Assessment Of The Average Stress Level Among Nursing Students

Msc. Enxhi Hasani[1],

[1](Department Of General Training And Vocational Development/ "Barleti" University, Tirana, Albania)

Abstract:
Background: Stress can be defined as a state of worry or mental tension caused by a difficult situation. Everyone experiences stress to some degree, and how we respond to it makes a big difference to our overall well-being. Students pursuing nursing studies may have an increased level of stress compared to other students. In different studies, a moderate level of stress was generally assessed for about half of the nursing students. The purpose of this study was to determine the average stress level experienced by nursing students in Albania and its main causes.
Materials and Methods: A cross – sectional study was conducted during March 2024 – April 2024 among 37 nursing students at "Barleti" University. A non – probability quota sample was used. To determine the stress level was used the "Student Stress Inventory", or SSI. A descriptive statistic was conducted using Excel.
Results: Based on the scoring system, 5% of students had a severe level of stress, 46% of them had a moderate level of stress and 49% had a mild level of stress. The lowest recorded stress value is 45 and the highest value is 150. What seems to be the main concern is academic stress in compliance with other studies' findings.
Conclusion: This study shows a moderate level of stress where the main problems are academic and environmental stress. Other studies can be done to assess on a larger scale the average stress level which may also suggest appropriate intervention programs in the future.
Key Word: Stress level; Nursing Student

I. Introduction

Stress can be defined as a state of worry or mental tension caused by a difficult situation. Everyone experiences stress to some degree, and how we respond to it makes a big difference to our overall well-being.[1] Students pursuing nursing studies may have an increased level of stress compared to other students.[2] This information serves as an incentive to evaluate the stress level of these students, taking into consideration the impact it has on general well-being and academic results.

In some studies, conducted to assess the average level of stress among nursing students, a moderate stress level was generally assessed for about half of them.[3, 4, 5, 6, 7]. Meanwhile, in a study conducted in Turkey, it was determined that the stress experienced by students during their nursing education was slightly above the average level.[8] According to another study conducted in Alexandria, the level of stress was high, related not only to the academic aspects but also to their health in general.[9]

A study was conducted to compare stress levels among nursing students in Albania, Brunei, the Czech Republic, Malta, and Wales, where it was found that nursing students have a lot in common, while still retaining individual cultural characteristics related to stress throughout their course of study. [10]

The main cause of stress is academic related, such as studying overload and the fear of dealing with the unknown of clinical situations, and generally there are no differences in the stress levels according to the academic year.[11, 12]

There are a number of instruments that can be used to assess stress levels. One of them is the "Student Stress Inventory", or SSI. The questionnaire's reliability and validity have been tested using Cronbach's alpha, with a result greater than 0.7. The tool is highly reliable for carrying out research work. [13]

The purpose of this study was to determine the average level of stress experienced by nursing students in Albania and its main causes.

II. Material And Methods

This cross-sectional study was carried out on nursing students of the Department of Technical Medical Sciences at the Faculty of Medical Sciences at "Barleti" University in Tirana.
Study Design: Cross–sectional study

Study Location: This study was conducted in the Department of Technical Medical Sciences at the Faculty of Medical Sciences at "Barleti" University

Study Duration: March 2024 to April 2024 (during the second semester of an academic year)

Sample size: 37 students

Sample selection: A non-probability quota sample was selected for data collection. The aim was to include in the study 30 people who meet the criterion: "student studying nursing". 37 students who met the criteria agreed to participate in the study.

Procedure methodology

There are a total of 14 public universities and 26 non-public universities in Albania[14]. Of these, nursing study programs are offered by several universities, of which seven are public and operate in Tirana, the capital, and in other cities of Albania, and nine of them are non-public, mostly in Tirana and only one of them in Vlora. Most of the students are concentrated in the universities of Tirana and are from all the cities of Albania. During their student life, most of them reside in public students' dormitories, or in rented houses. All the nursing students who participated in this study are from "Barleti" University.

Questionnaires were filled in individually. Oral consent was obtained in advance. The evaluation instrument that was used is the "Student Stress Inventory", (SSI). The questionnaire's reliability and validity have been tested using Cronbach's alpha, with a result greater than 0.7 making this tool reliable for carrying out research work. This questionnaire includes 40 questions in total, of which 10 assess physical stress, 10 questions are related to interpersonal relationships, 10 questions are related to the academic stress and 10 questions are related to environmental stress. For each, it is asked how often they are encountered in an ordinal order: "never", "somewhat frequent", "frequent", and "always"; each of these answers is marked with the values 1, 2, 3, and 4, respectively.

Statistical analysis

The data was analyzed using Excel and descriptive statistics were conducted to show the frequency of the results. For each student, the total amount of points has been calculated. According to this measuring instrument, values from 40 - 80 total points indicate mild stress, values from 81 - 121 indicate moderate stress, and values from 122 - 160 indicate severe stress.

