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Wypalenie zawodowe a poczucie koherencji wśród pielęgniarek pediatrycznych

Occupational burnout and the sense of coherence among pediatric nurses

Streszczenie

Cel. Celem badania była ocena poziomu wypalenia zawodowego i poczucie koherencji w grupie pielęgniarek pediatrycznych. Podjęto próbę oceny relacji między doświadczaniem wypalenia zawodowego, a odczuwaniem stanu koherencji.

Material i metody. Badanie zostało przeprowadzone w 2009 roku przy użyciu kwestionariusza Maslacha oraz Kwestionariusza SOC-29 w grupie 89 pielęgniarek z oddziałów pediatrycznych. Analizę statystyczną przeprowadzono przy zastosowaniu testu t-studenta w powiązaniu ze współczynnikiem korelacji Pearsona.

Wnioski. Badania wykazały, że uczestnicy odczuwali wypalenie zawodowe w stosunkowo niskim stopniu, przy jednoczesnym wysokim poczuciu koherencji. Ponadto, występowała istotna statystycznie korelacja między poczuciem koherencji, a wypaleniem zawodowym. Nie stwierdzono różnic w poziomie wypalenia zawodowego oraz poczuciu koherencji w grupach z oddziałów operacyjnych i nieoperacyjnych.

Abstract

Aim. The aim of this study was to assess the level of burnout and the sense of coherence in pediatric nurses.

Material and methods. The study was conducted in 2009 and the Maslach Burnout Inventory as well as the SOC-29 questionnaire in a group of 89 nurses from pediatric units. A statistical analysis was performed with the use of the student t-test in correlation to the Pearson correlation coefficient.

Conclusions. The study showed that the subjects experienced a relatively low degree of occupational burnout while, at the same time, there was a high level of SOC. Moreover, there was a significant statistical correlation between the sense of coherence and a professional burnout. There were no differences when it came to professional burnout and the sense of coherence between the surgical group and the non-surgical group.

Słowa kluczowe: pielęgniarka pediatryczna, wypalenie zawodowe, poczucie koherencji, stres zawodowy.

Key words: pediatric nurse, occupational burnout, sense of coherence, occupational stress.

INTRODUCTION

The occupational burnout phenomenon is determined by Maslach as a syndrome characterized by its regularities, which consists of emotional exhaustion, depersonalization and reduced personal accomplishment [1]. Further studies showed that the phenomenon of burnout affects primarily the health of the nursing staff [2-4].

The factors which usually cause the occupational burnout among nurses are daily contacts with the disease, lack of autonomy, need for constant vigilance, as well as a low range of environmental control [5]. Burnout is a psychological consequence of prolonged exposure to stress in the workplace, which has not been modified by psychosocial resources of individual units.

One of the most important resources for coping with stress effectively and, thereby, determining the state of health, is considered to be the sense of coherence.

In Antonovski's theory, it was described as an instruction unit permanently expressing the confidence that the stimuli one encounters throughout life is predictable and orderly, their resources will allow to meet the demands posed by these stimuli and the efforts are worth the commitment [6].

Studies show that people with high sense of coherence cope better when they are confronted with stress directly affecting their well-being and health status [7-9], which is also acknowledged by Polish authors [10, 11].

The sense of coherence that influences effective coping with experienced stress is a protective factor when it comes to professional burnout. Therefore, the research focuses on finding a connection between individual staff members' predispositions and occupational burnout, which is both a necessity and a challenge.

AIM

The aim of this study was to assess the level of dependence between occupational burnout and the sense of coherence, in a group of pediatric nurses.

MATERIAL AND METHODS

The study was conducted in 2009, among randomly selected 89 members of the nursing staff from the Children's University Hospital in Krakow, who completed a survey questionnaire.

There were two tools used in the research: a burnout questionnaire (MBI) and a SOC-29 questionnaire.

The burnout questionnaire constructed by Maslach and Jackson refers to the concept of burnout that consists of emotional exhaustion, depersonalization and reduced personal accomplishment. It consists of 22 test questions which are divided into three subscales, each of which refers to the components highlighted by the subject. The subjects mark answers with values from 0 ("never experiencing such feelings") to 6 ("I experience these feelings every day") on the 7-point Likert scale. The results of the questionnaire are used to determine the level of burnout in three spheres:

emotional exhaustion, depersonalization and reduced personal accomplishment. A high score obtained in the first two spheres and low score for the third one indicate a high burnout level.

