

THE INFLUENCE OF STRESS CONNECTED WITH PROFESSIONAL WORK ON THE OCCURRENCE OF BURNOUT SYNDROME IN NURSES WORKING IN SURGICAL AND MEDICAL TREATMENT WARDS

WPŁYW STRESU ZWIĄZANEGO Z PRACĄ ZAWODOWĄ
NA WYSTĘPOWANIE ZESPOŁU WYPALENIA ZAWODOWEGO U PIEŁĘGNIAREK
PRACUJĄCYCH W ODDZIAŁACH ZABIEGOWYCH I ZACHOWAWCZYCH

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SUMMARY

Nursing is one of the professions where chronic stress is an inseparable characteristic and stems from the very nature of the profession itself. The job of a nurse involves particular mental burdens. The source of these is another person, one who has most often found themselves in an extreme situation. A nurse carries out her/his duties in a state of strong and long-lasting emotional strain. Inappropriate coping with stress and a lack of support from others in difficult situations leads to the development of burnout syndrome. This syndrome not only lowers, to a great extent, the quality of performed work but also prevents nurses from further professional development.

Aims: The aim of the following paper is to evaluate the influence of stress connected with the professional work of a nurse on the occurrence of burnout syndrome.

Material and methodology: Research was conducted on a group of 103 nurses working at eight hospital wards (surgical and medical treatment) at the District Hospital in Lipsko. The research tool was a questionnaire of the author's own devise, which contained 34 questions.

Results: Among the examined nurses, 90% concluded that their professional work has a negative impact on their family life and they pointed to their own occupational burnout. Nurses who carried negative emotions over from work to their homes significantly more often showed a lack of satisfaction from their job and signs of occupational burnout. A substantial percentage of the participants considered shift-work and the professional position held to be a detrimental factor in the process of occupational burnout.

Conclusion: The nurses were to a large extent exposed to mental burdens having a negative impact on their work. The vast majority of the respondents felt satisfaction from their job but a significant percentage of the respondents admitted to suffering from symptoms of chronic stress and exhaustion, which may indicate a lack of any support from co-workers and superiors.

Key words: stress, occupational burnout, nurses.

STRESZCZENIE

Pielęgniarstwo zaliczane jest do zawodów, w których przewlekły stres jest nieodłączną właściwością i wynika z samej natury zawodu. Praca pielęgniarek niesie szczególne obciążenia psychiczne, których źródłem jest drugi człowiek znajdujący się często w sytuacji ekstremalnej. Pielęgniarka pracuje w sytuacji silnego i długotrwałego napięcia emocjonalnego. Nieumiejętne radzenie sobie ze stresem oraz brak wsparcia ze strony innych w sytuacjach trudnych prowadzi do powstania zespołu wypalenia zawodowego, który nie tylko w znacznym stopniu obniża jakość wykonywanej pracy, lecz także uniemożliwia pielęgniarkom ich dalszy rozwój zawodowy.

Cel pracy: Celem niniejszej pracy jest ocena wpływu stresu związanego z pracą zawodową pielęgniarek na występowanie zespołu wypalenia zawodowego.

Material i metodyka: Badaniami objęto grupę 103 pielęgniarek pracujących w ośmiu oddziałach zabiegowych i zachowawczych Szpitala Powiatowego w Lipsku. W pracy zastosowano metodę sondażu diagnostycznego. Narzędziem badawczym był kwestionariusz ankiety własnej konstrukcji, który zawierał 34 pytania.

Wyniki: Spośród badanych pielęgniarek aż 90% uznało, że praca zawodowa negatywnie wpływa na ich życie rodzinne i wskazało na własne wypalenie zawodowe. Pielęgniarki, które przenosiły negatywne emocje z pracy do domu, istotnie częściej wskazywały na brak zadowolenia z wykonywanej pracy oraz wypalenie zawodowe. Według znaczącego odsetka badanych praca zmianowa i stanowisko pracy jest czynnikiem obciążającym w procesie wypalenia zawodowego.

