

Stress and Coping Strategies Among Nursing Students

Kholoud Alharbi¹

¹ Nursing Education and Administration Department, College of Nursing, King Saud University, Riyadh, King Saudi

Correspondence: Kholoud Alharbi, Nursing Education and Administration Department, College of Nursing, King Saud University, Riyadh, King Saudi. E-mail: Kalharbi1@ksu.edu.sa

Received: October 19, 2023 Accepted: November 13, 2023 Online Published: November 15, 2023

doi:10.5539/gjhs.v15n12p46

URL: <https://doi.org/10.5539/gjhs.v15n12p46>

Abstract

Background: Nursing students experience stress as they progress through their programs of study because they must fulfill numerous theoretical and clinical requirements. Stress describes a dynamic relationship between a person and their surroundings. It is a widespread phenomena of contemporary life styles; it has been discovered to have negative health effects and to adversely impair students' learning, and it is recognized as one of the most significant problems in the contemporary world.

Aim/Objective: The goal of the current study was to identify the sources of stress among undergraduate nursing students and to explore their coping methods.

Design: a qualitative descriptive methodology.

Method: 20 semi-structured interviews were conducted individually in the English language by the principal researcher at female nursing college. The initial section of the interview consisted of a document listing the participants' age and level. Questions derived from theoretical model were used in the interview's second section to identify the sources of stress among undergraduate nursing students and to explore their coping methods. The qualitative data was analyzed using thematic analysis based on the Braun and Clarke framework.

Results: four global themes were emerged as the following: stressors, stress symptoms, coping strategies, and educational environment. The first 3 themes were derived deductively from the study theoretical model; whereas, the last theme was derived inductively from the data itself.

Conclusion: management of the stress becomes critical. Coping strategies have been found to be effective in lowering the stress among nursing students.

Keywords: nursing students, stress, coping, education

1. Introduction

One of the world's most demanding and stressful jobs is nursing (Ching et al., 2020). It has been discovered that sources of stress are similar for nursing students and staff nurses (Pulido-Martos et al., 2012). Nursing students experience stress as they progress through their programs of study because they must fulfill numerous theoretical and clinical requirements. By studying nursing theory and principles in the classroom, students acquire the necessary information to care for their patients. Students apply theoretical principles gained in the classroom in a clinical setting (Lavoie-Tremblay et al., 2022). Clinical practice is considered the highest source of stress for undergraduate nursing students. Other stressors can be personal or academic which effect on the physical and mental health (Ching et al., 2020). Using coping strategies is very essential for stress management (Labrague et al., 2017).

2. Background/Literature

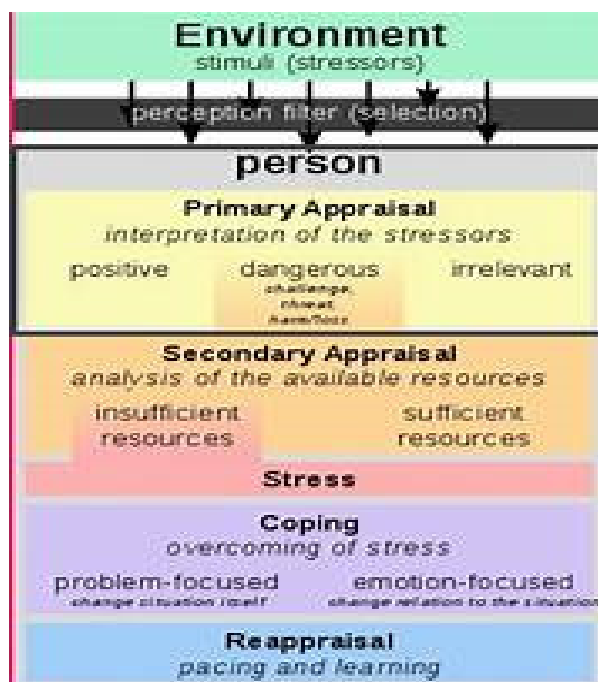
Stress describes a dynamic relationship between a person and their surroundings. It is a widespread phenomena of contemporary life styles; it has been discovered to have negative health effects and to adversely impair students' learning, and it is recognized as one of the most significant problems in the contemporary world (Madian et al., 2019). Nursing students experience stress frequently during their education (Hamadi et al., 2021). "The definition of stress as a response was discovered by Selye (1976), who defines stress as the non-specific response of the body to any kind of demand" (Hamadi et al., 2021, p. 2). Madian et al. (2019) reported in their study that students have a moderate level of academic stress: 42.5%.