III. Result

In total, 37 interviewees were included in the study. Based on the scoring system, 5% of students had a severe level of stress, i.e. within the range of values 122 - 160. 46% of them had a moderate level of stress, which corresponds to a value of 81 – 121, and 49% had a mild level of stress, i.e. they are in the range of values 40-80%. The lowest recorded stress value is 45 and the highest value is 150.
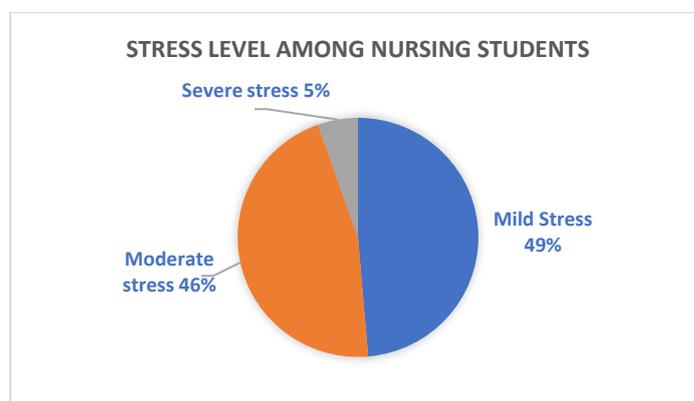
In the first 10 questions, it is asked about the frequency of physical stress issues such as headache, lower back pain, sleeping problems, difficulty breathing, worrying about something, nausea and/or stomach pain, feeling tired, problems with sweating or hands that sweat, cold, flu, fever, sudden weight loss. Results are shown in table no 1.

Table no 1: Frequency of physical stress

Never	Somewhat frequent	Frequent	Always	Total
26%	37%	25%	12%	100%

The other 10 questions are related to interpersonal relationships. Specifically, the stress that comes from the high expectations of parents, relationships with friends, and the support of teachers according to the perception of students. According to table no 2, we see that 20% answered "always" to these questions, while the main part answered "never" (49%).

Table no 2: Frequency of interpersonal relationship stress

Never	Somewhat frequent	Frequent	Always	Total
49%	24%	7%	20%	100%

The following 10 questions are related to academic aspects; from financial problems related to school expenses, to the stress of studying overload, time management between academic commitments and personal life, as well as stress related to exams, coursework and presentations. Referring to the table no 3; 41% of the students have checked the answer "somewhat frequent" and 22% "frequent". Meanwhile, 14% always experience stress related to the academic part, and only 23% never.

Table no 3: Frequency of academic stress

Never	Somewhat frequent	Frequent	Always	Total
23%	41%	22%	14%	100%

Among these stressors, the financial problems and the stress of the exams are ranked first. For each of them, 86% answered with "somewhat frequent", "frequent" and "always". This is followed by 84% who answered with "somewhat frequent", "frequent" and "always" for questions about time management between academic and extracurricular activities as well as stress from dealing with difficult subjects at the university.

The last 10 questions are about environmental stress. These are questions about the conditions of the dormitory or the rented house the students live in, including pollution, disorder, noise, safety, climate but also transportation. In table no 4, we see that 32% do not have such problems at all, and 34% only "somewhat frequent". While 21% are "always" stressed by the environment and 13% "frequently".

Table no 4: Frequency of environmental stress

Never	Somewhat frequent	Frequent	Always	Total
32%	34%	13%	21%	100%

In Table no 5, all these groups of stressors are summarized in a single table to facilitate the comparison of the results.

As we can see, the stressors that have more "always", "frequent" and "somewhat frequent" answers are the academic ones, followed by physical concerns. This is followed by those related to the environmental stress. For almost half of the participants, there are no interpersonal problems.

Table no 5: Summary of the frequency of each stressors' group

Stress/ Frequency	Never	Somewhat frequent	Frequent	Always
Physical stress	26%	37%	25%	12%
Interpersonal relationship	49%	24%	7%	20%
Academic stress	23%	41%	22%	14%
Environmental stress	32%	34%	13%	**21%**

IV. Discussion

From the findings of this study, we see that the prevalence of stress among nursing students is for almost half of them a moderate level. A low level of stress prevails (49%) and only 5% report a high level of stress. This result is similar to other studies [3, 4, 5, 6, 7], in which the main part of the students studying nursing, more or less than half of them, have a moderate level of stress.

The data of the study shows that a significant part (over 50%) had physical symptoms related to stress; while when it comes to interpersonal relationships, almost half of them do not have such problems, but 20% chose the alternative "always", compared to 12% who gave this answer for physical symptoms.

