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# Stress Levels and Coping Strategies among Nursing Students: A Study from Selected Colleges in Bangladesh

## Tingkat Stres dan Strategi Mengatasi Stres di Kalangan Mahasiswa Keperawatan: Studi Dari Beberapa Perguruan Tinggi Terpilih di Bangladesh

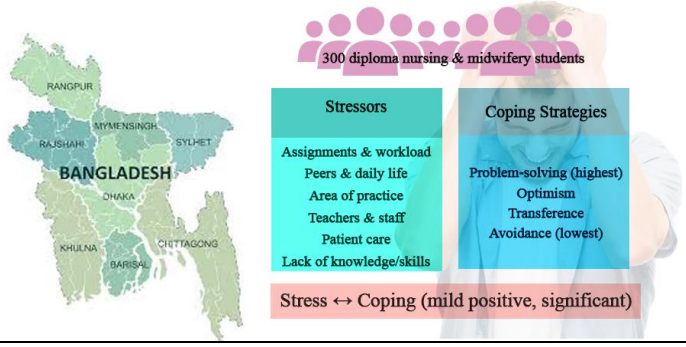
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**Abstract**
Stress among nursing students has been widely recognized as a persistent challenge, yet there remains a gap in understanding the interplay between stressors and coping mechanisms within the South Asian context, particularly Bangladesh. This study aimed to assess stress and coping strategies among diploma nursing and midwifery students in Bangladesh. A cross-sectional study was conducted among 300 students from selected nursing colleges, using a semi-structured, self-administered questionnaire. Stress was measured with the Perceived Stress Scale (PSS), while coping strategies were assessed with the Coping Behavior Inventory (CBI). The results showed that students reported moderate levels of stress, with assignments and workload (1.84±0.70) being the most prominent stressors, followed by peers and daily life (1.77±0.79), clinical environment (1.68±0.88), teachers and nursing staff (1.38±0.78), and taking care of patients (1.32±0.64), while lack of professional knowledge and skills was the least reported (1.27±0.79). The most frequently used coping strategy was problem solving (2.82±0.69), followed by optimism (2.65±0.67), transference (2.59±0.73), and avoidance (1.35±0.79). A significant mild positive correlation was found between stress and coping strategies (r = 0.229, p = 0.000), while avoidance coping was positively associated with all stress domains. These findings suggest that although nursing students face substantial stress, they often adopt constructive coping strategies, particularly problem solving and optimism, which should be reinforced through structured stress management and resilience-building programs in nursing education.

**Abstrak**
Stres di kalangan mahasiswa keperawatan telah diakui secara luas sebagai tantangan yang terus berlanjut, namun masih ada kesenjangan dalam memahami interaksi antara stresor dan mekanisme koping dalam konteks Asia Selatan, khususnya Bangladesh. Penelitian ini bertujuan untuk menilai tingkat stres dan strategi koping pada mahasiswa diploma keperawatan dan kebidanan di Bangladesh. Studi potong lintang dilakukan terhadap 300 mahasiswa dari beberapa perguruan tinggi keperawatan terpilih, dengan menggunakan kuesioner semi-terstruktur yang diisi sendiri. Tingkat stres diukur dengan Perceived Stress Scale (PSS), sedangkan strategi koping dinilai dengan Coping Behavior Inventory (CBI). Hasil penelitian menunjukkan bahwa mahasiswa melaporkan tingkat stres sedang, dengan beban tugas dan pekerjaan (1,84±0,70) sebagai sumber stres tertinggi, diikuti oleh rekan sebaya dan kehidupan sehari-hari (1,77±0,79), lingkungan klinik (1,68±0,88), dosen dan staf keperawatan (1,38±0,78), serta perawatan pasien (1,32±0,64), sedangkan kekurangan pengetahuan dan keterampilan profesional dilaporkan paling rendah (1,27±0,79). Strategi koping yang paling sering digunakan adalah pemecahan masalah (2,82±0,69), diikuti dengan optimisme (2,65±0,67), transferensi (2,59±0,73), dan penghindaran (1,35±0,79). Terdapat korelasi positif signifikan dengan kekuatan lemah antara stres dan strategi koping (r = 0,229, p = 0,000), sementara strategi penghindaran berhubungan positif dengan semua domain stres. Temuan ini menunjukkan bahwa meskipun mahas iswa keperawatan menghadapi stres yang cukup besar, mereka cenderung menggunakan strategi koping konstruktif, khususnya pemecahan masalah dan optimisme, yang perlu diperkuat melalui program manajemen stres dan pengembangan resiliensi dalam pendidikan keperawatan.

