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ORIGINAL PAPER

THE RELATIONSHIP BETWEEN SELF-ESTEEM OF NURSES AND THEIR CHOICE OF STRATEGIES TO COPE WITH WORKLOAD BURDEN

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Abstract

Aim: To identify coping strategies nurses working in clinical practice use to manage workload, and, subsequently, to determine whether the choice of coping strategies is related to self-esteem. *Design:* Quantitative cross-sectional study. *Methods:* The sample consisted of 509 nurses. Two coping strategies questionnaires – Brief COPE and Rosenberg Self-Esteem Scale – RSES were used to collect data. The data were evaluated by descriptive statistical methods and analysed via ANOVA. *Results:* Nurses prefer to adopt a range of adaptive coping strategies rather than maladaptive coping strategies. The most frequently chosen adaptive coping strategies used by nurses in clinical practice are acceptance, planning, and active coping. We found that selection of coping strategies is closely related to self-esteem. We registered a significant difference in preferences for adaptive and maladaptive coping strategies as follows: nurses with high self-esteem scores (RSES) preferred adaptive coping strategies: active coping (p = 0.017), positive reframing (p = 0.001), planning (p = 0.020), and acceptance (p = 0.045). We identified selection of maladaptive coping strategies in nurses with average and low self-esteem scale results, i.e.: denial (p = 0.000), disengaged behaviour (p = 0.001), and self-blaming (p = 0.000). *Conclusion:* The results of the study suggest that it is important to support nurses' self-esteem since this influences choice of adaptive coping strategies. These are an effective means of coping with the burden on nurses, which directly affects the quality of nursing care provided to patients in clinical practice.

Keywords: Brief COPE questionnaire, coping strategies, nurses**,** Rosenberg Self-Esteem Scale – RSES, self-esteem, workload.

Introduction

Nursing is a demanding profession involving specialized professional and personal prerequisites. The work environment of nurses is specific and is influenced by various mental, physical, and behavioral risk factors (Dimunová et al., 2018). Stress is generally considered to be the dominant risk attitudes towards difficulties, taking control of one's life, and maintaining a stable physical, mental, and social state (Folkman et al., 1986).

Long-term stress can result in burnout syndrome. For nurses, stress can also result in reduced quality of professional performance, satisfaction, and well-being of individuals, and stagnation in personal development, absence from work, reduced quality of services provided, increased number of errors, and high financial costs (Tomasina, 2012). The urgency and immediacy of nursing care are considered to be triggers of physical and emotional exhaustion, and experience of stress (Hooper et al., 2010).

Nurses working in intensive care units are responsible for the care of a large number of patients at immediate risk of death. They face a high incidence of unforeseen events, the demands of family members, and are witnesses to dying and death (Adriaenssens et al., 2012). We regard the workload of nurses, in conjunction with the global shortage of nurses, to be an urgent problem due to their impact on both the health of nurses and patient safety.

Ramezanli et al. (2015) claim that individuals' responses to stress influence their choice of coping strategies. Knowledge of stress management strategies that individuals use to adapt to stress can guide the activities of nurses and managers in alleviating and dealing with stress, resulting in a healthier work environment (Ribeiro et al., 2015).

One way to manage stress is "coping". By definition, coping represents any cognitive or behavioral effort to manage, minimize, or tolerate events that

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individuals perceive as potentially threatening to their well-being (Folkman & Lazarus, 1980). In other words, coping refers to the ability to deal with difficult life situations. Coping strategies are an important stabilizing factor in managing the challenging situations that nurses encounter on a daily basis in the work environment. Several international studies have addressed selection of coping strategies in nurses (McMeekin et al., 2017; Pašková, 2018; Pašková & Rapčíková, 2020; Ramezanli et al., 2015; Ribeiro et al., 2015; Sondhi et al., 2019; Sováriová Soósová & Varadyová, 2012), the findings of which suggest that nurses use several varieties of coping strategies.

Lazarus & Folkman (1984) mention three basic methods of coping: coping involving the resolution of a given problem; coping involving mitigation of negative experiences (to improve emotional balance rather than to resolve the problem itself – a symptomatic reaction, which can help the individual for a limited time), coping involving avoidance – the individual tries not to face the problem, preferring to forget about it and escape it.