What seems to be the main concern is academic stress, as this indicator has the lowest percentage of the "never" alternative of all question categories. Other studies have also shown that the main stresses are those related to academic aspects.[11]

Since financial aspects, exams and difficult subjects and time management remain important stressors, and since all these can have an impact on general well-being and academic performance, targeted interventions should be made to support them.

Some suggestions would be: the implementation of support mechanisms such as financial aid programs; exam preparation workshops and seminars; trainings on time management; or services to help with studying the

most difficult subjects. In addition, issues related to the dormitory where students live remain a problem for them, in aspects such as pollution, clutter, and noise, as well as related to public transport. These are issues that can be addressed in the future to reduce stress in young nursing students and increase their quality of life.

Study Limitations: Since the study was carried out in a non-probability quota sample, the results obtained from this study can be evaluated and interpreted only for the selected sample and cannot be representative of the stress values in the entire study population, therefore to nursing students. However, the results obtained from this study can be indicative of raising some study hypotheses and encourage the realization of other studies that include larger samples of students from many universities that offer this study program. Future research can also assess the level of stress for students studying in other study programs to make comparisons of the level of stress, or comparisons can be made with other countries.

V. Conclusion

Stress has a significant impact on the overall well-being, physical and mental health, and academic outcomes of nursing students. This study shows a moderate level of stress where the main problems are academic and environmental stress. Other studies can be done to assess on a larger scale the average level of stress and the main factors that influence it, which may also suggest appropriate intervention programs in the future to provide adequate support to students during their academic journey.

References

[1].   Https://Www.Who.Int/News-Room/Questions-And-Answers/Item/Stress
[2].   Reeve Kl, Shumaker Cj, Yearwood El, Crowell Na, Riley Jb. Perceived Stress And Social Support In Undergraduate Nursing Students' Educational Experiences. Nurse Educ Today. 2013; 33:419–24
[3].   Zheng, Yan-Xue Msn; Jiao, Jia-Ru; Hao, Wen-Nv Mb, Rn. Stress Levels Of Nursing Students: A Systematic Review And Meta-Analysis. 2022, Doi: 10.1097/Md.0000000000030547
[4].   Javaid Ahmad Mir's Lab. Stress Level Among Nursing Students. 2021. Doi: 10.13140/Rg.2.2.15934.82248/1
[5].   María Dolores Onieva-Zafra, Juan José Fernández-Muñoz, Elia Fernández-Martínez, Francisco José García-Sánchez, Ana Abreu-Sánchez & María Laura Parra-Fernández. Anxiety, Perceived Stress And Coping Strategies In Nursing Students: A Cross-Sectional, Correlational, Descriptive Study. 2020. Doi Https://Doi.Org/10.1186/S12909-020-02294-Z
[6].   Hala Mohamed Sanad. Stress And Anxiety Among Junior Nursing Students During The Initial Clinical Training: A Descriptive Study At College Of Health Sciences, University Of Bahrain. 2019. Doi: 10.12691/Ajnr-7-6-13
[7].   Baluwa, M. A., Lazaro, M., Mhango, L., & Msiska, G. (2021). Stress And Coping Strategies Among Malawian Undergraduate Nursing Students. Advances In Medical Education And Practice, 12, 547–556. Https://Doi.Org/10.2147/Amep.S300457
[8].   Sibel Senturk, Nevin Dogan. Determination Of The Stress Experienced By Nursing Students' During Nursing Education. 2018.
[9].   Fathia Khamis Kassem, Rasha Abd El Hakim Abdou. Stress, Coping Strategies And Perceived Faculty Support Among Nursing Students In Alexandria. 2015.
[10].   Philip Burnard 1, Deborah Edwards, Kim Bennett, Hjh Thaibah, Valerie Tothova, Donia Baldacchino, Petrit Bara, Jetona Mytevelli. A Comparative, Longitudinal Study Of Stress In Student Nurses In Five Countries: Albania, Brunei, The Czech Republic, Malta And Wales. 008 Feb;28(2):134-45. Doi: 10.1016/J.Nedt.2007.04.002. Epub 2007 Jun 7.
[11].   Pulido-Martos, Manuel & Landa, José & Lopez-Zafra, Esther. (2012). Sources Of Stress In Nursing Students: A Systematic Review Of Quantitative Studies. International Nursing Review. 59. 15–25. 10.1111/J.1466-7657.2011.00939.X.
[12].   Demet Uysal. Stress Factors And Stress Levels Of Students Enrolled In The Fundamentals Of Nursing Course. İskele Health Center, Trnc Health Ministry, North Cyprus
[13].   Mohamed Arip, Mohammad Aziz Shah. (2018). Student Stress Inventory (Ssi) Development, Validity And Reliability Of Student Stress Inventory (Ssi).
[14].   Https://Ualbania.Al/Pages/Universitetet.Html