Chan et al. (2009) conducted a study on 205 nursing students and the study revealed a moderate level of stress among nursing students ($M = 2.10, SD = 0.44$). The source of stress was lack of knowledge and skills. Moreover, a cross-sectional study was done by Manti et al. (2022) on 424 nursing students to determine the causes of the stress experienced by Greek nursing students as well as their coping mechanisms. The study revealed that the majority of students (81.7%) claimed that their present financial situation contributed to their feeling of stress. McCarthy et al. (2018) reported that stress is common in all aspects of nursing students during their nursing education. Nursing educators should be aware of this influence and provide the proper support to students in nursing school and during their clinical practice.

Students who use coping skills can overcome the difficulties brought on by stress (Shdaifat et al., 2018). In order to manage stress, an individual must make cognitive and behavioral adjustments to lessen the internal and external demands placed on them. Seeking social support was a common coping method among students from all program years. Social support functions as a stress-protective element because it can either reduce stress or help people respond to the circumstance in a healthy way (Lavoie-Tremblay et al., 2022). More studies are required to understand the sources of stress among undergraduate nursing students and their coping strategies. The aims of this study were: (1) to identify the sources of stress among undergraduate nursing students and (2) to explore coping methods used by nursing student through education.

3. Theoretical Model

There are various ways that stress can be felt. These include emotions, thoughts, sensations, and behaviors. These are typically brought on by stressors from outside. Depending on how the issue is viewed, a person’s feeling of stress will vary. The transactional theory of stress and coping, created by Lazarus and Folkman in 1966, has played a significant role in the development of the field’s understanding of stress and coping during the past five decades (Biggs et al., 2017). Their theory demonstrates how significant experiences in life impact people’s emotions. The approach places a strong emphasis on coping with stress and cognitive appraisal. Three levels of assessment are used: primary, secondary, and tertiary (reassessment). The theory states that rather than an event, stress is caused by interactions between people and their environment. According to the theory, before feeling and reacting to stress, we go through two stages of situational appraisal. Stress is then experienced as an appraisal of the situation we find ourselves in. Certain stressors can be such as divorce, loss of loved ones, loss of job, etc. Coping or adjustment is required. The term "coping" refers to the cognitive and behavioral strategies people use to deal with stress (Kivak, 2020).



(Griese, 2017, p.3).

4. Methodology

4.1 Study Design and Setting

The study utilized a qualitative descriptive methodology to deliver in-depth data and a comprehensive grasp of the students' stress and their coping strategies. The researcher's understanding of the participants' perspectives was aided by this design. The setting was King Saud University in Riyadh, Saudi Arabia. More specifically in the female nursing college.

4.2 Sampling Process

Participants in the study were gathered using a purposeful sampling method. The sample size for the current study was established by the data saturation level, which was attained with 20 participants. The inclusion criteria were: 1) being enrolled in the undergraduate nursing program. Students in any level can participate in the study. 2) being presented to contribute in the semi-structured interview. Participants who expressed a lack of interest in participating in the study were not included.

4.3 Rigor and Trustworthiness

The current qualitative study's rigor/trustworthiness was attained by conforming to Lincoln and Guba's (1985) four criteria: credibility, confirmability, dependability, and transferability (Polit & Beck, 2016). Participants gave extensive explanations during the semi-structured interviews, which helped to establish the credibility. Additionally, member checking by participants was done to confirm the study findings in order to meet the criteria of credibility and confirmability. Moreover, the study's results were verified by an external reviewer. The study methodology was well described, which meet the requirements of transferability and dependability. Additionally, dependability was attained by going over the transcripts, looking at the themes, and assessing the findings.

4.4 Data Collection Procedure

Six nursing students participated in a pilot study to determine the feasibility of the study and the probes. The main study did not include any of the pilot research's participants. The duration of data collection of the main study was five weeks. Students were interviewed for 20 to 30 minutes. About 20 semi-structured interviews were planned. They were conducted individually in a quiet class. Interviews were conducted in the English language as they studied their nursing program in the English language too. The principal researcher conducted all the semi-structured interviews. The initial section of the interview consisted of a document listing the participants' age and level. Questions derived from theoretical model were used in the interview's second section to identify the sources of stress among undergraduate nursing students and to explore their coping methods. The questions were as the following: 1) What do you think about the educational environment at this nursing school? 2) What are the things or difficulties that stress you out this academic year? 3) Please tell me about the feelings you experience when you are stressed? 4) What coping strategies did you use to deal with your stressors or challenges? 5) What could the university do to lower your stress?. Descript' software was used to record and transcript each interview. It is one of the top transcribing programs (Mansoor, 2022).