According to Meyer (2001), coping strategies can be categorized as adaptive and maladaptive. Choice of coping strategies is influenced by various interpersonal and intrapersonal factors. The authors of several studies (e.g., Ďuricová & Trojanová, 2015; Millová et al., 2008) point to the possible influence of self-esteem on choice of coping strategies when nurses are overworked/overstressed. Self-esteem is a measure of the extent to which individuals have a positive relationship with themselves, and value and accept themselves. The sense of self-esteem is strongly influenced by feedback from the social environment. The need for positive self-esteem has a supporting role in the formation of interpersonal relationships (Slavkovská, 2011). It is generally determined by a wide range of influences. These influences and their diversity were analyzed by Rosenberg (1965) and Rosenberg et al. (1995), who regarded self-esteem as a combination of self-evaluation and social comparison. A study by Mann et al. (2004) points out that self-respect can lead to both improved health and positive socialization, and, conversely, that decreased self-esteem is associated with a wide range of mental disorders and social problems.

Aim

Our aim was to identify the coping strategies used by nurses in clinical practice, and, subsequently, to determine whether the self-esteem of nurses influences the preference of specific coping strategies.

Methods

Design

Quantitative cross-sectional study.

Sample

The sample consisted of 509 nurses working at different departments of anesthesiology and intensive care in the Slovak Republic. The criteria for selecting the research group were as follows: at least one year of work experience at the department of anesthesiology and intensive care, current position as a nurse in clinical practice working at the department of anesthesiology and intensive care, willingness and eagerness to cooperate.

Data collection

The method of data collection consisted of two questionnaires: 1) the Questionnaire of coping strategies – Brief COPE, and 2) the Rosenberger Self-Esteem Scale – RSES. Data collection was supplemented with demographic items.

The Brief COPE Questionnaire is a revised and abbreviated version of the original COPE Questionnaire (Carver, 1997) containing 28 items, divided into 14 subscales, with each subscale containing two items. Respondents have the opportunity to answer according to a four-point Likert scale (1 – not at all; 2 – not much; 3 – quite a lot; 4 – very much). Subscales, or more specifically, coping strategies, are then divided into adaptive (with a focus on the problem and emotions) and maladaptive (with a focus on avoidance). Adaptive coping strategies aimed at the problem include active coping (i.e., planning and use of instrumental support); and coping strategies focusing on emotions include positive reformulation, religiosity and spirituality, use of emotional support, humor, and acceptance. Maladaptive coping strategies aimed at avoidance include venting, self-distraction, substance abuse, engaged behavior, self-blame, and denial. The Cronbach alpha Brief COPE questionnaire value for our population was 0.753.

The RSES (Rosenberg, 1965; Rosenberg et al., 1995) is one of the most commonly used global self-esteem scales. The RSES is understood as a two-factor construct, covering positively and negatively formulated items. It consists of ten items, with a four-point Likert scale (1 – strongly agree; 2 – agree; 3 – disagree; 4 – strongly disagree). Half of the items are listed positively (items 1 to 5) and the other half (items 6 to 10) negatively, with total scores possible of between 10–40 points.

The results can be divided into three categories: low self-esteem (score less than 25), average self-esteem (score between 26–29), and high self-esteem (score between 30–40). Cronbach's alpha scale for the study sample was 0.761.

Members of the Slovak Chamber of Nurses and Midwives (SKSaPA) were sent an e-mail about the possibility of participating in the research. Nurses completed the questionnaires online on the SKSaPA website, after entering their registration number. Data collection was carried out in the period July–December, 2017.

Data analysis

Data were processed in the program SPSS 20.0 by means of descriptive (means, standard deviation, absolute and relative frequencies) and inductive statistics (ANOVA). Testing was performed at a significance level of $\alpha = 0.05$.

Results

The sample consisted of 509 nurses, of which 94% were women (n = 477) and 6% were men (n = 32). The largest single age group of respondents was between 40 to 44 years (25.3%; n = 129), the most common length of work experience was from 10 to 20 years (28.9%; n = 147), and the most common level of education was a first or second level degree of higher education (54.2%; n = 276). Regarding socio-demographic characteristics, the group consisted of 47% (n = 239) married, 35% (n = 178) single, 14% (n = 72) divorced and 4% (n = 20) widowed respondents. Eighty percent (n = 409) of nurses were employed for an indefinite period, 15% (n = 77) for a definite period, and 5% (n = 23) of nurses were employed part-time or on an ad hoc basis.

