

DIFFICULT SITUATIONS AT NURSES' WORK AND STRATEGIES FOR COPING WITH STRESS

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Abstract: Stress is an inherent part of every person's existence. Due to the nature of the work that nurses do, there may be much more of it than the average person. The existence of strategies and styles of coping is very helpful, which is why it is so important which one is chosen.

Purpose of the work: Assessment of the occurrence of stress and stress coping strategies among nurses.

Material and method: The study included 315 nurses working in Małopolska. The study was conducted from December to March 2024. The research used the Perceived Stress Scale (PSS-10), the Mini-COPE questionnaire and an original survey questionnaire.

Results and Conclusions: Sociodemographic factors influencing the occurrence of stress among nurses are age and place of residence. Age, marital status, education and work experience influenced the methods of coping with stress among respondents. The most common strategy for coping with stress in the study group was active coping and the least frequently used strategy was taking psychoactive substances.

Key words: stress, nursing staff, stress coping strategies

1. INTRODUCTION

In the 21st century, stress is an inseparable element of every person's existence. It appears in many areas of everyday life. The problem of stress affects everyone. There is no individual who is exempt from feeling this stimulus. Today, society is exposed to the rapid development of the world, medicine, technology, etc. Not everyone can keep up with it, which is why, to such a large extent, we increasingly encounter the unpleasant effects of stress.

Stress is our body's reaction to unpleasant, unforeseen events. It is the body's mental and physical response to stressors that appear in our lives. Stressful situations occur with varying intensity. There are so-called high-risk professions, in which they occur much more often. One of them is the profession of a nurse. Working with people, being responsible for their safety, health and life, is a big mental burden for nurses. Low job prestige and staff shortages are just a few of the factors they have to deal with[1].

The effects of stress that people experience are common and are becoming more frequent. Lack of sleep, appetite, chest pain, stomach problems, rapid breathing are the most common symptoms observed in response to stress[2].

Stressors can be presented in three levels of intensity. The lightest include situations that occur in everyday life, such as quarrels with loved ones, failures of household appliances. The medium group includes events from private life, such as job loss, death of a loved one, sudden departure. The last group includes extreme or traumatic events. These include, for example, death of a very close person, life-threatening illness, physical and psychological violence. Looking at the work of nurses, they are the ones who are on the front line when it comes to these events. Therefore, they are at the center of not only their own stress, but also that of other people. The stressors listed above are so strong that an individual cannot remain indifferent to them. Therefore, it can be concluded that the stress factor in the work of nurses is the nature of the work they chose when choosing their career path[3,4].

Among all the above-mentioned factors considered as stress-inducing, the most important ones include the nature of work, interpersonal relations, and physical working conditions. The specificity of

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a nurse's work is associated with stress and its factors. They are inevitable in the fight for human life and health [5].

The goal of the study was assessment of the occurrence of stress and stress coping strategies among nurses.

1.1. Material and methods

The research method used in the work was a diagnostic survey. The research technique was a questionnaire. Two standardized research tools were used in the research work: Perceived Stress Scale (PSS-10), Mini-COPE questionnaire and the author's survey questionnaire.

The obtained results of the conducted surveys were statistically analyzed using Statistica software version 13.3. This tool was used to calculate descriptive statistics for the Perceived Stress Scale (PSS-10) and the final scales of the MINI-COPE questionnaire. Tests of compliance with the normal distribution were performed, and tests of dependencies between variables were calculated, i.e. the Mann-Whitney U test, Spearman's rank correlation tests, Kruskal-Wallis tests and post hoc tests verifying possible differences between categories. The typical value of $\alpha=0.05$ was assumed as the level of significance.

1.2. Organization and course of research

The survey was conducted from December to March 2024. The survey was addressed mainly to nurses working at the Specialist Hospital in Nowy Sącz and nurses in the second year of master studies at the Tarnów Academy. The survey was conducted electronically. The survey questionnaire was completed by 315 people. Respondents were informed about the voluntary and anonymous nature of the survey and about the possibility of resigning from completing it at any time.

2. RESULTS

The answers given to the questions of the PSS 10 questionnaire allowed to create a scale of perceived stress among the nurses surveyed. The scale is in the range of 0-40 points, and the higher its value, the greater the intensity of the perceived stress. Descriptive statistics presented in the table below (Table I) indicate that the average of this index is 19.65 points (with a standard deviation of 5.43 points). The respondent with the highest stress value obtained 34.00 points.

Table 1 - Scale of perceived stress among the respondents (PSS 10) – descriptive statistics [n=315]

Tested variable:	M	Me	Min.	Max	SD	SW
Perceived stress scale (0-40 points):	19.65	21.00	0.00	34.00	5.43	0.977

M – mean; Me – median; Min. – lowest value of the distribution; Max. – highest value of the distribution; SD – standard deviation; SW – Shapiro-Wilk test; p – statistical significance; * - $p < 0.05$

With respect to gender, women had a higher mean of the perceived stress index (19.77 points). The Mann-Whitney U test was used to examine the relationship between variables. Its result was not statistically significant ($p>0.05$). Therefore, it should be stated that gender does not affect the level of perceived stress.

