

edycji zdjęć, który umożliwił dobrać kolorów zgodnie z wartościami kolorów RGB (np. Adobe Photoshop).

Wnioski

Opracowana przez nas metoda cyfrowej dokumentacji stanu miejscowego owrzodzeń żylnych podudzi umożliwiła obiektywną ocenę zmian pola powierzchni i wyglądu rany. Jest wygodna i bezpieczna, gdyż nie wymaga bezpośredniego kontaktu z raną. Pozwala na łatwą i wygodną archiwizację materiału cyfrowego, który może być wykorzystywany do celów dydaktycznych i badawczych, a także może być ważnym czynnikiem motywacyjnym dla sceptycznie nastawionych, niechętnych do współpracy chorych.

Kontrola dokładności odwzorowania oraz dokładności pomiaru powierzchni programem „Pole” wykazała wysoką precyzję pomiaru wielkości owrzodzenia naszą metodą.

LITERATURA

- [1] Bioliński G., Kostyra J., Nowakowski P., Kuczmik W., Ziąja D., Ziąja K., Zespół pozakrzepowy — aktualny stan wiedzy na temat patomechanizmu choroby i nowych aspektów leczenia. *Chir Pol* 2006; 8 (2): 156-163.
- [2] Jawień A., Rybak Z., Cencora A., Szewczyk M.T., Górkiewicz-Petkova A., Oszkinis G., Wytyczne Polskiego Towarzystwa Leczenia Ran w sprawie gojenia owrzodzeń żylnych goleni. *Leczenie Ran* 2006; 3 (4): 103-112.
- [3] Sibbald R.G., Williamson D., Orsted H.L., et al., Preparing the Wound Bed — Debridement, Bacterial Balance, and Moisture Balance. *Ostomy Wound Manage* 2000; 46 (11): 14-22, 24-8, 30-5.
- [4] Gorin D.R., Cordts P.R., LaMorte W.W., Manzoian J.O., The influence of wound geometry on the measurement of wound healing rates in clinical trials. *J Vasc Surg* 1996; 23 (3): 524-528.
- [5] Kałuża G., Rybak Z., Pupka A., Jurkiewicz P., Patrzalak D., Langer M., Szyber P., Własna metoda oceny skuteczności leczenia owrzodzeń żylnych golenia na podstawie zmian ich pola powierzchni. *Prz Flebol* 2003; 11 (2): 51-55.
- [6] Martin M., Dynamic wound healing profile of venous ulcer cruris. *Vasa* 1994; 23 (3): 228-33.
- [7] Buda K. Doświadczenia własne w leczeniu rozległych, przewlekłych, żylnych owrzodzeń podudzi. Rozprawa doktorska. Śląski Uniwersytet Medyczny w Katowicach, Zabrze 2009.
- [8] http://www.optyczne.pl/62.4-Test_aparatu-Canon_PowerShot_G9_Optyka.html.
- [9] Cyprian T., Fotografia — technika i technologia. Wydawnictwo Naukowo-Techniczne; Warszawa 1968.
- [10] http://en.wikipedia.org/wiki/Cylindrical_projection#Cylindrical.
- [11] Składniewicz M. Format BMP okiem hakera. *Hacking* 2008; 2: 2-8. (<http://ozzy.kgb.pl/hackin9/FBOH.pdf>).
- [12] http://help.adobe.com/pl_PL/Photoshop/11.0.
- [13] Nicolaides A.N., Investigation of chronic venous insufficiency. A consensus statement. *Circulation* 2000; 102 (20): E126-163.
- [14] Stacey M.C., Burnand K.G., Layer G.T., Pattison M., Browse N.L., Measurement of the healing of venous ulcers. *Aust N Z J Surg* 1991; 61 (11): 844-848.
- [15] http://wound.smith-nephew.com/ca_en/node.asp?NodeId=3053.
- [16] Samad A., Hayes S., French L., Dodds S., Digital imaging versus conventional contact tracing for the objective measurement of venous leg ulcers. *J Wound Care* 2002; 11 (4): 137-140.
- [17] Kecejł-Leskovec N., Jezersek M., Mozina J., Pavlović M.D., Lunder T., Measurement of venous leg ulcers with a laser-based three-dimensional method: comparison to computer planimetry with photography. *Wound Repair Regen* 2007; 15 (5): 767-771.
- [18] Majeske C., Reliability of wound surface area measurements. *Phys Ther* 1992; 72 (2): 138-141.
- [19] Huńka-Żurawińska W., Ocena wyników leczenia owrzodzeń podudzi pochodzenia żylnego laserem CO₂. Rozprawa doktorska. Śląska Akademia Medyczna, Katowice 1999.