Wnioski: Pielęgniarki były w dużym stopniu narażone na obciążenia psychiczne wpływające niekorzystnie na ich pracę. Większość badanych pielęgniarek odczuwała satysfakcję z wykonywanej pracy, ale znaczny odsetek badanych stwierdzał u siebie objawy przewlekłego stresu i przemęczenia, co może świadczyć o braku jakiegokolwiek wsparcia ze strony współpracowników i przełożonych.

Słowa kluczowe: stres, wypalenie zawodowe, pielęgniarki.

INTRODUCTION

The profession of nurse is intrinsically connected with helping patients who have found themselves in a difficult situation in their lives. A close empathic contact with another person is the basis of the profession and it is difficult to protect one's self in these conditions. Lost in helping – one loses their self-preservation. At times, external circumstances such as poor organization of work, low wages, and bad relationships in a team of employees, to which individual predispositions can add, influence the quality of one's professional and personal life. When a nurse does not receive support from her/his superiors, she/he is exposed to a high level of emotional stress which leads to burnout syndrome. This in turn, manifests itself with the following detrimental phenomena: health problems, routine, conflicts at work, reduction of the quality and efficiency of work, and sometimes, in extreme cases, resignation from work.

Most people are willing to presume that stress is a phenomenon typical only of our century. Whereas it was present in every living being since the inception of life on Earth [1]. The term "stress" has become very popular in recent years. It is a word commonly used, yet still ambiguous. It is used when speaking about unusual traumatic events, but also in relation to everyday situations and experiences connected with them, employing terms such as "I'm stressed", "I'm in a stressful situation", or "I can't protect myself from stress" [1]. The word "stress" has become a part of the everyday dictionary as a convenient definition for a certain range of experiences. One may say that they are stressed when a task must be completed quickly or when one attempts to do multiple tasks at once. Using this word, one describes one's reaction to strain and adversity [2].

Stress in itself is a positive driving force which encourages one to act; it is a reaction to the expectations. A high level of stress allows one to survive but becomes negative and detrimental if one cannot cope with the challenges one faces. It emerges as a physical, emotional and mental strain when a discrepancy

occurs between the situation and that which one assesses as their ability to manage with it. Although stress in itself is not a disease, it can, however, lead to diseases and serious disorders [3].

The place of work is the place where violent situations occur most frequently. It is there that various conflicts emerge (for example of interests or values). Aggression at work can take various forms and, independently of them, is a factor which in a significant way influences mental health, motivation for work and work effectiveness. Violence, regardless of its intensity, is one of the more serious professional stressors and may cause consequences in mental and physical, as well as social and professional, functioning. It has an influence, amongst others, on the occurrence of "burnout syndrome", manifesting as emotional exhaustion, a feeling of fatigue, mental overload, a subjective treatment of the patients, less involvement in work, as well as a number of biological symptoms [4].

Constant mental strain, a feeling of anxiety, uncertainty or insecurity, life under the pressure of time or excessive responsibility are just a few of the stressors affecting one constantly, which are present at the place of work and trigger mobilisation reactions in the body. This way chronic stress may occur, whose repercussions, aside from various disorders and psychosomatic diseases and burnout syndrome, may include neuroses. These types of disorders in the state of health are treated as health costs of a person's functioning in the modern world [5].

The phenomenon of occupational burnout was revealed in the seventies, although it most likely existed much earlier. It can be assumed, however, that civilisation changes and increasing demands laid before the professions of social services caused the psychological costs that are faced by teachers, doctors, nurses, social workers, and emergency workers at their place of work to become ever more serious. The representatives of these professions experience ever more stress which is difficult to cope with; they are exhausted, chronically tired, and ever less satisfied with their work. In an attempt to cope with these

burdens they distance themselves ever more from the people who they help, with time losing commitment to the profession, changing their place of work or retiring early. These phenomena and processes have been commonly called, since the time of H. J. Freud- enberger's pioneering article, "staff burnout" [6]. The term is understood as "a state of physical and mental exhaustion, which emerges as a result of long-lasting negative feelings developing at work and in a person's self-image" [7]. The risk of burnout can be related to a person's personality, conditions connected with the profession or the place of work itself [8].