Our goal was to identify the coping strategies used by nurses. The most favored adaptive strategies included acceptance (6.48 ± 1.097) and planning (6.42 ± 1.085), followed by active coping (6.39 ± 1.278) and receiving emotional support (6.11 ± 1.371) strategies, which are problem-oriented. The least favored adaptive strategies in the research group included humor (4.30 ± 1.793) and instrumental support (4.65 ± 1.638). Of the maladaptive strategies, nurses generally favored self-distraction (6.21 ± 1.336) and venting (5.44 ± 1.235). The least favored strategies were drug abuse (2.37 ± 0.989) and disengaged behaviour (4.16 ± 1.235) (Table 1).

Regarding self-esteem of nurses, based on the RSES scale in the sample we monitored (n = 509), 57.4%

(n = 292) of nurses had a high RSES score; 32.4% (n = 165) had an average RSES score; and 10.2% (n = 52) had a low score.

Table 1 Statistical characteristics of coping strategies

	min	max	mean	SD
Adaptive coping strategies				
acceptance	2	8	6.48	1.097
planning	2	8	6.42	1.085
active coping	2	8	6.39	1.278
receiving emotional support	2	8	6.11	1.371
positive reframing	2	8	5.96	1.310
religiosity and spirituality	2	8	5.15	2.044
instrumental support	2	8	4.65	1.638
humor	2	8	4.30	1.793
Maladaptive coping strategies				
self-distraction	2	8	6.21	1.336
venting	2	8	5.44	1.235
self-blaming	2	8	5.00	1.300
denial	2	8	4.47	1.349
disengaged behaviour	2	8	4.16	1.235
substance abuse	2	8	2.37	0.989

SD – standard deviation; min – minimum value; max – maximum value

In the next stage, we used statistical analysis to determine whether there was a significant relationship between the self-esteem of nurses and their choice of coping strategies. Table 2 contains the results of the ANOVA test and describes whether our three groups created on the basis of their RSES score differed statistically significantly from each other. The last column for the p-value shows the level of significance, which, if lower than 0.05, means that the groups differed statistically significantly from each other in their preference of coping strategies. We observed a significant difference in preference of adaptive coping strategies according to RSES scores: active coping, positive reformulation, planning, and acceptance were more typical for nurses with a high RSES score. While nurses with a low RSES score had a preference for the instrumental support coping strategy. In the group of maladaptive coping strategies, we observed a significant difference in preferences for strategies of denial, disengaged behavior, and self-blame. According to the average values recorded, these coping strategies were adopted significantly more often by nurses with low self-esteem scores than nurses with high and medium self-esteem scores.

Table 2 Relationship between the selection of coping strategies and level of self-esteem

	RSES low (n = 52)		RSES medium (n = 165)		RSES high (n = 292)		ANOVA	
	mean	SD	mean	SD	mean	SD	F	p-value*
Adaptive strategies								
active coping	6.06	1.434	6.27	1.335	6.52	1.200	4.102	0.017
receiving emotional support	6.54	1.179	6.05	1.216	6.06	1.471	2.904	0.056
instrumental support	5.13	1.704	4.79	1.592	4.49	1.634	4.251	0.015
positive reframing	5.31	1.336	6.05	1.152	6.03	1.359	7.478	0.001
planning	6.12	1.293	6.33	1.049	6.52	1.053	3.951	0.020
humor	4.19	1.961	4.30	1.741	4.32	1.797	0.109	0.897
acceptance	6.17	1.248	6.42	1.042	6.56	1.090	3.130	0.045
religiosity and spirituality	5.56	1.984	5.32	1.886	4.98	2.127	2.645	0.072
Maladaptive strategies								
self-distraction	6.02	1.229	6.20	1.216	6.25	1.418	0.135	0.832
denial	5.04	1.357	4.61	1.262	4.29	1.363	8.225	0.000
substance abuse	2.35	0.883	2.39	1.034	2.36	0.984	0.049	0.952
disengaged behavior	4.62	1.388	4.30	1.145	3.99	1.230	7.486	0.001
venting	5.73	1.254	5.41	1.225	5.40	1.235	1.634	0.196
self-blaming	5.83	1.294	5.17	1.218	4.75	1.272	18.530	0.000

*SD – standard deviation; *level of statistical significance p < 0.05; RSES – Rosenberg Self-Esteem Scale; (ANOVA) F-test statistics of the difference of group*

Discussion

The aim of our research was to identify coping strategies of nurses working at the departments of anesthesiology and intensive care. Forms of coping have an adaptive character (they represent an effort to cope with the workload with positively formulated strategies focusing on either the problem itself or the emotional reaction to it) or strategies with a maladaptive character, which represent forms of coping based on avoidance, such as denial, or self-blame.