PATRICIA DOBRÍKOVÁ, KATARÍNA BLAŽOVÁ, MIRIAM ŠRAMATÁ

Trnavská univerzita, Fakulta zdravotníctva a sociálnej práce

Burnout of healthcare workers at inpatient facilities

Zespół wypalenia zawodowego pracowników służby zdrowia w placówkach szpitalnych

Abstract:

Nearly every individual faces stressful events in his personal and professional life, but each of us has a unique ability to cope with such situations. The need to tackle the high demands at work or in one's personal life over the long term can lead to the mental, physical and emotional exhaustion known as burnout. Its occurrence has been tracked in research studies and surveys in different professions, but the predominant focus of this article is on the helping professions, such as the work of healthcare workers.

Our goal was to determine the degree of professional burnout among health professionals working at inpatient facilities in Slovakia. We focused on the relation between burnout and dissatisfaction with the choice of profession, workplace equipment and financial evaluation. We surveyed the dependence of burnout on the age and gender of the workers. To identify burnout, we used a standardized questionnaire MBI with three dimensions — emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA). The sample included 315 healthcare workers from 11 hospitals in Slovakia.

We assert that burnout occurs when an individual scores 2-3 times in the third stage, which was found in 33% of the workers. In the EE subscale a high degree of burnout was achieved by 46% of the workers, in the DP subscale by 29% and in the PA subscale by 45% of the workers. We confirmed a significant relationship between burnout and dissatisfaction

with the choice of occupation, with the equipment and the financial evaluation of the workplace. A burnout dependence on gender and age was not confirmed.

The results of our study confirmed an increased occurrence of burnout and show the importance of preventive measures in the field of burnout.

Streszczenie:

Niemal każdy w życiu osobistym jak i zawodowym spotyka się z sytuacjami stresogennymi, jednak każdy z nas ma swoją własną metodę radzenia sobie w tych sytuacjach. Zwłaszcza długoterminowa potrzeba stawania naprzeciw wysokim wymaganiom w pracy jak i w życiu osobistym może prowadzić do wycieńczenia zarówno umysłowego, fizycznego jak i emocjonalnego, określanego „wypaleniem”. Próbuje się je opisać przez badania i ankiety pracowników różnych zawodów. Jednak główny nacisk kładzie się na pracowników zawodów pomocy, jak na przykład pracowników służby zdrowia.

Naszym celem było określenie stopnia wypalenia zawodowego pracowników służby zdrowia pracujących w placówkach szpitalnych w Słowacji. Skupiliśmy się na związku pomiędzy wypaleniem a niezadowoleniem wynikającym z wyboru profesji, wyposażenia miejsca pracy i oceny zarobków. Anketowaliśmy stopień „wypalenia” w zależności od wieku i płci pracowników. Aby zidentyfikować „wypalenie” użyliśmy znormalizowanego kwestionariusza MBI z trzema wymiarami – przemęczenie emocjonalne (EE), depersonalizacja (DP) i osobiste spełnienie (PA). Próbę przeprowadzono na 315 pracownikach służby zdrowia z 11 szpitali w Słowacji.

Objawy wypalenia zawodowego stwierdzono u 33% pracowników. W kategorii EE wysoki stopień „wypalenia” został osiągnięty przez 46% badanych, w kategorii DP przez 29% , a w kategorii PA przez 45% badanych. Potwierdziliśmy znaczący związek pomiędzy „wypaleniem” a niezadowoleniem związanym z wyborem profesji, z wyposażeniem i z oceną finansów placówek. Zależność „wypalenia” od płci i wieku nie została potwierdzona.

Wyniki naszych badań potwierdziły wzrost występowania zespołu wypalenia, co wskazuje na konieczność podjęcia działań profilaktycznych.