**Graphical Abstract**




**Keyword**
coping skills; midwifery; nursing; stress; students

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## INTRODUCTION

Stress is a significant challenge in nursing education worldwide, as it directly influences students' academic performance, psychological well-being, and professional preparedness. High levels of academic stress have been shown to impair deep learning, reduce clinical competence, and increase vulnerability to anxiety, depression, and burnout (Andargeery et al., 2025; Dogam et al., 2024). Nursing students, particularly during their first clinical placements, often experience stressors such as heavy workload, theory–practice gaps, and inadequate support from clinical instructors (Dias et al., 2024). Addressing these challenges aligns with the United Nations' Sustainable Development Goal (SDG) 3, which emphasizes good health and well-being, as well as SDG 4, which promotes inclusive and quality education. Ensuring the mental health and resilience of nursing students is crucial not only for their academic success but also for building a competent healthcare workforce capable of contributing to global health systems (Chye et al., 2024).

Globally, studies have identified coping strategies as essential mechanisms that enable nursing students to adapt to stress and maintain their learning capacity. Coping, defined as a dynamic process involving behavioral and cognitive efforts to manage external and internal stressors, plays a key role in fostering resilience and academic persistence (Onieva-Zafra et al., 2020). Empirical evidence has demonstrated that problem-focused strategies, such as active problem-solving and seeking social support, are more effective in preserving academic performance than emotion-focused approaches (Hamadi et al., 2021; Salimzadeh et al., 2021). However, while stress and coping strategies have been extensively studied in developed countries and several Asian contexts, there remains a scarcity of research from Bangladesh, where cultural, educational, and religious factors may shape students' experiences differently.

Despite the global recognition of stress as a major barrier to nursing education, little is known about how nursing students in Bangladesh perceive stress and apply coping mechanisms. Existing literature highlights variations in stressors and coping approaches across countries, yet there is limited evidence from low- and middle-income settings where educational resources and psychosocial support systems may be insufficient (Ab Latif & Nor, 2019; Ahmed & Mohammed, 2019). A deeper understanding of stress levels and coping strategies among Bangladeshi nursing students is therefore essential for designing contextually relevant interventions. This study aims to fill this gap by identifying stressors and coping mechanisms among diploma nursing and midwifery students, with the broader goal of supporting educational resilience and improving family health outcomes through culturally and spiritually informed approaches.

Several scientific studies have highlighted evidence-based interventions that can mitigate stress and enhance coping capacity among nursing students. Mind–body interventions, including relaxation training, meditation, and yoga, have been shown to significantly reduce psychological and physiological stress markers such as cortisol levels, blood pressure, and heart rate (Fischer et al., 2022; Hunt et al., 2018; Lemay et al., 2019). These benefits are particularly evident when the interventions are delivered through structured programs lasting 9–12 weeks with 15–30 sessions (Ji et al., 2024). Similarly, integrating emotional intelligence and self-development training into nursing curricula has been found to foster resilience, self-awareness, and emotional competence, thereby improving students' ability to cope with stress and promoting long-term professional preparedness (Haver et al., 2025). These interventions underscore the importance of holistic approaches that not only address immediate academic challenges but also strengthen students' capacity for lifelong adaptation.

Other coping mechanisms reported in the literature include religious and problem-solving approaches, which demonstrate cultural and contextual variations. For example, a Malaysian study found that the most commonly employed coping strategy among nursing students was religious coping (mean = 3.30, SD = 0.71), while clinical assignments and workload represented the most significant stressors (mean = 3.19, SD = 1.09). Furthermore, six domains of stressors during clinical practice were significantly correlated with coping strategies ($p < 0.05$) (Ab Latif & Nor, 2019). Similarly, research in Saudi Arabia revealed that students employed strategies such as problem-solving, optimism, transference, and avoidance, while stressors included workload, noise, lack of professional skills, and interactions with clinical staff (Ahmed & Mohammed, 2019). These findings demonstrate the multifaceted nature of stress in nursing education and highlight the importance of culturally sensitive interventions that recognize both spiritual and problem-focused coping approaches.

