

Nursing Education and Stress

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ABSTRACT

It is necessary to provide a nursing education that includes sufficient theoretical and practical teaching to respond to society's health problems and needs and train nurses who are open to learning and aware of their social responsibility. Students may face various interpersonal and environmental stressors during their nursing education that affect their learning and performance. Students experience different levels of anxiety and stress during their nursing education. Nursing students' fear of failing exams and problems caused by the professor, team conflicts in the clinical environment, difficulties experienced during patient care, pain and suffering of patients, lack of knowledge, inability to cope in emergencies, the attitude of clinical staff to the student, theoretical training in the clinic problems such as incompatibility are cited as a source of stress. Students can give physiological, emotional, and behavioral reactions due to the stress they experience. Stress in the nursing education process can negatively affect students' learning and performance.

Individuals use different methods of coping with stress, depending on their characteristics. Effective use of coping strategies with stress contributes to the successful coping of stressful situations that individuals encounter in their lives. This review was conducted in order to draw attention to the stress experienced by students during their nursing education and the approaches to control this stress.

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Introduction

Nursing education is a training program that includes sufficient theoretical and practical training to respond to society's health problems and needs and to train nurses who are open to learning and are aware of their social responsibility.¹ Student experiences different

levels of anxiety and stress during their nursing education.² For nursing students, fear of failing exams and problems caused by the professor, team conflicts in the clinical environment, difficulties experienced inpatient care, pain, and suffering in patients, lack of knowledge, inability to cope



in emergencies, the attitude of clinical staff to the student, theoretical training in the clinic problems such as incompatibility are cited as a source of stress. Stress in the nursing education process can negatively affect students' learning and performance.³ In the event of intense stress, students' correct thinking and decision-making process deteriorate, their motivation is negatively affected, and their academic success may decrease. Therefore, it should be ensured that the stress in nursing students is kept at the desired level. The desired stress level is the low-stress level that has a motivating effect on students, can be controlled, and appropriate coping methods are used.⁴

When nursing students begin to take responsibility for patient care, they experience high-stress levels due to the intense academic and emotional demands. This stress experienced while the student is studying at school can continue when working as a professional nurse.⁵ This review was conducted to draw attention to students' stress during their nursing education and the approaches to control it.

Factors Causing Stress

During nursing education, students may be faced with various individual, interpersonal and environmental stressors, including physical, psychological, social, spiritual, clinical environment, and situational, affecting their learning and performance.⁶

Individual Factors

It is seen that individuals with high levels of psychological resilience experience less anxiety and have a higher sense of self-confidence.⁷ Psychological resilience is a concept that expresses individual characteristics such as premature birth, negative life experiences, and chronic diseases; It can also be affected by external factors at any stage of the developmental period. Many environmental factors such as family environment, social support, school success, peer relationships, and socioeconomic status affect resilience.⁸ Nursing students with limited resilience capacity may be more vulnerable to negative psychological consequences such as anxiety and depression.⁵ However, to be successful in the nursing profession, resilience capacity must be high.⁹

In their study of Chinese nursing students, Smith and Yang found that psychological well-being was impaired in senior students.¹⁰ Many researchers recommend training students on resilience before nursing education and developing strategies to learn how to cope with stress.¹¹ It is stated that there is a significant, positive, and weak relationship between the students' psychological resilience and academic self-efficacy who can identify the risk factors for students related to the concepts of psychological resilience and academic self-efficacy, or support the increase of their awareness of protective factors. It has been suggested that this situation may play an essential role in increasing psychological resilience in the face of difficulties experienced by student nurses.^{12,13}

Interpersonal Factors

In addition to the above-mentioned risk factors for psychological resilience, protective factors are also important. Protective factors are factors that prevent the occurrence of risky situations, reduce the effects of negative consequences, increase the individual's emotional and physical well-being, and ensure success in the individual's life. Individual/internal protective factors; includes characteristics such as being physically, mentally, and socially healthy, intelligence, high self-esteem, self-efficacy, self-confidence, effective communication, and problem-solving skills.¹³ Academic stress is thought to occur among nursing students due to the clinical learning environment and interpersonal relationships. Teacher-student relationships are another source of stress for many students, and adequate support should be provided for students in clinical practice.¹⁴ While providing this support to nursing students, it is necessary to establish positive interpersonal relationships, flexible, critical, and creative thinking, self-efficacy, using humor, emotional intelligence, and developing skills. This positively affects students' coping.¹⁵

Environmental Factors

Environmental protective factors can be listed as a supportive society, developed socioeconomic level, positive school relations, peer support, being in the social environment, and getting a good education. Therefore, resilience is a process

that is directly affected by the interaction of risk and protective factors.^{16,17} Clinical practice is an education in which students develop their problem-solving skills, learn about the multidisciplinary team approach, the principles associated with being in the clinic, the holistic approach, and the roles of their colleagues.⁶ However, although clinical practice areas are an indispensable part of students' professional knowledge and skills development, they are also an important source of anxiety and stress.³

Stress-Related Reactions

Students can give physiological, emotional, and behavioral reactions due to their stress.¹⁸

Physiological Reactions

Physiological reactions such as headache and back pain, sleep disturbance, gastrointestinal changes, fatigue, decrease in energy, tachycardia, increase in blood pressure, sweating in the palm, itching occurs.