THE AIM OF THE RESEARCH

The aim of the present paper is an attempt at an assessment of the influence of selected elements of stress connected with professional work on the occurrence of burnout syndrome in nurses working at the District Hospital.

Taking into consideration the existence of various stress-inducing factors, a number of specific issues have been postulated as follows:

- what factors can have an influence on the occurrence of burnout syndrome in nurses;
- what is the relation between the stressful nature of a profession (position, shifts, labour system, tiredness) and the occurrence of burnout syndrome among nurses;
- what is the relation between the place of work and a nurse's education and burnout syndrome.

MATERIAL AND METHODS

The research was carried out in a group of nurses from eight wards of the district hospital. The method of diagnostic poll was used. The questionnaire was used as the research technique. A questionnaire of the author's own devise contained 34 questions which concerned some of the areas of occupational burnout and factors conditioning its occurrence. The study was anonymous and voluntary.

In order to conduct a statistical analysis, statistical methods were used; whereas in order to make a comparison between the assumed groups, the χ^2 test was used. A difference of $p < 0.05$ was assumed as significant. In order to test the differences in evaluation of stress factors, the population under study was divided into two groups, as follows: nurses from medical treatment wards and those from surgical wards. The following methods were used: the Kruskal-Wallis ANOVA test,

Spearman's correlation coefficient, multi-way tables and the χ^2 (Chi-squared) test. The method of two-way tables was used to determine the statistical correlation between nominal-type variables. Statistical significance of the correlations under study was analysed using the Chi-squared test. A $p < 0.05$ was assumed as the border value of the level of significance. Relationship strength was determined by calculating the r_c coefficient.

RESEARCH RESULTS

In the opinion of the participants of the study, burnout syndrome is the result of the influence of many factors of a mental and physical character on the body (table 1).

The relation between occupational burnout and the opinion of the participants according to the nature of work

The result was statistically significant

The level of occupational burnout depended on the stressful nature of work.

$$\chi^2 = 15.1788, df = 4, p < 0.005.$$

From the calculations, it follows that a stressful nature of the nurses' work had the decisive influence on burnout syndrome. Amongst the total of the examined, as much as 52.63% of the nurses believed their work to be very stressful, 32.65% believed it to be stressful, and the remaining percentage of the participants was nurses who thought their work to be slightly stressful. Relationship strength proved to be moderate, $r_c = 0.360$ (table 2).

The relationship between occupational burnout and the opinion of the participants according to the experienced fatigue

The result was statistically significant

A statistically significant relationship was ascertained between the level of occupational burnout and the frequency of feeling tired.

$$\chi^2 = 15.4282, df = 2, p = 0.0005.$$

Amongst the total of the examined, as much as 76.47% of the nurses who always felt tired indicated a connection between the aforementioned and burnout syndrome. Among those who sometimes felt tired, only 27.71% pointed to burnout. Relationship strength proved to be moderate, $r_c = 0.366$ (table 3).

The relationship between occupational burnout and the opinion of the nurses taking part in the study on changing their profession

The result was statistically significant. Nurses who noticed in their case symptoms of occupational burnout thought about changing their profession.

Table 1. The opinion of the respondents concerning occupational burnout according to the factors influencing occupational burnout

No.	Factors influencing occupational burnout	The opinion of the respondents	χ^2 calculated	df	Exact value of p	A juxtaposition of calculated χ^2 values in the context of table data
A	a stressful nature of work	evaluation of the level of a stressful nature of work	15.1788	4	0.0044	15.1788 > 13.277
B	type of tiredness	feeling tired	15.4282	2	0.0005	15.4282 > 13.8953
C	changing the profession	readiness to change the profession	17.0336	2	0.0002	17.0336 > 13.8953
D	place of work	the nurses' place of work	6.1316	3	0.1054	6.1316 < 7.8153
E	support at work	support from others in difficult situations	2.1583	2	0.3399	2.1583 < 5.9912

Table 2. The influence of the nature of work on burnout syndrome in the opinion of the nurses taking part in the research