The questionnaire SOC-29 on life orientation, which was constructed by Antonovsky, allows the evaluation of the coherence level. The questionnaire consists of 29 questions to which the examinees are asked to select an answer on the 7-point Likert scale. When it comes to measuring the sense of coherence through the SOC-29 questionnaire, the respondents could obtain a score ranging from 23 to 203 points. The average score was 116 points. The higher the score, the stronger the sense of coherence characterizing the tested person.

One of three components of the sense of coherence is the sense of comprehensibility, which is measured with the use of 11 questions from the SOC-29 questionnaire. The highest obtained score was 77 points and the lowest was 11 points. The second component is the sense of resourcefulness, measured by 10 questions. The highest possible score for this scale is 70 points and the lowest is 10. The last element is the sense of meaningfulness, which is measured with the use of 8 questions. The highest score possible is 56 points and the lowest is 8 points.

In the first stage of the analysis, it is necessary to find the levels of variables included in the study and calculate the average values for the experienced burnout and for the sense of coherence in the examined group.

The next stage is to determine the relationship between the analyzed variables. The correlation coefficients between the dimensions of professional burnout and the components of the sense of coherence are calculated for this purpose.

The trans-coded results obtained were analyzed statistically using SPSS. The student t-test with a correlation to the Pearson correlation coefficient was used. The level of significance (*p*) indicates statistical significance of the results when *p* < 0.05.

RESULTS

The study was carried out on a group of 89 people from the nursing staff of pediatric wards. The examined group consisted of 84 women, who represented 94% of all the participants, and 5 men (6%). The largest group consisted of people aged 31 to 40 (45%) and 20 to 30 (43%). Thirty-five respondents (40%) had worked in the profession for more than 10 years, while 18 people (20%) had had work experience up to 5 years and another 16 (18%) had worked less than a year in the profession. Thirty-seven of the examined people (42%) finished grammar school, followed by 42 people (47%) who were undergraduates and 10 respondents (11%) who had a master's degree in nursing (Table 1).

Slightly over half of the respondents (51%) worked in surgical wards and the remaining 44 (49%) worked in non-surgical wards (Table 2).

Relatively low scores were obtained by the respondents when it came to emotional exhaustion (the average score for the nurses in the surgical group was 22.13 ± 12.99 and in the non-surgical group it was 21.64 ± 10.39) and depersonalization (the average score in the surgical group

Table 1. Characteristics of the study group (N = 89).

		Total	
		Number	%
Sex	Women	84	94
	Men	5	6
Age	20-30 years	38	43
	31-40 years	40	45
	41-50 years	10	11
	Over 50 years	1	1
Education	Medical school	37	42
	Licentiate	42	47
	Master	10	11
Years of practice	1 year	16	18
	From 1 to 5 years	18	20
	From 5 to 10 years	17	19
	Over 10 years*	35	40

* Results do not add up to 100%, because 3 people did not answer this questions.

Table 2. Characteristics of the study group in terms of specialty.

Specialty	Total	
	Number	%
Surgical specialty	45	51
Operating theatre	1	1
Emergency department - SOR	5	6
Surgical	22	25
Intensive Care	17	19
Non-surgical specialty	44	49
Neurology	12	14
Nutritional therapy	4	4
Hematology	10	11
Endocrinology	10	11
General pediatrics	5	6
Neonatal	3	3
Together	89	100

Table 3. The level of burnout and the results of the student t-test for the test group.

Specialty branch	Spheres of burnout					
	Emotional exhaustion		Depersonalization		Reduced personal accomplishment	
	Average	Standard deviation	Average	Standard deviation	Average	Standard deviation
Surgical	22.13	12.99	8,51	6.33	28.87	9.44
Non-surgical	21.64	10.39	8,20	7.07	27.66	8.92
Together	21.89	11.72	8.36	6.67	28.27	9.15
Results of the student t-test						
Value of the test's t-statistics	0.2		0.21		0.62	
Level of probability	0.84		0.83		0.54	

Table 4. The sense of coherence level and the results of the student t-test for the test group.