A growing body of research has examined the relationship between stress, coping strategies, and academic outcomes among nursing students in diverse global contexts. Studies from Europe and North America have consistently shown that moderate to high stress levels are associated with maladaptive coping mechanisms such as avoidance, wishful thinking, and social withdrawal, which in turn negatively influence learning and clinical performance (Gurková & Zeleníková, 2018; Onieva-Zafra et al., 2020; Owen et al., 2022). Conversely, adaptive strategies such as problem-solving, cognitive restructuring, and social support are linked to improved resilience and academic persistence. Research from Middle Eastern and Southeast Asian countries has further emphasized the role of religious and cultural coping mechanisms, revealing a unique integration of spiritual practices with academic resilience (Ab Latif & Nor, 2019; Alanazi et al., 2023; Hamka et al., 2025). These findings underscore the contextual differences in coping strategies, shaped by cultural and educational environments.

Table 1
*Characteristics of Respondents*

| Variables | Number (n) | Percentage (%) | M±SD |
|---|---|---|---|
| Age (years) | Min = 19, Max = 24 | | 21.27 ± 1.19 |
| Gender | | | |
| Male | 30 | 10 | – |
| Female | 270 | 90 | – |
| Religion | | | |
| Islam | 109 | 36.3 | – |
| Hindu | 184 | 61.3 | – |
| Christian | 7 | 2.3 | – |
| Level of Education | | | |
| First year | 100 | 33.3 | – |
| Second year | 100 | 33.3 | – |
| Third year | 100 | 33.4 | – |
| Monthly family income | Min = 4000, Max = 80000 | | 9275.33 ± 11369.33 |

*Note*: M=Mean, SD=Standard Deviation, Min=Minimum, Max=maximum

Despite these advances, there is scant literature on the stressors and coping mechanisms among nursing students in Bangladesh. While evidence from neighboring regions highlights stressors such as workload, clinical expectations, and lack of professional knowledge (Ahmed & Mohammed, 2019), little is known about how Bangladeshi students navigate these challenges. Moreover, no prior study has comprehensively explored how diploma nursing and midwifery students in Bangladesh employ coping strategies, including the potential integration of spiritual and religious practices, to manage stress. This study aims to address this gap by identifying the levels of stress and the coping strategies used by diploma in nursing science and midwifery students in Bangladesh. The novelty of this research lies in its focus on a previously underexplored context, providing new insights into culturally grounded coping strategies that may inform educational policies, enhance student well-being, and contribute to strengthening family health outcomes.

## METHODS

This study employed a cross-sectional design to assess stress levels and coping strategies among nursing students. The research was conducted at Nursing and Midwifery College, Gopalganj, and Nursing and Midwifery College, Pirojpur, Bangladesh, which serve as important training institutions for diploma nursing and midwifery students. The target population consisted of students enrolled in the Diploma in Nursing Science and Midwifery program. Based on a prevalence rate of 47.92% for moderate stress identified in a previous study from Spain (Onieva-Zafra et al., 2020), the minimum sample size was calculated as 383. After adjusting for a 10% attrition rate, the final required sample size was 421. However, due to time limitations, data were ultimately collected from 300 students. Participants were recruited using a convenience sampling method, with eligibility restricted to those currently enrolled in the diploma program and willing to participate voluntarily. Students who were absent during data collection or who declined to provide informed consent were excluded.

Data collection procedures began with the approval of the principals of both colleges. Before distributing the questionnaires, participants were verbally briefed about the objectives of the study, and written informed consent was obtained. An orientation session was held to explain the structure of the questionnaire and instructions for completion. The data were collected using a self-administered questionnaire, which required approximately 20 minutes to complete.

The semi-structured questionnaire consisted of three sections. The first section captured socio-demographic information such as age, gender, religion, educational level, and monthly family income. The second section employed the Perceived Stress Scale (PSS), which consists of 29 items rated on a five-point Likert scale ranging from 0 (never) to 4 (very often). Previous research identified six stress domains within this instrument: stress from patient care, teachers and nursing staff, assignments and workload, peers and daily life, lack of professional knowledge and skills, and clinical environment. The total score ranged from 0 to 116, with higher scores indicating greater stress. The PSS has demonstrated strong internal consistency, with a Cronbach's alpha of 0.93 (Engelbrecht, 2022). The third section used the Coping Behavior Inventory (CBI), which contains 19 items classified into four types: avoidance, problem solving, optimistic coping, and transference. Each item was rated on a five-point Likert scale, with higher scores indicating greater use of coping behaviors. The CBI has been shown to be reliable, with a Cronbach's alpha coefficient of 0.89 (Labrague et al., 2018). To ensure comprehension, the questionnaire was translated into Bengali.