In our sample of 509 nurses, a preference for the use of adaptive coping strategies over maladaptive was confirmed, which may be down to nurses's choice of profession itself; nursing is a unique profession, focusing on caring for and being with people in peculiar life situations (Dimunová et al., 2018); nurses decide on their profession on the basis of prosocial motives – for their willingness to help others (Hadašová & Kollárová, 2008).

Adaptive strategies include strategies oriented at emotions and the problems that intersect with each other in the course of nurses' work. In our population of nurses, acceptance (emotion-oriented strategy) was the most favored adaptive stress management strategy. Problem-oriented strategies, i.e., planning and active coping, frequently followed. A similar finding was made by the authors of an Iranian study in which nurses working in intensive care units tended to apply emotional coping strategies rather than problem-oriented strategies (Ramezanli et al., 2015).

According to Ribeiro et al. (2015), the coping strategies most commonly used by nurses working in intensive care units are active coping and positive reformulation. In nurses working in emergency departments, Isa et al. (2019) found coping strategies focusing on the problem and positive reformulation to be predominant. Similar results were reported in the Fiske study (2018). For Asian and Australian nurses, coping strategies focusing on problems were associated with better mental health, while coping strategies focusing on emotions were connected with a deterioration in mental health. This finding suggests that problem-based coping strategies would be most effective for nurses (Schreuder et al., 2012).

With regard to maladaptive strategies (avoidance-oriented strategies), nurses most commonly reported self-distraction and venting in our study. The least favored avoidance strategies were substance abuse and disengaged behaviour.

The use of maladaptive strategies for coping in nurses has been identified in several studies (Pašková & Rapčíková, 2020; Sondhi et al., 2019), but always to a lesser extent than adaptive straftegies, which can be considered a very positive finding. According to Morita (2008), avoidance-oriented behavior does not address the cause of stress, although it can provide a reduction in stress in the short term, and minimize the severity of the situation. Wang et al. (2011) report that nurses chose avoidance coping strategies due to the rapid pace and high workload of the work environment.

According to Dumalaon-Canaria et al. (2018), adaptive coping strategies can be influenced by variables such as self-esteem and optimism. After identifying the coping strategies used by the nurses in our cohort, we investigated whether the nurses' personal self-esteem has a significant relationship to the selection of specific coping strategies. Nurses with a high self-esteem score (based on RSES scores) favor adaptive coping strategies (active coping, positive reformulation, planning, and acceptance), in contrast to nurses with low self-esteem scores, who favor maladaptive coping strategies (denial, engaged behavior, and self-blame). Our results concord with the study by Joaquín-Mingorance et al. (2019), in which women with high self-esteem scores also preferred the use of humor as an adaptive coping strategies.

Limitation of study

The study had several limitations. First, the size of the sample of nurses in relation to the total number of nurses in Slovakia can be considered a limitation of the study. Further limitations were the use of self-esteem research tools that depended on the subjective responses of nurses, and the predominance of female nurses in the monitored population. Finally, the fact that the questionnaire was completed only by nurses who were interested in the monitored issue can also be considered a limitation.

Conclusion

The choice of coping strategies is one means of managing the workload of nurses. Adoption of these strategies is important for effective management of nursing care and maintaining the mental and physical health of nurses. The nurses in the population we monitored tended towards choosing adaptive coping strategies rather than maladaptive coping strategies, which we consider a very positive finding. The use of maladaptive coping strategies may indicate an increased workload for nurses, which, in the long term, may lead to the development of burnout syndrome. It is interesting to note that nurses' self-esteem influences their preference of coping strategies. We regard our study as a pilot study, and regard it as a stimulus for the application of techniques supporting self-esteem, together with the development of adaptive coping strategies in nurses working in clinical practice.

Ethical aspects and conflict of interest

The authors declare that the research was carried out in accordance with the 1964 Helsinki Declaration and its latest revision, published in 2013. The research was carried out with the support of the Slovak Chamber of Nurses and Midwifery in Slovakia. Research respondents were informed in advance in writing about the aims of the research, that their participation in the research was voluntary and anonymous, and that all data obtained would remain confidential.

The authors declare that there are no conflicts of interest in connection with this study.

Author contributions

Concept and design (LD, AB, TF), data analysis and interpretation (AB), manuscript processing (LD, AB, JR, IR), critical revision of manuscript (AB, TF, IR), final completion of the article (LD, JR, AB).

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