Taking into account the age categories of respondents, the highest level of perceived stress was recorded among respondents under 30 years of age (21.11 points). In turn, the lowest average score was recorded among respondents in the age group of 41-50 years (17.79 points) ($p<0.05$). The

correlation was negative and had a low impact. This means that the higher the age of the respondents, the lower the level of perceived stress.

Table 2 - Scale of perceived stress and age of respondents [n= 315]

Age:	N	Perceived stress scale (0-40 points):				
		M	Me	Min.	Max.	SD
under 30 years old	132	21.11	21.00	10.00	34.00	5.42
31-40	63	20.00	21.00	12.00	27.00	4.10
41-50	87	17.79	19.00	0.00	28.00	6.29
more than 50	33	18.00	19.00	12.00	24.00	3.69
Statistical significance:		$r_s = -0.244317$, $p = 0.012014^*$				

M – mean; Me – median; Min. – lowest value of the distribution; Max. – highest value of the distribution; SD – standard deviation; r_s – Spearman's rank correlation coefficient; p – statistical significance; * - $p < 0.05$

Next, the relationship between the level of perceived stress and the place of residence of the respondents was examined. The higher level of perceived stress was observed in rural residents (20.54 points) than in urban residents (17.94 points) ($p < 0.05$). This means that the place of residence differentiates the scale of perceived stress among respondents.

Table 3 - Scale of perceived stress and place of residence of the respondents [n= 315]

Domicile:	n	Scale of perceived stress (10-50 points):				
		M	Me	Min.	Max.	SD
Village	207	20.54	21.00	0.00	34.00	5.47
City	108	17.94	18.50	7.00	29.00	5.00
Statistical significance:		$Z = 2.457329$, $p = 0.013998^*$				

M – mean; Me – median; Min. – lowest value of the distribution; Max. – highest value of the distribution; SD – standard deviation; Z – Mann-Whitney U test ; p – statistical significance; * - $p < 0.05$

Depending on the marital status of the respondents, the average score of the perceived stress scale was the highest among people in an informal relationship (21.50 points), while it was definitely the lowest among widows and widowers (10.25 points) ($p > 0.05$). In the case of education, the highest average of the perceived stress index was characteristic of respondents with the education of a nurse/certified nurse (20.20 points) ($p > 0.05$). The study also proved that a higher average score of the perceived stress scale index was characteristic of respondents working in the surgical ward (21.35 points) ($p > 0.05$). Taking into account the category of seniority, the highest level of perceived stress was noted among respondents working for 1 to 3 years (20.87 points) ($p > 0.05$).

The results indicate a lack of statistical significance ($p > 0.05$) between the use of individual strategies and gender. The results indicate that there is a significant difference ($p > 0.05$) between the

use of the strategies of venting, turning to religion and sense of humor and the age of the respondents. With the age of the respondents, the frequency of using the strategy of turning to religion increases, while the use of venting and sense of humor decreases.

Table 4 - Stress coping strategies used by the respondents (Mini-COPE) and age [n=315]

Strategies:	The relationship between the use of stress coping strategies and age:	
	r_s	P
planning	0.036163	0.714185
active coping	0.172977	0.077631
seeking instrumental support	-0.067014	0.496989
seeking emotional support	-0.043836	0.657030
positive revaluation	0.136044	0.166423
doing something else	-0.109205	0.267455
acceptance	0.020329	0.836915
discharge	-0.278939	0.003958
blaming yourself	-0.103338	0.294160
turn to religion	0.199226	0.041600
sense of humor	-0.210095	0.031466
denial	0.023185	0.814390
cessation of action	-0.104255	0.289877
use of psychoactive substances	-0.180060	0.066057

The obtained results suggest no significant difference ($p>0.05$) between the strategies used and the place of residence and place of work of the respondents, at the same time there is a statistically significant ($p<0.05$) difference between the use of the strategies of positive reevaluation, venting, self-blame, turning to religion and denial and the marital status of the respondents, and between the use of the strategy of seeking instrumental support and occupying oneself with something else and the level of education of the respondents. An increased frequency of using these strategies is observed with the increase in the level of education of the respondents.

The obtained results indicate the existence of a statistically significant ($p<0.05$) relationship between the use of the strategies of active coping, positive reappraisal, venting, turning to religion, sense of humor and taking psychoactive substances, and the work experience of the respondents. The higher the work experience of the respondents, the more often they used the strategies of active coping, positive reappraisal and turning to religion, while they less often chose venting, sense of humor and taking psychoactive substances.