Keywords: burnout syndrome, stress, healthcare workers, emotional exhaustion, working environment factors

Słowa kluczowe: syndrom burnout, stres, pracownicy służby zdrowia, wyczerpanie emocjonalne, czynniki środowiska pracy

Although burnout has been frequently observed in the last 30 years, the research into the phenomenon (which has been addressed by many Slovak authors such as [1-3] and others) has neither completely nor clearly answered the question what leads to burnout. Studies and research suggest that it is the result of multiple risk factors and several defined key areas that lead to the appearance of this syndrome. As it has been established, the helping professions are not the only type of professions in which this syndrome may occur, however, in this article we address the rights of those healthcare workers whose profession only focuses on assisting patients.

There has been increasing demand on those employed in particular healthcare professions. The responsibility of the medical staff not only to bear the physical burden, but mainly the psychological burden of chronic stress, in addition to the pressure of continual learning and high working deployment place a heavy psychophysical and emotional burden on healthcare workers. Demands of this nature are a risk factor for burnout [4].

Healthcare in Slovakia has been experiencing major changes in recent years, so we decided to evaluate the occurrence of burnout at selected inpatient facilities.

We have researched the relationship between burnout and work environment factors. We decided to address the issue of burnout not only for its current presence among Slovak healthcare professionals, but also because of the possibility of taking preventive action which can prevent its occurrence and thereby improve the quality of healthcare provided.

Materials and methods

For the sample population, we have chosen healthcare workers (nurses, doctors, nursing staff) working at inpatient facilities in departments, where the work is physically and mentally very demanding. We chose the following specific sections: an intensive care unit, a department of oncology, a department of anesthesiology and intensive care medicine, as well as internal and geriatric departments. We managed to get 315 respondents from 11 Slovak hospitals from 8 Slovak regions. Of these respondents 296 were women representing 94% of the cohort and 19 men representing 6%. The health workers were 20 to 62 years of age. The average age of the health workers was 37.3 years (SD ± 9.7). Most healthcare workers were nurses, numbering 287 (91%), there were

10 physicians (3%) and 18 caregivers (6%). The average length of employment at inpatient facilities was 14.9 years (SD ± 10.6).

A questionnaire survey was chosen to meet our data collection objectives. The fieldwork was conducted between September and November 2010. Of the 16 hospitals contacted, 11 agreed to participate in a questionnaire survey, which meant that every region in Slovakia was represented. 79% of the questionnaires were returned. The total number of respondents included in our cross-sectional study was 315. The questionnaire consisted of two parts. The first part consisted of questions to which the respondents provided basic socio-demographic data about themselves and open questions concerning the various contributing factors leading to burnout. The second part of the questionnaire was the Maslach Burnout Inventory (MBI), which is a standardized questionnaire to survey burnout created by the authors Maslach and Jackson (we used the version presented to the Czech author Žídková). This questionnaire consists of 22 claims in which the respondents report the number indicating the strength of their feelings on a scale from 0 (never) to 7 (very strongly) on the attached key. It consists of three subscales - emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA). Burnout is defined if a high score in the dimensions of emotional exhaustion and depersonalization is achieved and if low scores in the dimension of personal accomplishment occur (which is in negative correlation with the previous two dimensions) [5]. The level of burnout is monitored in each of these dimensions on three levels - high, medium and low. We processed the gross scores of each dimension. According to this score, the respondents were classified into grades of staff burnout. Burnout occurs when an individual scores 2-3 times in the third degree. For the calculation of correlations we used the Pearson test on age and the Spearman test for the other. For comparisons, we tested the normality of the distribution with the Kolmogorov-Smirnov test and then we used the Mann-Whitney U Test for two independent selections. The data obtained were processed using Microsoft Excel and SPSS for Windows (11th edition). We also surveyed the reliability of the MBI; when comparing the results, Maslach and Jackson [6] have reached similar values to Cronbach's alpha. For emotional exhaustion 0,89, depersonalization 0,71 and personal accomplishment 0,79. Maslach and Jackson [6] show the following values: EE 0.90; DP 0.79; and PA 0.71.

Results

Evaluation of burnout in the surveyed sample of health workers

A high degree of emotional exhaustion was recorded in

46% of respondents and secondary levels in 24% of respondents. On the depersonalization subscale, namely the impersonal treatment of patients, we confirmed the high level of 29%, while 30% showed a moderate degree of burnout, which also requires attention. In the area of personal accomplishment a high burnout level is reflected in 45% of workers and middle levels were reached by 25% of health workers (Tab. 1).