4.5 Ethical Consideration

The King Saud University Institutional Review Board approved this study. Before taking part in the study, nursing students were informed about its purpose. They were asked whether they had any queries or needed more information. All participants provided informed consent. They were aware that their participation was entirely voluntary and that they had the option to withdraw from the study at any time. They also agreed that the interviews would be audio-recorded. Individual interviews were conducted to ensure privacy. Confidentiality was maintained by assigning a number to each participant, such as 'participant 1' when the study findings were reported. All participant data was saved on a password-protected computer. Participants were provided with the phone number of the researcher in case they had any questions or concerns. Participants' information will be destroyed once the study is completed.

4.6 Data Analysis

The qualitative data was analyzed using thematic analysis based on the Braun and Clarke framework. It composed of six steps: reading transcripts, creating codes, producing themes, reviewing themes, defining themes, and writing the report (Maguire & Delahunt, 2017). As a result, in this study, the researcher listens to recordings numerous times. Microsoft Word was used to organize the data. The thematic analysis produced 24 priori codes. These codes were rearranged into 11 organizing themes. Those 11 organizing themes were grouped together to form 4 global themes which were: stressors, stress symptoms, coping strategies, and educational environment. The first 3 themes were derived deductively from the study theoretical model; whereas, the last theme was derived inductively from

the data itself.

5. Results

5.1 Demographic

The current study enlisted the participation of 20 undergraduate nursing students. Two participants were 19 years old, eight of the participants were 20 years old, seven were 21 years old, and three were 22 years old. In terms of level, three participants were from level one, one participant was from level two, two participant was from level three, three participants were from level four, two participants were from level five, four participants were from level six, two participants were from level seven, and three participants were from level eight.

5.2 Stressors

Nursing students revealed that they are experiencing different kinds of stressors. Stressors theme includes the following categories: academic stressors, clinical stressors, personal stressors, and emotional stressors.

"I have many stressors, like heavy workload, high expectation, deadlines of assignments, and academic competition" (Participant 1)

"For me, the most stressor is exam, I always have anxiety and fears from exams" (Participant 6)

"Some courses are complex and they give me a lot of stress" (Participant 10)

"I have family problems that make me difficult to concentrate on my learning goals and this stress me" (Participant 16)

"I think my stress is coming from the huge number of assignments and my responsibility also at home" (Participant 19)

5.3 Stress Symptoms

Participants reported some of the signs and symptoms of stress and they expressed their feelings toward stressors. Stress symptoms theme include: physical symptoms and psychological symptoms.

"When I have stress, I feel I can't focus anymore and also I feel tired both physically and mentally" (Participant 3)

"Stress cause me headache" (Participant 5)

"My stomach hurt me when I got stress. I always go to doctor and he say you don't have physical problem and I have to work on lowering my stress" (Participant 8)

"I have trouble with sleeping. I stay the whole night trying sleep" (Participant 13)

"It effect my feelings and I feel I am overwhelmed and I cannot work" (Participant 17)

5.4 Coping Strategies

Participants shared their own personal experiences in using the coping strategies, as well as they discussed the coping strategies that they could utilize in the future. Coping strategies theme include: prior coping strategies and future coping strategies.

"I used to do physical activity when I feel stressed" (Participant 2)

"Relaxation techniques like mediation helped me a lot" (Participant 7)

"I Can tell that time management is important step for me to decrease my stress level" (Participant 11)

"I usually use social support like my family or friends for lowering stress but I maybe use exercise in the future to help me also with that" (Participant 15)

"I am planning to use healthy lifestyles, for example to start diet and exercise because this will affect on my mood and heath" (Participant 18)

5.5 Educational Environment

Participants shared their experiences about the educational environment in the school of nursing and they provided some suggestions. Educational environment theme include: classroom and setting, organization, and support.

"Educational environment is very supportive" (Participant 4)

"I find environment is positive because there is good communication between faculty and students" (Participant 9)

"We have good academic advising in our school. My adviser always help me when I have any difficult things" (Participant 12)

"I hope our school will open any program for exercise, Hmmm, like wellness program or fitness program, I think this, mmm, will help all students who have stress" (Participant 14)

"Uh, I see workshops is important to help us in managing coursework and academic responsibility effectively" (Participant 20)

6. Discussion

The aim of the current study was to identify the sources of stress among undergraduate nursing students and to explore their coping methods. The stressors theme was a construct in the conceptual framework of the current study. This study revealed that nursing students are having many sources of stressors. The results of the current study were consistent with the study of Majrashi et al. (2021) who found nursing students very stressed due to assignments, clinical training, and educational workloads. In addition, Temiz's (2020) study reported that 40.5% of nursing students had a moderate anxiety; and there was a positive correlation between students' stress levels and their family, educational, and financial issues.