Table V. Stress coping strategies used by the respondents (Mini-COPE) and length of service [n=315]

Strategies:	The relationship between the use of stress coping strategies and length of service:	
	r_s	P
planning	0.058801	0.551284
active coping	0.216628	0.026444
seeking instrumental support	-0.009360	0.924502
seeking emotional support	-0.037561	0.703641
positive revaluation	0.196840	0.044157
doing something else	-0.133944	0.173124
acceptance	-0.009619	0.922422
discharge	-0.219016	0.024787
blaming yourself	-0.107305	0.275919
turn to religion	0.216458	0.026565
sense of humor	-0.249971	0.010119
denial	0.010911	0.912040
cessation of action	-0.046255	0.639393
use of psychoactive substances	-0.195697	0.045426

3. DISCUSSION

Difficult situations in the work of a nurse, as well as in any other medical profession, are its inseparable element. All medical professions are focused on protecting health and life, as well as preventing diseases of other people, and at the same time they themselves take on mental and physical burdens, the consequences of which are health, personal and social problems [6]. Stress in professional work causes reduced motivation, helplessness and even illness. It is important what factors cause stress. If the task is possible to complete, stress is positive, while if stress exceeds the limits of possibility, it is so-called negative stress. The existence of strategies and styles of coping with stress is very helpful. If they were not present, the body would not be able to function, due to the weakening resulting from the reaction to a difficult situation. The task of the strategy is to restore the disturbed harmony [7].

The analysis of the studies showed that there are sociodemographic factors that affect the experience of stress among nurses. It can be stated with full certainty that it is age. The highest level of stress was shown in the age group below 30 years. Analyzing the subsequent age groups, it can be stated that the higher the age of nurses, the lower the level of stress experienced. The independent variable that has a significant impact on the experience of stress among respondents is the place of residence. The higher level of stress experienced by rural residents than by city residents. According to the research conducted by Komorowska [8], age and place of residence did not determine the level of stress intensity among respondents. Variables such as gender, marital status, education, place of work

and work experience of the respondents did not show statistical significance in our own research. Different research results can be seen in Komorowska's work, which clearly indicate a higher stress index in the group of nurses with 10-15 years of work experience, while the lowest in the group of 0-5 years [8].

Most studies show a relationship between variables and the choice of strategy in dealing with stress. The results indicate a significant difference in the case of the strategies of turning to religion, venting and sense of humor. With the increase in the age of the respondents, the use of the strategy of turning to religion increases, while the frequency of using the strategy of venting and sense of humor decreases. In the work of Piernikowska et al., correlations between age and the choice of strategy were observed [9]. The results differ from those in the current study.

In this study differences were observed between the use of strategies of seeking instrumental support and occupying oneself with something else and the level of education. An increased frequency of using these strategies was observed with the increase in the education of the surveyed nurses. The presented results differ from those presented in the work of Śniegocka et al. [10], because the factor analysis in relation to the education of the surveyed nurses and the chosen style of coping with stress did not reveal significant differences between secondary and higher education. The research on the chosen strategies of coping with stress in relation to the length of service suggests that the higher the length of service of the surveyed nurses, the more often they used the strategies of active coping, positive reevaluation and a return to religion, while they less often chose venting, a sense of humor, and taking psychoactive substances. A completely different picture of the influence of length of service on the choice of strategy was shown in the study by Śniegocka et al., namely in the group of nurses with less than 20 years of service, problem-oriented styles and avoidance-oriented behavioral styles were used significantly more often [10].

The analysis of the data gathered in the current research showed a relationship between marital status and the choice of strategies of positive reevaluation, venting, self-blame, turning to religion and denial. On the other hand, sociodemographic factors such as gender, place of residence and place of work did not determine the ways of coping with stress in the studied group of nurses. After a deeper analysis of the literature, no reference to these variables was found. Perhaps because they do not have a greater significance in the choice of strategies for coping with stress among nurses.

Lemska et al.[11] also undertook research on the strategies of coping with stress by nurses. The results obtained in the course of the study are almost identical to the authors' research in terms of the most common strategy of coping with stress. Both in their own work and according to the literature, the most frequently used strategy among nurses is active coping. All these strategies belong to the category of strategies focused on solving the problem.

In further analysis of stress coping strategies used by nurses, it is worth paying attention to what is not used in most cases in the fight against stress. Comparing the authors' own research and the work of Kaźmierczak et al. [12], it was shown that the least common strategy for coping with stress is taking psychoactive substances. The results of our study, but also of other authors' research on the strategies used to cope with stress, show that nurses mostly choose a style focused on solving the problem. They very rarely decide on a style focused on avoidance. Each of the statements presented above has a positive character when it comes to the nursing environment and the chosen style of strategy used in difficult situations.

4. CONCLUSION

- The higher the age of the respondents, the lower the level of stress experienced. People living in rural areas had a higher level of stress experienced than those living in the city. On the other hand, gender, marital status, education, place of work and work experience of the respondents did not determine the level of stress experienced.

- Sociodemographic factors such as gender, place of residence and place of work did not influence the chosen way of coping with stress among respondents. However, marital status, education and work experience influenced the choice of stress coping strategies by nurses.
- The most common stress coping strategy in the studied group of nurses was active coping, and the least frequently used stress coping strategy was the use of psychoactive substances.

5. REFERENCES

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