Tab. 1. Distribution rate of burnout in the individual subscales

degree	EE		DP		PA	
	number	%	number	%	number	%
I.low	93	30%	130	41%	93	30%
II.middle	77	24%	93	30%	81	25%
III.high	145	46%	92	29%	141	45%

As previously mentioned, scoring 2-3 times in the third degree was recorded in 33% of workers and a high level in all three subscales in 13% of health professionals was also reached.

Relationship with burnout and dissatisfaction with career

We hypothesized that any increased dissatisfaction healthcare workers have with their choice of profession will increase the amount of burnout in the dimensions of EE and DP. In these two subscales we therefore assumed a positive correlation. As the PA is in the dimension of height to score reverse burnout, we assumed a negative correlation, so that along with increasing dissatisfaction with the choice of profession would decline in respondents obtained subscale scores in the personal work of sedation.

Tab. 2. Relationship burnout and dissatisfaction with career

	EE	DP	PA
Spearman correlation	0,393	0,273	-0,195
sig.	0,001	0,001	0,001

Here we were able to confirm our assumption in all three subscales with significance $p < 0.001$. In the EE subscale we found a positive correlation with the correlation coefficient $R = 0.393$, the DP subscale $R = 0.273$ while the PA subscale was confirmed with a significant negative correlation coefficient $R = -0.195$. This means that the healthcare workers who were less satisfied with their profession showed higher burnout in all three subscales (Tab. 2).

Relationship between burnout and dissatisfaction with workplace equipment

In this hypothesis, we assumed a significantly positive correlation in the EE and DP subscales. In the PA subscale we expected a significant negative correlation with dissatisfaction with the workplace equipment. Upon analysis of the correlation coefficients (Spearman) a significantly ($p < 0.001$) positive correlation in the subscale EE and DP was found. This means that along with increasing dissatisfaction with workplace equipment, the emotional exhaustion and depersonalization scores climbed as well (Tab. 3). The correlation coefficients confirmed a moderate relationship among the mentioned variables. In the subscale of personal fulfillment from work, we found a significant negative correlation. This relationship means that with increasing dissatisfaction with the facilities of the department, the burnout scores achieved in the subscale of personal satisfaction from working on the significance level of $p < 0.05$ decreased.

Tab. 3. Relationship between burnout in the MBI subscales and dissatisfaction with workplace equipment

	EE	DP	PA
Spearman correlation	0,305	0,225	-0,116
sig.	0,001	0,001	0,05

Relationship between burnout and dissatisfaction with financial evaluation

Our results suggest that dissatisfaction with financial evaluation was significantly ($p < 0.001$) linked to burnout in the EE subscales ($R = 0.377$) and DP ($R = 0.207$) (Tab. 4). This means that along with increasing dissatisfaction with the financial evaluation of healthcare workers, the scores achieved in these two subscales climbed.

Tab. 4. Relationship between burnout in the MBI subscales and dissatisfaction with financial evaluation

	EE	DP	PA
Spearman correlation	0,377	0,207	-0,004
sig.	0,001	0,001	0,947

Relationship of age and gender to burnout

Our assumption was that with the increasing age of workers the scores in burnout subscales EE and DP would increase. In the PA subscale, we assumed that with increasing age the scores obtained in this subscale would decline. We used the Pearson correlation test to calculate the figures. There was no statistically significant

relationship between age and burnout scores achieved by health workers because the significance of individual subscales did not reach the targets we have set for the significance level $p < 0.05$ (Tab. 5).

Tab. 5. Effect of age on the burnout

	EE	DP	PA
Spearman correlation	0,104	0,025	-0,041
sig.	0,064	0,659	0,468

We did not confirm the dependence of burnout based on gender because the differences between the scores achieved by men and women were not statistically significant in any of the three subscales so they did not meet the significance level $p < 0.05$. Medians achieved in the scores of men and women reached nearly identical values (Tab. 6). We could therefore conclude that there was no significant difference in the level of achieved scores in the three burnout subscales for men and women.