The stress symptoms theme was also a construct in the current study's conceptual framework. The current study findings were consistent with the results of Gomathi et al.'s (2017) study who stated that the impacts of stress transcend beyond physical, emotional, and behavioral problems, as students may struggle to achieve their academic goals. Prolonged stress among nursing students may cause memory problems, inability to concentrate, depression, headache, abdominal cramps, and trouble with sleeping. Also, it can cause burnout. Furthermore, Alvarez et al. (2019) reported that more lifetime stressors were linked to an increased risk of several health disorders such as hypertension, diabetes, and depression.

Coping strategies theme was another construct in the current study's conceptual framework. The study showed that nursing students were using coping strategies such as physical activity, healthy lifestyles, social support, time management, and relaxation techniques. According to Shdaifat et al. (2018), coping techniques assist students in dealing with stress-related issues. The current study findings were consistent with results of Rafati et al.'s (2017) study who revealed that nursing students were using social support from others such as mentors or peers to reduce their stress level. However, the results were different from a study that conducted by Kumar and Nancy (2011) on 180 nursing students. The study revealed that "Seeking diversion" is the most coping strategy that was identified in nursing students, while "seeking professional support" is the least common coping strategy.

Educational environment was a theme that emerged from qualitative data through the inductive approach. The results of the current study were similar to those of Onieva-Zafra et al. (2020) who highlighted on the importance of that nursing teachers and clinical preceptors/mentors should be encouraged to establish programs to help nursing students prepare for the obstacles they will face during their education or clinical placements; that might help in reducing the students' stress. Del Prato et al. (2011) stated that academic, social, and behavioral support systems at nursing school can help in lowering the distress and prevent unhealthy levels of stress. In addition, students' stress levels can be reduced by using caring and supportive learning environment.

7. Study Implications, Limitations, and Recommendations

The study's findings can be used to help students in managing their stress and to motivate them in using the coping strategies. Social support functions as a stress-reduction method because it can either prevent stress or allow a good response to the situation. Nursing schools should create regulations that extend nurse educators' role in assisting students with stress management. Creating a caring and supportive environment in nursing schools not only improves the relationship but also has a favorable impact on the students' academic performance. In addition, it is important to make the students understand that psychological problems are same as physical problems and they need support and help when they have any of them. The current study included some limitations. Purposive sampling was used in the study, which limits the generalizability of the results. Another limitation is that the study was conducted in only one setting and geographical location, limiting the generalizability of the study's findings. Therefore, future research studies are recommended to address those limitations.

8. Conclusion

Nursing students experience stress during education. Academic stress has become a widespread issue in many countries. It is a serious problem that affect the student's mental and physical health. Thus, management of the condition becomes critical. Coping strategies have been found to be effective in lowering the stress among nursing students. Educator should provide social support for students which will help in improving the holistic health of the student. This would ultimately affect positively on the academic performance of students; and it would increase the overall productivity of the academic institution.

Funding

None

Acknowledgments

The author thanks the Deanship of Scientific Research at King Saud University, Riyadh, Saudi Arabia for their support.

Informed Consent

Obtained.

Provenance and Peer Review

Not commissioned; externally double-blind peer reviewed.

Data Availability Statement

Data are not shared due to privacy and ethical restrictions.

Competing Interests Statement

The author has no conflict of interest to declare.

