Original Paper

Stress in Romanian First Year Nursing Students

FLORENTINA NECHITA[1], C.T.STREBA[2], C.C.VERE[2], D.NECHITA[1], I.ROGOVEANU[2]

[1]Center for Counseling and Occupational Orientation, University of Medicine and Pharmacy of Craiova
[2]Internal Medicine and Gastroenterology Department, University of Medicine and Pharmacy of Craiova

ABSTRACT: Objective: This study aims to analyze the stress of the students from the nursing department within the Medical Midwife and Nurse School from our University. **Subjects and methods**: For this purpose a questionnaire, comprising the factors the students consider important for their academic preparation during the first year, was elaborated and applied to 100 students. **Results**: The result analysis revealed no significant differences as far as the genders of the subjects were concerned. In the same way, the prior academic background or the student experience did not influence the level of stress. The social and economic factors seem to be involved in choosing a career and thus influence the academic stress. For this purpose, a questionnaire comprising the factors the students consider important for their academic preparation during the first year, was elaborated and applied to 100 students. We used the Students t-test to determine differences between groups and considered $p<0.05$ as significant. **Conclusions**: The stress equally affects the nursing department students, regardless of their gender or prior studies. Social and economic factors play a role in adapting to a new academic environment, having higher expectations and requirements.

KEYWORDS: *stress, nursing, students, gender*

Introduction

The medical nursing represents a field characterized by strong emotions, dominated by the care for the patient and the total attention they should always receive from the medical team, but mostly from the team's main representative in relation with the patient, the medical nurse. Learning to practice medical nursing means, among many others, to deal with one's own states of mind and emotions, in order to reach the personal and professional maturity the job requires. This, in turn, involves a high psychological effort which, sooner or later, can lead to depression, anxiety or stress. This occurs especially because learning to practice this job means, among others, to accept death, beyond its significance as a clinical effort, but as a natural phenomenon, part of everyday life [1], and learning to face the stress which such a situation and all other daily interactions generate is a continuous challenge. [2]. This is why the individual or organizational interventions meant to diminish the stress and its effects have to be based on the knowledge and identification of the stress-inducing factors which affect the professional's wellbeing [3].

The Aim of the Study

This study aims at investigating the stress in first year students of the Medical Nursing Department within the Medical Midwife and Nurse Faculty from Craiova, by collecting answers to the following questions:

Is stress higher in female subjects than in male ones?

Are there any differences regarding the level of stress as far as the graduated high school courses are concerned? Is yes, are the subjects who graduated humanistic courses more stressed than those who graduated science courses? And are the women who graduated humanistic courses more stressed than those who graduated science courses?

Are there any differences between those who are following courses of a second faculty than those who are students for the first time?

Material and Methods

The questionnaire used for this study consists in 15 items and it was elaborated based on the responses provided by a sample group of 20 subjects, first year students of the Medical Midwives and Nurse Faculty, who answered to the question: "What causes would you identify so as to consider the first year of faculty difficult?" Based on the results of the frequency analysis, the items were elaborated and then pre-tested on a sample group of another 20 subjects, students at the same faculty, with an equal distribution of the two genders. The subjects were provided with a scale from 1 to 6, where 1 is totally disagree, 2 partially disagree, 3, rather disagree, 4, rather agree, 5 partially agree, 6 totally agree. The value of the alpha-Cronbach coefficient calculated by considering all 155 items was 0.76. The t test for independent

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sample groups was used and an alpha below .05 was considered significant.

The Sample Group

For this research, 100 subjects were used, of which 28 male subjects and 72 female subjects. From these, 44 graduated a humanistic high school and 56 a science high school; for 76 of them this is the first faculty whose courses they are following, while for 24, the second.

Results

The effect of the biological gender variable on the stress level variable

By applying the t test for independent sample groups, no statistically significant differences were recorded for the stress level ($t = 1.863$; $p = 0.067$; $p > 0.05$), the average of male subjects is 5.11, while the average of female subjects is 4.86 (Table 1).

Table 1. The effect of the biological gender variable on the stress level variable

	Male	**Female**
Average	5.11	4.86
Standard Deviation	0.55	0.72
C.V. (%)	10.76%	14.81%
t=	1.863	
p - Student's t test	0.067	- NS

The effect of the graduated high school profile variable on the stress level variable

The t test for independent sample groups was applied in order to verify the effect of the graduated high school profile variable on the level of stress. No significant differences were recorded ($t=1.045$; $p=0.299$, $p > 0.05$), meaning that the subjects who graduated humanistic high school courses experience the same level of stress like the subjects who graduated science high school courses (Table 2).

Table 2. The effect of the graduated high school profile variable on the stress level variable

	Humanistic	**Science**
Average	5.01	4.87
Standard Deviation	0.58	0.76
C.V. (%)	11.58%	15.61%
t=	1.045	
p - Student's t test	0.299	- NS

The effect of the prior university studies variable on the stress level variable

The t test for independent sample groups was applied in order to verify the effect of the prior university studies variable on the level of stress. No significant differences were recorded ($t=0.072$; $p=0.943$, $p > 0.05$), meaning that the subjects who are currently following courses of the first faculty experience the same level of stress like the students who are following the courses of a second faculty (Table 3).