Stress and coping levels were categorized according to the 33rd, 66th, and 100th percentiles of the mean scores. A stress score at or below the 33rd percentile was categorized as low stress, scores between the 33rd and 66th percentiles as moderate stress, and scores above the 66th percentile as high stress. Coping levels were categorized using the same percentile-based approach.

All responses were checked for completeness and consistency before being entered into the Statistical SPSS version 20.0 (SPSS Inc., Chicago, IL, USA). Descriptive statistics including frequency, percentage, mean, and

Table 2
*Mean and Standard Deviation of Stress Sources and Coping Strategies*

| Stress Sources and Coping Strategies | Mean ± SD |
|---|---|
| Overall Stress | 1.52 ± 0.58 |
| Stress Sources | |
| Stress from taking care of patients | 1.32 ± 0.64 |
| Stress from assignments and workload | 1.84 ± 0.70 |
| Stress from lack of professional knowledge and skills | 1.27 ± 0.79 |
| Stress from area of practice | 1.68 ± 0.88 |
| Stress from peers and daily life | 1.77 ± 0.79 |
| Stress from teachers and nursing staff | 1.38 ± 0.78 |
| Coping Strategies | |
| Avoidance | 1.35 ± 0.79 |
| Problem solving | 2.82 ± 0.69 |
| Staying optimistic | 2.65 ± 0.67 |
| Transference | 2.59 ± 0.73 |

deviation were used to summarize socio-demographic variables and scale outcomes. Inferential statistical methods included Pearson's correlation coefficient to examine relationships between stress and coping strategies, as well as t-tests and one-way analysis of variance (ANOVA) to identify group differences. Statistical significance was set at $p < 0.05$ with 95% confidence intervals.

The study protocol was reviewed and approved by the Institutional Review Board (IRB) of Universal Nursing College. Permission to conduct the study was also obtained from the respective nursing colleges. The purpose of the research and issues of data safety were explained to the participants. Written informed consent was obtained from all respondents, and their right to withdraw at any stage was respected. To maintain anonymity, no personally identifiable information was collected. Data confidentiality was strictly observed, and no participant was subjected to any physical or psychological harm, as the study relied solely on survey methods. Participants were offered the option to receive a summary of the study findings upon request.

## RESULTS

Table 1 presents the socio-demographic characteristics of the participating nursing students. The mean age of the students was 21.27 ± 1.19 years, ranging from 19 to 24 years. The majority of participants were female (90.0%). With respect to religion, most students identified as Hindu (61.3%), followed by Muslim (36.3%) and Christian (2.3%). Each academic year was almost equally represented, with approximately one-third of students enrolled in the first (33.3%), second (33.3%), and third year (33.4), respectively.

The study examined participants' perceived stressors and coping mechanisms (See Table 2). The overall mean stress score was 1.52 ± 0.58, indicating a relatively low level of stress. Among the specific stressors, "stress from assignments and workload" had the highest mean score (1.84 ± 0.70), followed by "stress from peers and daily life" (1.77 ± 0.79). Conversely, "stress from lack of professional knowledge and skills" showed the lowest mean score (1.27 ± 0.79), suggesting greater confidence in professional competencies.

Regarding coping strategies, "problem-solving" emerged as the most frequently utilized method (M = 2.82 ± 0.69), followed by "staying optimistic" (M = 2.65 ± 0.67) and "transference" (M = 2.59 ± 0.73). "Avoidance" was the least employed strategy (M = 1.35 ± 0.79). These findings suggest that while students reported low to moderate stress levels, workload and peer-related stressors were more influential. At the same time, the preference for constructive strategies such as optimism and problem-solving reflects resilience and adaptive coping behaviors.

Stress and coping levels are summarized in Table 3. Most students (67.7%) reported low to moderate stress, while a substantial proportion (34.4%) experienced moderate stress. Coping levels were almost evenly distributed: 35.7% demonstrated poor coping, 30.6% moderate coping, and 33.7% high coping. These results indicate that although overall stress levels were modest, students exhibited diverse coping responses. This highlights the importance of targeted interventions to strengthen coping skills, particularly for students with low coping capacity despite mild stress exposure. Enhancing adaptive coping strategies may contribute to better mental health outcomes and reduced stress among nursing students.

