived stress even when coping strategies are not fully adaptive.

Another factor that may have contributed to the nonsignificant findings is the relatively small sample size used in this study. A limited number of respondents can reduce statistical power, making it more difficult to detect significant relationships between variables. Additionally, stress during clinical practice is a multifactorial phenomenon influenced by various individual and environmental factors beyond coping strategies. Previous research has suggested that variables such as emotional intelligence, resilience, self-efficacy, and social support play important roles in shaping students' stress responses during clinical learning (Wijayanti & Rahmawati, 2020). Including these variables in future studies may provide a more comprehensive understanding of stress among nursing students.

Despite the absence of a statistically significant relationship, the findings of this study still underscore the importance of understanding coping strategies among nursing students. Maladaptive coping strategies, if consistently used over time, may increase vulnerability to psychological problems such as anxiety, emotional exhaustion, and depression, particularly when students lack adequate psychosocial support (Anisah, Damayanti, & Putri, 2021). Therefore, early identification of coping patterns and timely psychosocial interventions remain crucial in nursing education.

Overall, this study suggests that stress experienced by nursing students during clinical practice cannot be explained by coping strategies alone. A holistic approach that considers individual characteristics, coping skills, learning environments, and institutional support systems is necessary to effectively manage stress among nursing students and promote their psychological well-being during clinical education (Wijayanti & Rahmawati, 2020; Sitorus et al., 2023).

Conclusion

Based on the results of the study, the majority of undergraduate nursing students undergoing clinical practice in hospitals experienced stress at a mild level, and most of them used poor or maladaptive coping strategies. Although descriptively there appeared to be a tendency for coping strategies to influence stress levels, statistical analysis showed no significant relationship between coping strategies and stress levels ($p = 0.581$).

These findings suggest that factors other than coping strategies, such as social support, previous experience, and the clinical environment, may influence students' stress perception. Therefore, stress management approaches for nursing students should be carried out holistically, including training in adaptive coping strategies and psychosocial support during clinical practice.

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Authors' Contribution

All authors contributed equally to every stage of the research, from proposal preparation, data collection, and analysis, to the writing of the article. All authors have read and approved the final manuscript and are responsible for the content and originality of this work.

Conflict of Interest

The researchers declare that there is no conflict of interest regarding the implementation or publication of this research. The entire research process was carried out independently, without any influence from any party. Respondent participation was voluntary, with informed consent obtained, and their confidentiality and privacy were protected in accordance with ethical research standards. The researchers hope that the results of this study can serve as a valid reference for the development of nursing education and mental health support.

Ethical Considerations

This research received ethical approval from the nursing education institution and the hospital where the clinical practice was conducted. All respondents were informed about the purpose and benefits of the study and signed an informed consent form. The research was conducted with a strong commitment to ethical principles, including data confidentiality and the right to voluntary participation.

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