References

- Alvarez, H. A. O., Provencio-Vasquez, E., Slavich, G. M., Laurent, J. G. C., Browning, M., McKee-Lopez, G., ... & Spengler, J. D. (2019). Stress and health in nursing students: The nurse engagement and wellness study. *Nursing Research*, 68(6), 453. <https://doi.org/10.1097/NNR.0000000000000383>
- Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's psychological stress and coping theory. In C. L. Cooper & J. C. Quick (Eds.), *The handbook of stress and health: A guide to research and practice* (pp. 351–364). Wiley Blackwell. <https://doi.org/10.1002/9781118993811.ch21>
- Chan, C. K., So, W. K., & Fong, D. Y. (2009). Hong Kong baccalaureate nursing students' stress and their coping strategies in clinical practice. *Journal of Professional Nursing*, 25(5), 307-313. <https://doi.org/10.1016/j.profnurs.2009.01.018>
- Ching, S. S. Y., Cheung, K., Hegney, D., & Rees, C. S. (2020). Stressors and coping of nursing students in clinical placement: A qualitative study contextualizing their resilience and burnout. *Nurse Education in Practice*, 42, 102690. <https://doi.org/10.1016/j.nepr.2019.102690>
- Del Prato, D., Bankert, E., Grust, P., & Joseph, J. (2011). Transforming nursing education: a review of stressors and strategies that support students' professional socialization. *Advances in Medical Education and Practice*, 109-116. <https://doi.org/10.2147/AMEP.S18359>
- Griese, B. (2017). Learning strategies in engineering mathematics. <https://doi.org/10.1007/978-3-658-17619-8>
- Gomathi, S., Jasmindehora, S., & Baba, V. (2017). Impact of stress on nursing students. *International Journal of Innovative Research and Advanced Studies*, 4(4), 107-110. <https://www.researchgate.net/publication/327013844>
- Hamadi, H. Y., Zakari, N. M., Jibreel, E., Al Nami, F. N., Smida, J. A., & Ben Haddad, H. H. (2021). Stress and coping strategies among nursing students in clinical practice during COVID-19. *Nursing Reports*, 11(3), 629-639. <https://doi.org/10.3390/nursrep11030060>
- Kivak, R. (2020). Transactional model of stress and coping. *Salem Press Encyclopedia*. https://searchworks.stanford.edu/articles/ers__121772932
- Kumar, R., & Nancy. (2011). Stress and coping strategies among nursing students. *Nursing & Midwifery Research Journal*, 7(4), 141-151. <https://doi.org/10.33698/NRF0134>
- Labrague, L. J., McEnroe-Petitte, D. M., Gloe, D., Thomas, L., Papathanasiou, I. V., & Tsaras K. (2017). A literature review on stress and coping strategies in nursing students. *Journal of Mental Health*, 26(5), 471–480. <https://doi.org/10.1080/09638237.2016.1244721>
- Lavoie-Tremblay, M., Sanzone, L., Aubé, T., & Paquet, M. (2022). Sources of stress and coping strategies among undergraduate nursing students across all years. *Canadian Journal of Nursing Research*, 54(3), 261-271. <https://doi.org/10.1177/08445621211028076>
- Madian, A., Abdelaziz, M., & Ahmed, H. (2019). Level of stress and coping strategies among nursing students at Damanhour University, Egypt. *American Journal of Nursing Research*, 7(5), 684-96.

<https://doi.org/10.12691/ajnr-7-5-3>

- Manti, P., Mastrogiannis, D., Mantzorou, M., Adamakidou, T., Mantoudi, A., Stefanidou, S., & Timmins, F. (2022). Stress levels and coping strategies among undergraduate nursing students in Greece during economic recession: a cross-sectional study. *Nurse Education in Practice*, 60, 103299. <https://doi.org/10.1016/j.nepr.2022.103299>
- Mansoor, F. (2022). *12 best transcription software for audio and video to text*. My E-Learning World. <https://myelearningworld.com/best-transcription-software/>
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, 9(3). <https://ojs.aishe.org/index.php/aishe-j/article/view/335/553>
- McCarthy, B., Trace, A., O'Donovan, M., Brady-Nevin, C., Murphy, M., O'Shea, M., & O'Regan, P. (2018). Nursing and midwifery students' stress and coping during their undergraduate education programmes: An integrative review. *Nurse Education Today*, 61, 197-209. <https://doi.org/10.1016/j.nedt.2017.11.029>
- Majrashi, A., Khalil, A., Nagshabandi, E. A., & Majrashi, A. (2021). Stressors and coping strategies among nursing students during the COVID-19 pandemic: scoping review. *Nursing Reports*, 11(2), 444-459. <https://doi.org/10.3390/nursrep11020042>
- Pulido-Martos, M., Augusto-Landa, J. M., & Lopez-Zafra, E. (2012). Sources of stress in nursing students: A systematic review of quantitative studies: Corrigendum. *International Nursing Review*, 59(2), 289. <https://psycnet.apa.org/record/2012-13361-028>
- Polit, D. F., & Beck, C. T. (2016). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.). Lippincott Williams and Wilkins.
- Rafati, F., Nouhi, E., Sabzevari, S., & Dehghan-Nayeri, N. (2017). Coping strategies of nursing students for dealing with stress in clinical setting: A qualitative study. *Electronic Physician*, 9(12), 6120. <https://doi.org/10.19082/6120>
- Shdaifat, E., Jamama, A., & Alamer, M. (2018). Stress and coping strategies among nursing students. *Global Journal of Health Science* 10(5):33-41. <https://doi.org/10.5539/gjhs.v10n5p33>
- Temiz, Z. (2020). Nursing students' anxiety levels and coping strategies during the COVID-19 pandemic. *Int Arch Nurs Health Care*, 6, 150. <https://doi.org/10.23937/2469-5823/1510150>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).