There are no significant differences regarding the stress level of the female subjects who graduated a high school with a humanistic profile compared to the female subjects who graduated a high school with a science profile ($t= 0.409$; $p = 0.685$).

There are no significant differences regarding the stress level of the male subjects who graduated another faculty compared to the male subjects who currently following the courses of the first faculty ($t = 1.11$; $p = 0.289$).

Table 3. The effect of the prior university studies variable on the stress level variable

	First faculty	**Second faculty**
Average	4.93	4.94
Standard Deviation	0.73	0.54
C.V. (%)	14.81%	10.93%
t=	0.072	
p - Student's t test	0.943	- NS

Discussions

The majority of the studies performed on students, including on those who study the medical field, reveals that the women have the tendency to be more stressed than men [4,5], and the studies which recorded equal levels of stress explained this through the different ways the individuals interpret the same stressing factors. For men, showing you are stressed is a sign of weakness, while for women, the stressing situations have a higher negative impact. [6] Such is the explanation for the current case. Furthermore, in a field in which the number of women is significantly higher and the job requirements are more easily fulfilled by members of this gender, considering the women in the medical field tend to be perceived as more communicative, more easily to approach and better handling the social skills which involve maintaining relations through communication [7], men can face new challenges which would stretch them even more. Also, other studies have

shown there are no differences regarding the stress level in the men and women who study in a medical profile faculty, as the identified causes are diverse, ranging from food habits to learning strategies. [8].

One of the myths the teaching in medical faculties from Romania is founded on is that students who graduated high school science classes perform better during the faculty than those who graduated a humanistic high school. The basis of this assumption rested on the conviction that the number of curriculum topics which are currently classified as within the science field and are part of the program is higher than the number of humanistic topics and, implicitly, those who are more accustomed with them and previously obtained positive results at them will also perform better during faculty. Until now, there is no such research as to study the correlation between the two variables. If we assume that this belief is based on the experience the student has with this type of requirements and work style of the named academic topics, then we can use, for analysis purposes, the idea that coping strategies which were successfully used in the past form a general stable style of adapting to that sort of issues. [9]

Moreover, such an optimistic and confident attitude ("I've been through this before and I know how to handle it" or "I know I'm good at this topic") diminishes the stress experienced during the current situation which seems familiar. [10]

The results from this study refuted the myth, as the students experienced the same level of stress, regardless of the high school they had graduated. This aspect can also be explained by the higher difficulty level of the studied topics, as well as by the different work rhythm in the first year, much more alert than the one during high school. One can notice a fracture between the almost parentlike style the high school students are treated by the teachers and the rather independent one of the university professors, where the learning responsibility falls largely on the students. Besides, being a student also involves having the capacity to memorize large amounts of information in a relatively short time, without being able to practice the mechanical learning from high school.

Starting from the same assumptions according to which prior experience in a certain field forms a valid and stable work strategy to be applied in similar situations, ne expected the students who graduated another faculty to have a lower level of stress in comparison with those who experience being students for the first time. The results showed there are no significant differences, as the prior experience had no influence whatsoever. If we are to take into consideration the economic and social factors, then we may be able to explain this phenomenon as result of the lack of concordances between educational offers, in general, and the requirements on the labor market in Romania, as there are still attempts to reconcile the two aspects. Thus, there are graduates in over-saturated filed, who, at a certain moment, decide to reorient themselves towards others where there are more job opportunities, in the country or abroad. This aspect can generate, along with the frustration of giving up the profession one initially desired, as frustration is one of the important causes of stress [10], the pressure of financial and social discomfort stemmed from the impossibility of finding a workplace or a better paid one. The new requirements, the high expectations from the more experienced students, coming from themselves or from those around, have been identified as a source for stress in other studies as well, which emphasize the idea that the level of stress will increase in the following years. [11]. Because the pressure is high and of a relatively new nature, it is mandatory to employ an additional preparation of the students, aimed at adapting them to both the current educational requirements and to the future professional ones, so that, besides the basic preparation, the nursing department students would benefit from strategies which will enable them to face challenges while preserving their health. In addition to this sort of pressure, previous research have shown that, for the nursing department students, learning is difficult due to the large amount of time spent in school, the large workload and the uncertainty regarding their own necessary competencies and abilities, but also due to the difficulty of coping with the patients' suffering or death. [11]

Similarly, no differences were recorded as far as the subjects' genders were concerned, neither within the same gender category in these two results, which determine us to favor the external factors, especially the social and economic ones [12], some of them driving the students towards choosing a certain faculty.

Conclusions

The stress equally affects the nursing department students, regardless of their gender or prior studies. The pressure of specific

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economic and social factors seem to be the most important in this respect, along with the pressure of the new tasks and abilities or competencies which have to be learned in an environment which allows for very few mistakes.

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Corresponding author: Costin Teodor Streba, Internal Medicine and Gastroenterology Department, University of Medicine and Pharmacy of Craiova, St. Petru Rares No. 2, Craiova 200349, Dolj, Romania.
E-mail: costinstreba@gmail.com