Table 4 illustrates the relationships between socio-demographic factors, stress, and coping. A statistically significant association was found between religion and stress ($F = 5.015$, $p = 0.007$). Similarly, the level of education was significantly associated with both stress ($F = 5.551$, $p = 0.004$) and coping ($F = 3.349$, $p = 0.036$).

Figure 1 depicts the correlation coefficients (r) between stressors and coping strategies. Positive correlations indicate a direct relationship, whereas negative correlations indicate an inverse relationship. Avoidance was positively associated with all types of stress, with the

Table 3
*Levels of stress and coping strategies among nursing students*.

| Grade | Stress Level | Coping Level |
|---|---|---|
| Low | 100 (33.3%) | 107 (35.7%) |
| Moderate | 103 (34.4%) | 92 (30.6%) |
| High | 97 (32.3%) | 101 (33.7%) |

Table 4
*Relationship among Socio demographic Characteristics, Stress, and Coping*

| Variables | Stress (M ± SD) | F/t/r (p) | Coping (M ± SD) | F/t/r (p) |
|---|---|---|---|---|
| Age | | r = 0.085 (p = 0.142) | | r = 0.110 (p = 0.057) |
| Gender | | | | |
| Male | 1.55 ± 0.39 | t = 0.509 (p = 0.613) | 2.26 ± 0.38 | t = -0.313 (p = 0.755) |
| Female | 1.51 ± 0.59 | | 2.28 ± 0.43 | |
| Religion | | | | |
| Muslim | 1.45 ± 0.58 | | 2.27 ± 0.38 | |
| Hindu | 1.53 ± 0.56 | F = 5.015 (p = 0.007) | 2.28 ± 0.46 | F = 1.569 (p = 0.210) |
| Christian | 2.13 ± 0.46 | | 2.56 ± 0.47 | |
| Level of Education | | | | |
| First Year | 1.37 ± 0.66 | | 2.21 ± 0.47 | F = 3.349 (p = 0.036) |
| Second Year | 1.64 ± 0.49 | F = 5.551 (p = 0.004) | 2.27 ± 0.35 | |
| Third Year | 1.53 ± 0.53 | | 2.23 ± 0.46 | |
| Income | | r = 0.070 (p = .230) | | r = 0.079 (p = 0.171) |

*Note:* M = Mean; SD = Standard Deviation; r = Pearson Correlation; F = One-way ANOVA; t = Independent Samples t-Test. Statistical significance is considered at $p < 0.05$

strongest correlations observed for "stress from peers and daily life" ($r = 0.443$, $p < 0.01$) and "stress from teachers and nursing staff" ($r=0.541$, $p < 0.01$). This suggests that avoidance was frequently used when confronted with interpersonal or authority-related stressors.

In contrast, problem-solving showed significant negative correlations with "stress from peers and daily life" ($r = –0.115$, $p < 0.05$) and "stress from teachers and nursing staff" ($r = –0.272$, $p < 0.01$), indicating that interpersonal stress hindered the use of effective problem-solving strategies. Optimism was positively correlated with "stress from assignments and workload" ($r = 0.205$, $p < 0.01$), suggesting that students maintained a positive outlook despite academic stressors. Similarly, transference demonstrated weak positive correlations with both "stress from peers and daily life" ($r = 0.152$, $p < 0.01$) and "stress from assignments and workload" ($r = 0.115$, $p < 0.05$), reflecting reliance on emotional support or distraction as coping mechanisms.

Overall, the findings indicate that nursing students employed a range of coping strategies depending on the stressor type. While avoidance was consistently linked to stress, interpersonal stressors were inversely related to problem-solving. These results underscore the need for interventions aimed at promoting adaptive coping mechanisms, particularly in managing academic and interpersonal stress.