Tab. 6. Influence of gender on the dimension of burnout

dimension of burnout	gender	number	median	U - test	sig.
EE	men	19	20	2530,5	0,464
	women	296	25		
DP	men	19	7	2736	0,843
	women	296	10		
PA	men	19	35	2713,5	0,798
	women	296	33		

Forums

As already mentioned in the methodology section, we surveyed the reliability of the MBI questionnaire in our study, where the Cronbach's alpha resulting values reached values of 0.89 for the EE subscale, 0.71 for DP and 0.79 for PA. These values show a sufficiently high reliability, and thus, affirm the reliability of this questionnaire. Even the original author of the MBI questionnaire [6] presented similar values (EE 0.90, DP 0.79 and 0.71 PA). American studies (Beckstead, 2002), which investigated burnout in nurses confirm Cronbach's alpha findings in the EE subscale 0.88, in the DP subscale 0,79 and in the PA subscale 0.75. In addition, the values found in a New Zealand study (Lois et. Al, 2009) approach our findings (EE 0.92, DP 0.75, PA 0.74).

Complete burnout was recorded in 33% of workers, mostly in the EE subscale. By means of comparison, we mention the Slovak research conducted in the year 2000-2001, in which a total burnout was found in 18% of the respondents and, as in our case, this research also found that burnout

in the EE subscale affected 17% of workers. An interesting finding of this research was that a high degree of burnout in all three subscales was only observed in one worker.

Bartošíková [4] writes that emotional exhaustion manifests itself as a depletion of emotional resources, which would otherwise allow the worker to contend with despair. Experiencing frustrations, the worker considers the job to be extremely exhausting and thus, by just thinking about the work problems, the worker feels his/her efforts fall short. We think that the profession of healthcare presents a variety of situations that are very difficult to contend with emotionally. To care for a seriously or chronically ill person, the personnel not only bear great responsibility, but must be able to respond in a flexible manner to differing needs and changing situations. Oftentimes the actions that must be performed are neither pleasant for the patient nor for the healthcare worker. Considering the fact that those working at oncological, internal, or geriatric in-patient facilities are confronted daily with such situations, we think that is why our series showed the largest amount of burnout just in the EE subscale.

We wondered what health care professionals considered to be very burdensome mentally in their profession. For 29% of respondents, the toughest mental factor at work was stress. Prolonged stress, as is the nature of this work, is a major risk factor for burnout. Another common response was the death of a patient (25%). Kupka [9] writes that just caring for the dying or immobile patients who often progress to dementia becomes very difficult and burdensome over the long term. Coping and empathising with a suffering patient are heavy burdens, which require a certain resistance to stress in the personality features of a healthcare professional, thus making careful selection of health workers a necessity. The need to empathize with the patient's feelings was considered by 20% of our respondents as being the most difficult factor in their mentally demanding work. Another 20% said that it is psychologically difficult for them to communicate with patients or their relatives. Here, too, Kupka [9] states it is very burdensome to deal with a patient's anger and/or unwillingness to cooperate, but there is also a need to communicate with the relatives of the patient which requires the ability to adapt to this type of situation. Therefore, Kupka [9] considers it appropriate that the management of health facilities provide a trial period during which the worker and his superiors decide whether the worker is well predisposed for the job, particularly in terms of psychological fitness.

Our findings in relation to burnout and dissatisfaction with the choice of occupation is confirmed by an Austrian study [10], which examined the incidence of burnout on a set of 320 nurses and doctors working on an ICU. Among other

findings, they were able to confirm that health workers with an advanced level of burnout reported low satisfaction with their choice of profession and their desire to choose the profession again was significantly lower. American authors Golub et al. [11] also examined the relationship between satisfaction with the choice of profession and burnout. In their study, they also confirmed that dissatisfaction with the choice of profession increases significantly with burnout ($p < 0.001$). The satisfaction with the choice of occupation is related to many factors at the workplace. It includes the type of department, the overall atmosphere of the workplace, but also an assessment relating to earnings and to the type of praise and support provided by superiors. Following this hypothesis, we examined these factors precisely. Most research studies focus on examining the impact of the working environment in terms of the so-called 'work climate' which includes workplace relationships, communication with superiors, team work, or work organization. However, we wonder whether the outfitting of a department with updated equipment and sufficient amounts of material can affect workers' burnout. We rely on experience when we state that nurses or doctors who have all the necessary equipment and enough material to treat patients should be more content, and the physical and psychological load they bear should be lighter than with those workers who lack the aforementioned items. These were our assumptions and the above results were confirmed. In all three subscales, we found a significant correlation, the highest rate was in the EE subscale $R = 0.305$. Furthermore, the findings of the European NEXT study confirmed that nurses who have reached a high level of burnout (49%) reported frequently that they feel insecure because of the workplace equipment [12].