Specialty branch	Components of the sense coherence					
	Sense of comprehensibility		Sense of resourcefulness		Sense of meaningfulness	
	Average	Standard deviation	Average	Standard deviation	Average	Standard deviation
Surgical	44.24	7.79	45.0	8.19	37.6	8.97
Non-surgical	44.48	8.07	48.34	9.32	41.0	7.53
Together	44.85	7.91	46.66	8.88	39.28	8.1
Results of the student t-test						
Value of the test's t-statistics	- 0.73		- 1.79		- 1.9	
Level of probability	0.46		0.07		0.05	

was 8.51 ± 6.33 and in the non-surgical group it was 8.20 ± 7.07 , which indicated a low burnout level. Additionally, the values obtained in the third sphere of reduced personal accomplishment (the average score for the surgical group was 28.87 ± 9.44 and 27.66 ± 8.92 for the non-surgical group) indicated an inverse relationship between the higher level of reduced personal accomplishment and a low degree of experienced burnout (Table 3).

In the next stage of the study, an evaluation of the sense of coherence level was performed. The results obtained through the SOC-29 questionnaire indicate that nurses show a sense of coherence at a relatively high level as evidenced by the high values obtained for all of its components, namely the sense of comprehensibility and meaningfulness (the average score for the sense of comprehensibility was 44.24 ± 7.79

in the surgical group and 44.48 ± 8.07 in the non-surgical group, and the average score for the sense of resourcefulness was 45 ± 8.19 in the surgical group and 48.34 ± 9.32 in the non-surgical group). The average score for the last sphere of the sense of meaningfulness, was 37.6 ± 8.97 in the surgical group and 41 ± 7.53 in the non-surgical group (Table 4).

The obtained coefficient correlations indicate a significant statistical relationship between occupational burnout and having the sense of coherence (from $r = 0.28$ to $r = 0.50$) (Table 5).

The sense of coherence level was most strongly correlated to emotional exhaustion and depersonalization. It is a negative correlation, which means that the lower the sense of coherence, the higher the scores of the two dimensions of burnout.

Table 5. The results of the analysis of the relationship between the various components of the sense of coherence and the spheres of burnout.

Burnout	N=89		Sense of coherence			
	Sense of comprehensibility		Sense of resourcefulness		Sense of meaningfulness	
	Surgical units	Non-surgical units	Surgical units	Non-surgical units	Surgical units	Non-surgical units
Emotional exhaustion	-0.48**	-0.28*	-0.48**	-0.45**	-0.48**	-0.49**
Depersonalization	-0.50**	-0.30*	-0.50**	-0.46**	-0.50**	-0.47**
Reduced personal accomplishment	0.44**	0.38**	0.44**	0.34*	0.44**	0.33*

*p<0.01, **p<0.001

What is more, there is a weaker, but also statistically significant, correlation between the underlined occupational burnout and the sense of understanding.

The statistics showed no significant difference between the felt sense of coherence and the burnout experience with regard to both surgical and non-surgical pediatric nurses.

DISCUSSION

The results of the study do not confirm some authors' reports in which it was claimed that the group of pediatric nurses, who experience high levels of burnout, is particularly exposed to the stress in the workplace [12, 13]. This may be the result of the fact that workers who participated in the survey had a long working practice and had developed, in their previous jobs, successful strategies for coping with stress as compared to the stress at work experienced by young people who start their career. This opinion is confirmed by some authors who indicate that people with a shorter work practice show a higher level of burnout [14,15].

The studies show that the sense of coherence plays a key role in coping with stress and, thereby, protects against occupational burnout [11,16].

The results confirm the results obtained by those authors who claim that a higher sense of coherence determines the level of experienced emotional exhaustion in relation to work.

The sense of coherence acts as a buffer, protecting the body from experiencing negative consequences of burnout. Therefore, the development of individual psychosocial resources is an effective means of preventing professional burnout.

CONCLUSIONS

1. Experienced pediatric nurses do not experience excessive effects of burnout.
2. A majority of the respondents is characterized by a relatively high sense of coherence.
3. Based on the study, a relation can be observed between the sense of coherence and professional burnout, which means that the higher the sense of coherence, the lower the occupational burnout.

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