## DISCUSSION

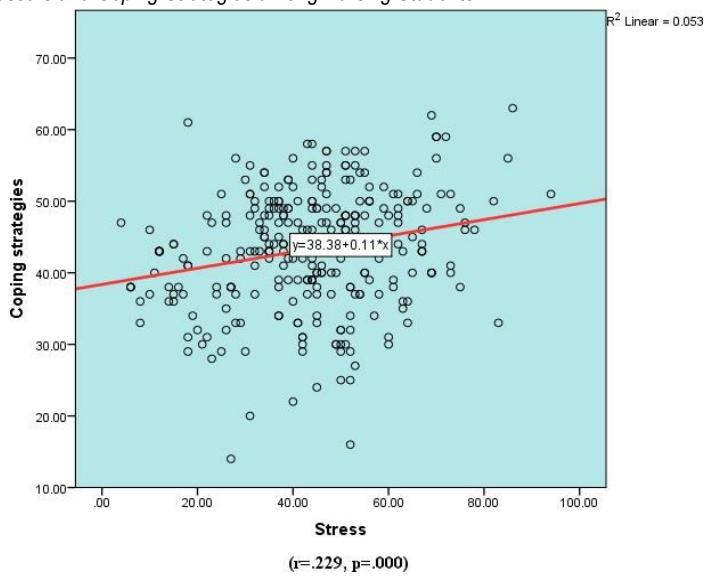
The present study revealed that nursing students experienced overall moderate levels of stress during clinical rotations, with assignments and workload being the most significant sources. This finding is consistent with studies conducted in Saudi Arabia, Egypt and Jordan, where academic workload and clinical responsibilities were identified as primary stressors among nursing students (Ahmed & Mohammed, 2019; Alkouri et al., 2025; Chaabane et al., 2021; El-Ashry et al., 2022). The present study also found that stress from peers and daily life, clinical environment, and interactions with teachers and nursing staff contributed significantly to students' stress, a pattern similarly reported in regional studies (Ahmed & Mohammed, 2019; Dogham et al., 2024). Interestingly, stress from lack of professional knowledge and skills was the least reported, suggesting that the respondents were relatively confident in their academic preparation compared to other contexts where knowledge gaps are often highlighted as major stressors (Onieva-Zafra et al., 2020).

The importance of this finding lies in the emphasis on workload as a modifiable factor. Excessive assignments and heavy clinical responsibilities risk undermining students' psychological well-being and academic performance. Nursing educators and clinical instructors must therefore consider restructuring academic and clinical schedules to balance skill acquisition with mental health. This has practical implications for the sustainability of nursing education in Bangladesh, where mental health resources for students are limited. By prioritizing manageable workloads, institutions can help reduce stress and promote healthier academic environments.

Regarding coping strategies, this study found that problem solving was the most frequently used coping mechanism, followed by staying optimistic and transference, with avoidance being the least used strategy. These results are similar to earlier findings in both Asian and Middle Eastern settings, where problem solving and optimism were identified as effective adaptive coping mechanisms (Onieva-Zafra et al., 2020; Ahmed & Mohammed, 2019). However, unlike studies where avoidance strategies were more dominant in response to stressors (Ab Latif & Nor, 2019), the present study shows that Bangladeshi nursing students preferred constructive approaches. This highlights cultural and contextual variations in coping styles, influenced by educational systems, social support networks, and possibly religious or cultural orientations.

The practical implication of this finding is that the inclination toward problem solving and optimism provides a strong foundation for educational interventions. Training

Figure 1
*Correlation between Stressors and Coping Strategies among Nursing Students*




programs that reinforce adaptive coping mechanisms, such as structured problem-so lving workshops and resilience-building sessions, could enhance students' ability to manage stress effectively. According to Fullerton et al. (2021) that the relatively lower reliance on avoidance strategies suggests that with proper guidance, students can further strengthen adaptive responses and reduce maladaptive coping tendencies.

The study also found a significant positive correlation between stress and coping strategies, indicating that higher stress levels prompted students to employ coping mechanisms more frequently. Avoidance was positively associated with all stress domains, particularly stress from peers, daily life, and teachers or clinical staff, which mirrors findings in Jordanian and Saudi studies (Alanazi et al., 2023; Ta'an et al., 2024). Conversely, problem solving was negatively correlated with stress from peers and teachers, suggesting that interpersonal stressors may inhibit effective coping. Optimism showed a positive relationship with workload-related stress, while transference was weakly associated with stress from peers and assignments.

The implications of these findings are significant for both scientific understanding and practical application. The strong use of avoidance in relation to interpersonal stress highlights the vulnerability of students when facing authority figures or peer conflicts, pointing to the need for communication skills training and supportive supervisory structures. The observed negative association between problem solving and interpersonal stressors underscores the importance of interventions aimed at fostering effective problem-solving abilities specifically for relationship-based stress. Overall, these correlations suggest that coping is a dynamic process shaped by the type of stress encountered, and targeted strategies are needed to optimize outcomes.