The level of occupational burnout	The nature of work			
	very stressful	stressful	slightly stressful	total
No	26.32	38.78	73.33	39.22
Partly	21.05	28.57	26.67	25.49
Yes	52.63	32.65	0.00	35.29
Total	100.00	100.00	100.00	100.00

Table 3. The influence of experienced tiredness on the occurrence of burnout syndrome

The level of occupational burnout	An assessment of the feeling of tiredness in %		
	tiredness – always	tiredness – sometimes	total
No	5.88	44.58	38.00
Partly	17.65	27.71	26.00
Yes	76.47	27.71	36.00
Total	100.00	100.00	100.00

Table 4. The influence of changing the profession on occupational burnout

The level of occupational burnout	Readiness to change the profession in %		
	changing the profession – yes	changing the profession – no	total
No	5.88	47.06	40.20
Partly	17.65	27.06	25.49
Yes	76.47	25.88	34.31
Total	100.00	100.00	100.00

Table 5. The influence of the place of work on the occurrence of burnout syndrome

Place of work	The level of occupational burnout in %				
	to a great degree	partly	to a small degree	not at all	total
Surgical	40.00	30.00	20.00	10.00	100.00
Medical treatment	25.53	23.40	23.40	27.66	100.00
Total	32.99	26.80	21.65	18.56	100.00

Table 6. The influence of education on variables connected with occupational burnout

Variable	The level of education of the participants in light of the tests that were used						
	the median test				the Kruskal-Wallis test		
	median	χ^2	df	p	N	H	p
Burnout	22.0000	5.9548	1	0.0147	79	8.6027	0.0034
Stress	2.0000	2.5645	1	0.1093	89	0.4168	0.5185
Stress-inducing	6.0000	0.5868	1	0.4437	89	1.2055	0.2722
Supportive	10.0000	3.3917	1	0.0655	83	5.6383	0.0176

Table 7. The influence of changing the profession on the level of analysed variables

Variable	Changing the profession by the participants of the research in light of the tests that were used						
	the median test				the Kruskal-Wallis test		
	median	χ^2	df	p	N	H	p
Burnout	22.0000	0.0211	1	0.8845	92	0.6918	0.9790
Stress	2.0000	0.8172	1	0.3660	103	0.1863	0.6660
Stress-inducing	6.0000	1.0718	1	0.3005	102	2.2372	0.1347
Supportive	10.0000	0.0378	1	0.8459	96	1.3021	0.2538

Table 8. The influence of the position held at work on the level of the values of the analysed variables

Variable	The relationship of the professional position presented through tests						
	the median test				the Kruskal-Wallis test		
	median	χ^2	df	p	N	H	p
Burnout	22.0000	6.7554	2	0.0341	78	7.6975	0.0213
Stress	2.0000	0.2717	2	0.8730	85	1.2357	0.5391
Stress-inducing	6.0000	5.0500	2	0.0801	85	5.9613	0.0508
Supportive	10.0000	1.5578	2	0.4589	81	4.7508	0.0930

Table 9. The place of work of the nurses participating in the research and the values of the analysed variables

Variable	The places of work of the participants in light of the tests that were used					
	the median test				the Kruskal-Wallis test	
	median	χ^2	df	p	N	H
Burnout	22.0000	0.6688	1	0.4135	90	1.3487
Stress	2.0000	1.7441	1	0.1866	101	3.8547
Stress-inducing	6.0000	0.0000	1	0.0000	100	0.1746
Supportive	10.0000	0.0220	1	0.8822	94	0.3663

$\chi^2=17.0336$, $df = 2$, $p = 0.0002$.

Amongst 103 nurses answering the questionnaire, 13 would like to change their profession, and 40 would not. Nurses who showed readiness to change their profession, significantly more often pointed to occupational burnout than others. 76.47% of the total of the examined nurses ready to change their profession pointed to occupational burnout, whereas 5.88% was not ready to change their profession, although they felt burnt-out. Relationship strength proved to be moderate, $r_c = 0.378$ (table 4).

The influence of the place of work on occupational burnout

NS - a result not statistically significant.