Emotional Reactions

Emotional reactions such as lack of attention, decreased self-esteem, loss of meaning in life, lack of control or need for too much power, negative thoughts, difficulty in making decisions, anxiety, change in mental state, nervousness, decreased self esteem, burnout, crying and anger bursts.

Behavioral Responses

With withdrawal and socialization problems; They show behavioral responses such as alcohol, nicotine, or drug use, eating too little or too much, accident-prone and careless, impatient, aggressive (such as swearing, hitting, breaking), and impaired time management.

Approaches to Coping with Stress

Individuals use different methods of coping with stress, depending on their characteristics. Effective use of coping strategies with stress contributes to the successful coping of stressful situations that individuals encounter in their life.³ In Reeve *et al.*'s statement on undergraduate students' approach to cope with stress in the clinic, students stated that they feel better when

they talk to someone who is faced with the same situation.⁵ In the same study, it was found that students applied positive stress coping strategies such as meditation, running, taking a shower, and listening to music. Besides, psychological well-being can be increased by encouraging students to have a quality sleep, regular exercise, leisure time activities, and a balanced diet.¹⁹ Silva *et al.*²⁰, in their study, stated that nursing students should be informed that they can provide their sleep arrangements with cognitive and behavioral interventions and that programs that can help improve their sleep quality should be implemented. They stated that this situation is a determining factor in minimizing stress and anxiety related to academic performance.

Curriculum and theoretical knowledge play an essential role in reducing the stress experienced during clinical practice.² Educating students in the nursing curriculum to develop reasoning skills and to be proactive, resourceful, and collaborative is a factor that increases psychological resilience. It is believed that when strategies such as critical case analysis and clinical skills teaching sessions are applied with online education and information, nursing students will be able to overcome difficulties and maintain positive psychological well-being during their education.¹⁹ Stressful life events and coping styles experienced by the individual may differ according to culture and ethnicity. Hypersensitive individuals have emotional reactions, evaluate events as good or bad, and have passive and immature personality traits that fail to cope with stress. Individuals with assertive personality traits mostly use active planning, which includes rational steps and methods for problem-solving in coping with stress.^{21,22}

In cases such as the students' physical field problems in their educational institutions, the absence of skill laboratories, and the inability to perform the application in laboratory conditions, readiness cannot be provided, and a lack of self-confidence arises. In this case, clinical practice becomes a stressful factor for the student.²² Nursing education includes practical experiences such as clinical practice and simulation to develop students' professional competencies. Simulation and clinical practice are essential components of the nurse to nursing students to better prepare

for the transition from student to post-graduate work.²³ According to the pre-clinical learning needs, the simulation of practices such as patient care, intervention, and communication performed by the instructor in a planned, predictable and controllable environment enables students to develop an interprofessional team approach, allow students to make mistakes, and learn from them, and increase the skill through repeated practice.²³ Thus, the student's stress level regarding clinical practice decreases.²⁴ To increase nursing students' success during clinical practice, it is recommended to increase simulation training before and during clinical practices and implement resilience-building strategies (such as reflection, training, and support) in the nursing curriculum.¹¹

Problems may also occur due to the high number of students in clinical practice, other faculty students in the same clinical practice environment, the lack of sufficient application areas, and the team's acceptance by the team reduced. This situation causes an increase in the stress level in nursing students.²² Ensuring the effective use of clinical application areas causes a decrease in students' stress levels.¹⁸ The use of different nursing education models such as the Collaborative Clusters Training Model (CCTM) is recommended for effective use of clinical practice areas. The Collaborative Clusters Education Model (CCEM) is an educational model that allows students to easily follow their clinical practice experience, position students close to the clinical nurse, and present their experiences to learners individually and in small groups by an experienced nurse or instructor.²⁵

Instructors working in nursing programs should help students successfully cope with stress during their undergraduate education. Instructors should know their roles in support systems developed for coping with stress for students. Reeve *et al.*'s study, the student statement, "This was the death of my first patient, and I felt that my clinical instructor did not understand how the incident affected me", expresses the clinical instructor's ignoring the undergraduate student's affections towards death, is a good example showing the importance of the role of the instructor in support systems.⁵

Conclusion

During nursing education, students may be faced with various individual, interpersonal and environmental stressors, including physical, psychological, social, spiritual, clinical environment, and situational, affecting their learning and performance. This stress may occur due to lack of professional knowledge and skills, fear of making medical mistakes, heavy workload, social problems, exposure to the death of patients. Students can give physiological, emotional, and behavioral reactions due to the stress they experience. Stress can cause disruption in the correct thinking and decision-making process, decrease motivation, and decrease academic success. It can be suggested that nursing students should be trained in the curriculum to develop reasoning skills and be proactive, resourceful, and collaborative from the first years of nursing education, including psychological resilience, and continue at regular intervals. Thus, it is recommended to teach the students coping methods with stress and implement stress reduction interventions.

Conflict of Interest

Authors have no conflict of interest to declare.

Authors' Contribution

Study Conception: HY, YK; Study Design: HY, YK; Literature Review: HY, YK; Manuscript Preparation: HY, YK; Critical Review: HY.

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