This is confirmed by Buchancová [13] when he writes that a pleasant workplace environment is an important element in the overall satisfaction of health workers, affecting personal satisfaction and the quality of the care provided. We have included the detection of the relationship more on our own experience and observations (in terms of worker's health in-patient facilities), but we think that this factor also should be reflected in our conditions.

As supplementary questions, we asked our respondents what specifically they were dissatisfied with. The medical staff expressed the greatest dissatisfaction (44%) with the technical equipment of the workplace. 23% of the staff expressed dissatisfaction with the workplace environment and 10% of workers were dissatisfied with the equipment for staff. For the specific questions, the health workers often reported a dissatisfaction with the outdated, unreliable, or a basic lack of modern equipment, such as an insufficient number of infusion pumps. It is true that a nurse who has several patients on a unit all being co-administered infusions must monitor each one and without the

forementioned device she also has to estimate the time when the patients need the infusion to be replaced and/or disconnected. Meanwhile, however, she must cope with many other tasks. If the department had a sufficient number of these devices, it would facilitate the work of nurses and it would also ease her physical and psychological burden. Another common response was dissatisfaction with staff facilities, which is also considered to be an important aspect of the work environment. It is important that workers have a place where they can take a break in comfort. We believe that well-developed conditions in this area contribute to the satisfaction of health professionals by reducing the workload and thus reducing the risk of burnout.

In terms of job satisfaction, financial support plays an important role as well. As Kajzar writes [14] the remuneration for our work consists of several important functions. It represents the materialization of awards and it meets the needs of self-esteem, the need for survival and security and any increase in wages confirms career achievement. If you are not satisfied with the financial evaluation of these needs, it may contribute to the development of burnout. The findings of the European study NEXT indicated that a small degree of satisfaction with the salary of nurses in Europe points to a high risk of burnout [12]. Similarly, the authors Ilhan et al. [15] who conducted research in a university hospital in Turkey on a set of 418 nurses, found a significant correlation between dissatisfaction and the financial evaluation of burnout in the EE subscale. A Croatian study also stated [16] a significant correlation in this subscale, with a correlation coefficient $R = 0.52$. In a national study in New Zealand, authors [17] obtained similar results which confirm the commitment of significant dissatisfaction with the salary and the emotional exhaustion of psychiatrists. The last two mentioned studies have shown the correlation of these variables, but only in the subscale of emotional exhaustion. In our study the relationship was exhibited in the depersonalization subscale too. This means that dissatisfaction with financial evaluation, to a great extent, affects the patient, because this dimension of burnout is indicated by the negative attitudes or even cynicism on the part of healthcare workers towards the patient and his/her needs.

In this area, Bartošiková writes, [4] healthcare workers may experience frustration particularly if there is a large disparity between financial evaluation and the quantity of effort expended at work, which, according to Štranfelgová and Hřčková, [18] may seriously threaten the scope and the quality of health care. The salaries in the health department are generally known to be paramedic and an individual does not have many options to change the situation. As Bartošiková says, [4] it does not make sense to stay discontent in this situation. Therefore, it is good for individuals, in the prevention of burnout, to find other personal reasons to remain in the profession.

The relationship of age and burnout was verified by the Pearson correlation test. Our assumption was that with the increasing age of workers, the scores in burnout subscales EE and DP would increase. We assumed that with increasing age, scores obtained in the PA subscale would decline. Here, however, we found no significant relationship in all three subscales. Several studies [1,19,20] reached the same results and confirmed the link between increasing age and burnout. However, there are also authors who have confirmed such a hypothesis. A Greek study [21] confirmed this relationship in the PA subscale and Hungarian studies [22] found a link between age and burnout [-] in the DP subscale. In literature, however, age is considered a neutral factor. Other studies [3,23], in turn, say there are age groups at which burnout occurs more frequently, or they achieve higher burnout scores. In both of these studies, it was among the youngest age group of health professionals (18-25 years). The authors of these findings substantiate the fact that workers are more vulnerable at this young age. They have less experience, and especially having entered the job with enthusiasm some expectations may be ruined by excessive mental and physical stress and then they become frustrated. This is actually the way we define the essence of burnout.