The integration of Islamic values and cultural practices in coping has been emphasized in prior studies, particularly in Southeast Asia and the Middle East, where religious coping emerged as a significant strategy for managing stress (Ab Latif & Nor, 2019; Hamka et al., 2025). Although the current study did not specifically measure religious coping, the demographic profile of the students, with a majority Hindu followed by Muslim participants, suggests that spiritual practices may still play a role in their coping repertoire.

Islamic perspectives provide a valuable framework for understanding constructive coping strategies among nursing students. The concept of *sabr* (patience) emphasizes endurance and self-control during times of difficulty, which aligns closely with students' tendency to adopt problem-solving approaches in managing academic and clinical stressors. Similarly, *tawakkul* (trust in God) reflects an attitude of reliance on divine wisdom after exerting personal effort, resonating with optimistic coping strategies that foster hope and confidence despite challenges. In addition, *shukr* (gratitude) cultivates a positive outlook by encouraging acknowledgment of blessings even amidst hardship, which parallels transference strategies such as seeking emotional support and reframing stress experiences (Islam et al., 2025). Together, these values not only promote psychological resilience but also reinforce holistic well-being by integrating spiritual strength with practical problem-solving (Rohmatulloh et al., 2023). Therefore, incorporating faith-based counseling and structured spiritual guidance into nursing education in Bangladesh may serve as an effective complement to conventional stress management programs. Such integration can strengthen adaptive coping mechanisms, enhance emotional stability, and foster resilience, ultimately preparing nursing students to provide compassionate care and contribute positively to family and community health.

From the perspective of family health, the findings highlight that stress management among nursing students

is not only vital for academic performance but also for their future roles as healthcare providers. High stress and maladaptive coping can compromise the quality of patient care and undermine family-centered health services. This study contributes to the literature by providing baseline evidence from Bangladesh, a context previously underexplored. Nonetheless, several limitations must be acknowledged. The cross-sectional design limits causal inference, the convenience sampling raises concerns of selection bias, and the reduced sample size constrained statistical power. Despite these limitations, the study provides valuable insights that can guide future longitudinal research, with larger and more representative samples, to better understand the dynamics of stress and coping among nursing students in Bangladesh.

## CONCLUSIONS

This study demonstrated that diploma nursing and midwifery students at Nursing and Midwifery College, Gopalganj and Nursing and Midwifery College, Pirojpur experienced moderate levels of stress during their clinical training. The major sources of stress were related to assignments, workload, and peer interactions, while stress from lack of professional knowledge and skills was minimal. Students predominantly utilized problem-solving as a coping strategy, supplemented by optimism and transference, with avoidance being the least adopted method. These findings indicate that while stress is an inevitable aspect of nursing education, the presence of constructive coping strategies highlights students' resilience and adaptability.

The implications of this research are twofold. First, nursing faculties should recognize the role of workload and academic pressure in shaping student stress, and adopt policies to reduce unnecessary burdens through curriculum restructuring and balanced clinical assignments. Second, stress management programs, particularly those incorporating problem-solving skills, resilience training, and faith-based or culturally relevant coping strategies, should be integrated into nursing education to further strengthen students' capacity to manage stress effectively. Future longitudinal and multicenter studies are recommended to establish causal relationships and to explore the role of religious and cultural coping in greater depth. By addressing these issues, nursing education in Bangladesh can better support student well-being and ensure the development of competent, resilient healthcare professionals who are prepared to contribute effectively to family and community health.

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**AUTHORS' CONTRIBUTIONS**
Sajib Madhu contributed substantially to all stages of the study. This author was responsible for designing the study, formulating the research concept, writing the manuscript, reviewing and revising the manuscript, enrolling participants, collecting and acquiring the data, analyzing the data, and performing the fieldwork. Fardina R. Omi participated in designing the study and formulating the concept, analyzing the data, revising the manuscript, and reviewing the draft. M. Abdus Salam was primarily engaged in data collection and acquisition, as well as conducting fieldwork and also contributed to reviewing the manuscript. Md Sakibul Islam played a role in enrolling participants, reviewing the manuscript, revising the manuscript, and performing the fieldwork. All authors ensured the final approval of the manuscript.

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**COMPETING INTERESTS**
The author(s) declare no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

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