$\chi^2 = 6.1316$, $df = 3$, $p = 0.10539$.

The results of the carried out research did not confirm a statistical relationship between the level of occupational burnout and the ward where the examined nurses worked (table 5).

The conditions of burnout syndrome in light of the tests that were used

1) The influence of education on occupational burnout

The level of education was connected in a significant way with the level of occupational burnout experienced by the nurses and the experienced level of factors which had a positive influence on the mental state of the participants. The level of occupational burnout increased along with the level of education. Nurses who had secondary education experienced occupational burnout to a lesser degree than nurses with BA degree education. Nurses with BA degree education experienced supportive factors at work to a greater extent (table 6, figure 1, 2).

2) Changing the profession and occupational burnout
Changing of the profession did not influence in a significant degree the level of occupational burnout, the level of stress, experiencing stress-inducing factors, or those which are supportive (table 7, figure 3).

3) The professional position and occupational burnout

Three of the most numerous represented professional categories were given to analysis: unit nurse, surgical nurse and operating-room nurse,

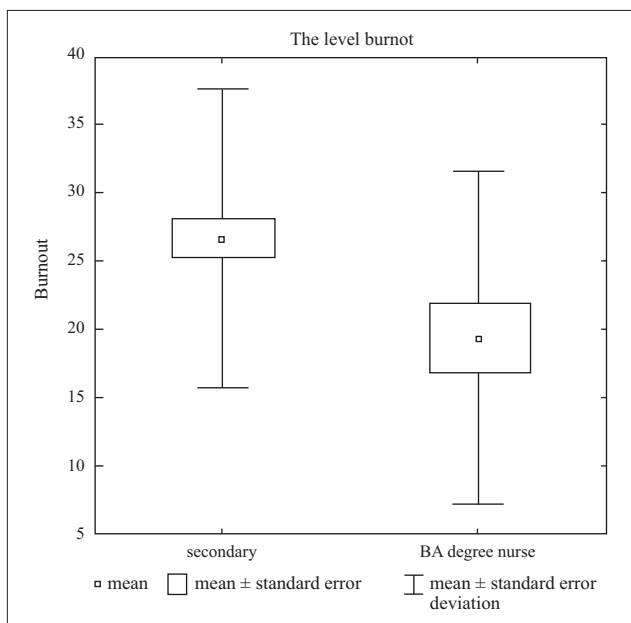


Fig. 1. The relationship of the influence of the level of occupational burnout and education

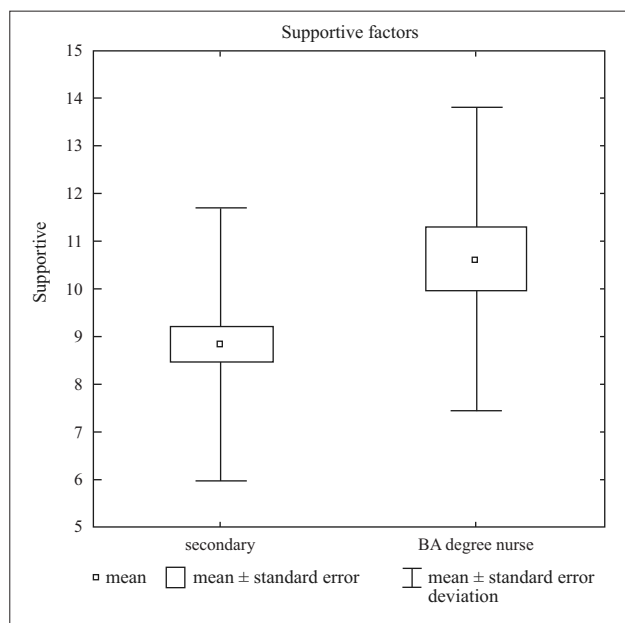


Fig. 2. The relationship between the influence of experiencing supportive factors and education of the nurses taking part in the study