We also have not found a significant dependence of burnout based on gender. The results of similar studies vary. Earlier studies suggest that women are more affected by this syndrome [24], but confirm the European study NEXT (study on early retirement of nurses), the results of which indicate that the overall risk of burnout is higher among women [12]. According to Kupka [9] these results are influenced by demographic parameters of population samples, because the studies are often done with professional groups typically comprised of women (nurses, teachers, social workers). On the other hand, some studies have found higher levels in men [3,12] and in turn there are others that confirm the dependence of burnout based on gender [1,8,19].

Conclusion

Based on the results obtained in our research we found that the dissatisfaction healthcare professionals have with their working conditions contribute to the development of burnout. It is necessary to emphasize the significance of prevention in this area at the individual level, as well as, at the level of larger organizations such as hospitals. As this syndrome affects workers' mental and physical health in the form of psychosomatics (cardiovascular disease, indigestion), impacts the social sphere (within the workplace and/or private life of the worker), and has an impact on the quality of care provided to patients, we consider raising awareness among healthcare workers necessary. We recognize that the objectivity in describing

the process leading to burnout is not as easy as with other somatic diseases, but the severity of its impact on the individual and his/her surroundings, in our view, requires attention to public health in the department of occupational medicine and preventive services through health.

From our research and experience we would recommend encouraging and developing teamwork in individual workplaces and optimizing the conditions for creating a good psychosocial climate on the job through supervision. They should also provide health education to workers in the field of mental health and, in collaboration with psychologists, provide help in coping with stressful situations.

LITERATURE

- [1] Dimunová L.: Vplyv sociálno-demografických ukazovateľov na výskyt syndrómu vyhorenia u sestier. In Profese on-line [online]. 2008, roč 1, č. 2 [cit. 2011-02-22]. s.134-142. Dostupné na: <http://www.pouzp.cz/text/cs/vplyv-socialno-demografickych-zkazatelov-na-vyskyt-syndromu-vyhorenia-u-sestier-na-slovensku.aspx>.
- [2] Berová L., Žáková M.: Zdravotné riadky práce sociálnych pracovníkov pracujúcich so žiadateľmi o azyl a možnosti ochrany ich zdravia. In: Zdravie ako základný predpoklad rozvoja ľudského potenciálu: Zborník príspevkov medzinárodného seminára. Podhájska: Východoeurópska agentúra pre rozvoj, 2010: 10-14.
- [3] Nótová P.: Syndróm vyhorenia - pilotná štúdia. Sestra 2004; roč.6, č.4: 44-45.
- [4] Bartošiková I.: O syndromu vyhoření pro zdravotní sestry. Brno: NCO NZO, 2006: 86.
- [5] Křivohlavý J.: Jak neztratit nadšení. Praha: Grada, 1998.
- [6] Maslach Ch., Jackson S., Leiter M.: Maslach Burnout Inventory: Third edition. In Zalaquett, CP., Wood, JR. Evaluating Stress: A Book of Resources [online]. 1997, [cit. 2011-02-09]. Dostupné na internete: <http://www.rci.rutgers.edu/~sjacksox/PDF/EvaluatingStress.pdf>
- [7] Novotná H., Hlaváčová M.: Syndrom vyhoření bohužel není minulostí. Sestra 2004; č.10: 36-37.
- [8] Honzák R.: Burnout u personálu psychiatrické léčebny Horní Bečkovice. Psychiatria-Psychoterapia-Psychosomatika [online]. 2009, roč. 16, č.3 [citované 2011-01-15]. Dostupné na internete: <http://www.psychiatria-casopis.sk/files/psychiatria/3-2009/psy3-2009-cla3.pdf>.
- [9] Kupka M.: Paliativní péče a riziko syndromu vyhoření. E-psychologie. [online]. 2008, roč.2, č.1, s.23-35 [cit. 2011-03-09]. Dostupné na internete: <http://e-psychologie.eu/pdf/kupka-ps.pdf>.
- [10] Lederer W. et al.: Fully developed burnout and burnout risk in intensive care personnel at a university hospital. Anaesth Intensive Care. [online]. 2008, vol. 36, no.2. [cit. 2011-02-15]. Dostupné na internete: <http://www.aaic.net.au/document/?D=2007583>.
- [11] Golub J.S. et al.: Burnout in residents of otolaryngology-head and neck surgery: a national inquiry into the health of residency training. In Acad. Med. [online]. 2007, vol. 82, no.6. [cit. 2011-02-22].s.134-142. Dostupné na internete: http://journals.lww.com/academicmedicine/Fulltext/2007/06000/Burnout_in_Residents_of_Otolaryngology_Head_and.14.aspx.
- [12] Kovářová M.: Rizikové faktory profesionálneho vyhorenia sestier. In Životné podmienky a zdravie: Zborník vedeckých prác. Bratislava: Úrad verejného zdravotníctva SR, 2006: 304-309.
- [13] Buchancová J. a kol.: Pracovné lekárstvo a toxikológia. 1. slov. vydanie. Martin: Osveta, 2003. 1133.
- [14] Kajzar P.: Jak motivovat zaměstnance ve společnostech. Personál, časopis pro rozvoj lidských zdrojů 2008; roč. 14, č. 12: 14-16.
- [15] Ilhan M.N. et al.: Burnout and its correlates among nursing staff: questionnaire survey. J Adv Nurs. [online]. 2008, vol. 61, no. 1. [cit.2011-03-02]. Dostupné na internete: <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2648.2007.04476.x/full>.
- [16] Ogresta J. et al.: Relation Between Burnout Syndrome and Job Satisfaction Among Mental Health Workers. Croat. Med. J. [online]. 2008, vol. 49, no. 3. [cit. 2011-03-02]. Dostupné na internete: <http://www.cmj.hr/2008/49/3/18581615.htm>.
- [17] Kumar S. Et al.: Stresses experienced by psychiatrists and their role in burnout: a national follow-up study. Int J Soc Psychiatry. [online]. 2011, vol. 57, no. 2. [cit. 2011-03-02]. Dostupné na internete: <http://isp.sagepub.com/content/57/2/166.abstract>.
- [18] Štrangfergová J., Hrková M.: Vplyv odmeňovania na produktivitu práce. In: Hodnota duševnej práce pre organizáciu a spoločnosť: zborník vedeckých prác z výskumného grantu VEGA č. 1/0865/08. Košice: Univerzita P.J. Šafárika, 2010: 394-402.
- [19] Popa F.: Occupational burnout levels in emergency medicine--a stage 2 nationwide study and analysis. J Med Life. [online]. 2010 vol. 3, no. 4. [citované 2011-01-15]. Dostupné na internete: <http://www.medandlife.ro/medandlife484.html>.
- [20] Hosák L. et al.: Syndrom profesionálneho vyhoření zdravotnických pracovníků. Psychiatr. prax. [online]. 2005, roč. 6, č. 4 [cit. 2011-01-15]. s. 202-203. Dostupné na internete: http://www.solen.sk/index.php?page=pdf_view&pdf_id=1768&magazine_id=2.

OKSANA SEROKA-STOLKA¹

Politechnika Częstochowska, Wydział Zarządzania, Katedra Zdrowia Publicznego, ul. Armii Krajowej 19 b, 42-200 Częstochowa

Czynniki implementacji dobrych praktyk środowiskowych w małych i średnich przedsiębiorstwach

Factors of implementing good environmental practises in small and medium enterprises

Streszczenie:

W artykule zaprezentowano przegląd wyników badań empirycznych dotyczących wpływu wybranych czynników determinujących zastosowanie dobrych praktyk środowiskowych w małych i średnich przedsiębiorstwach (MŚP). W pracy zaakcentowano szczególnie rolę indywidualnego zaangażowania właściciela/menedżera w implementację praktyk środowiskowych, wyrażone poprzez jego świadomość ekologiczną i proekologiczną postawę. W opracowaniu zaprezentowano teoretyczny model uwarunkowań zewnętrznych świadomości ekologicznej i stosowanych praktyk środowiskowych.