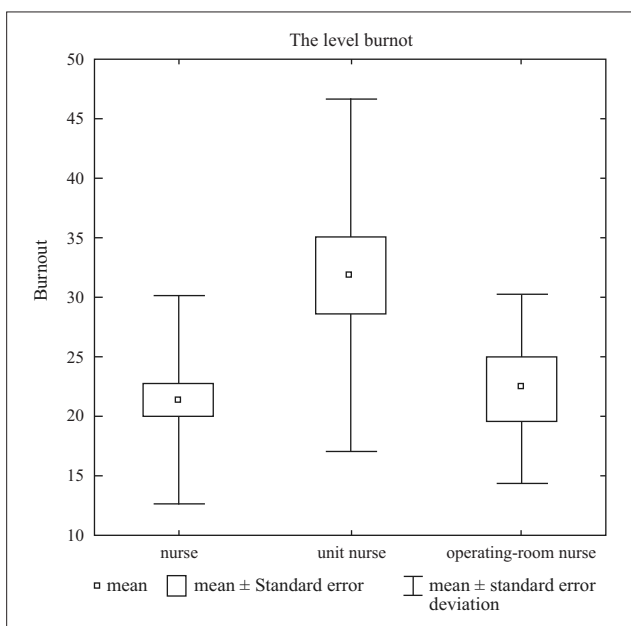


Fig. 3. The relationship between the influence of changing the profession and the experienced level of occupational burnout of the nurses participating in the research

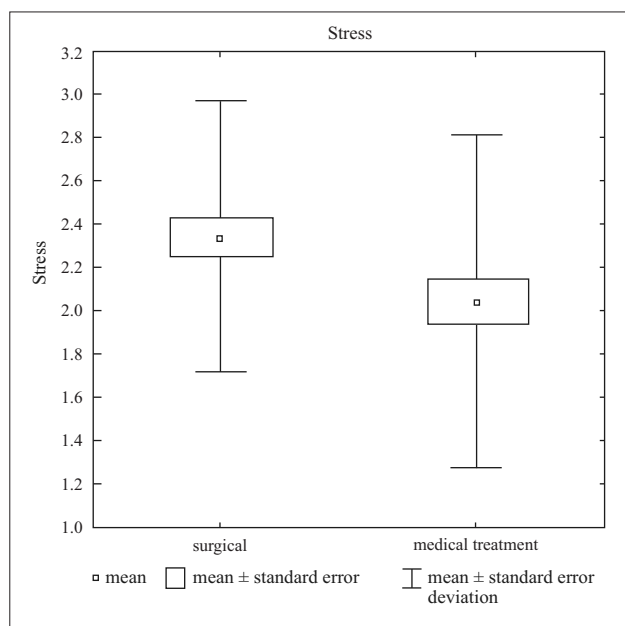


Fig. 4. The relationship between the influence of the place of work and the level of stress experienced by the nurses who took part in the research

junior nurse. As a result of the carried out analysis, it was confirmed that the position held at work differentiated to a significant degree the level of occupational burnout. The phenomenon was experienced to the greatest extent by unit nurses (table 8).

4) The influence of the place of work of the nurses participating in the research on the level of occupational burnout

The results of the carried out research confirmed the significant influence of the specifics of work at the ward where the nurses were employed on the

experienced stress related to professional work. The nurses who worked at surgical wards experienced stress significantly more than nurses working at medical treatment wards (table 9, figure 4).

CONCLUSIONS

According to the participants, many factors of a mental and physical character (a stressful nature of work, feeling tired, the nature of the profes-

sion) influence the occurrence of burnout syndrome in nurses.

The nature of the profession (stress at work, feeling tired during working hours, the position) influenced in a significant way the occurrence of burnout syndrome and gave little satisfaction from the profession in the group of nurses taking part in the research. The professional position differentiated to a significant degree the level of occupational burnout. The phenomenon was experienced to the greatest extent by unit nurses. Nurses who showed readiness to change their profession, significantly more often pointed to occupational burnout.

The level of education was connected in a significant way with the level of occupational burnout experienced by the nurses.

The specifics of work at the ward where the nurses were employed had a significant influence on the experiencing of stress related to professional work. The nurses who worked at surgical wards experienced stress more than nurses working at medical treatment wards.

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