

# The incidence of burnout in nursing practice

Występowanie syndromu wypalenia zawodowego w praktyce pielęgniarki



Faculty of Health Care at Prešov, University in Prešov, Slovakia

#### CORRESPONDING AUTHOR/AUTOR DO KORESPONDENCJI:

Iveta Ondriová Faculty of Health Care at Prešov University in Prešov ul. Partizánska 1, 080 01 Prešov, Slovak Republic e-mail: iondriova@centrum.sk

#### **STRESZCZENIE**

#### WYSTĘPOWANIE SYNDROMU WYPALENIA ZAWODOWEGO W PRAKTYCE PIELĘGNIARKI

**Wprowadzenie.** Syndrom wypalenia zawodowego w znaczącym stopniu wiąże się z zawodem pielęgniarki. U osób zmagających się z nim, pojawiają się istotne problemy zdrowotne. Konieczne jest pogłębianie wiedzy dotyczącej częstości występowania oraz czynników ryzyka wypalenia zawodowego, aby możliwe było jego zapobieganie oraz ustalanie leczenia w przypadku gdy się pojawi. **Cel pracy.** Celem badania jest identyfikacja występowania syndromu wypalenia zawodowego w zawodzie pielęgniarki, porównanie jego występowania w zależności od typu oddziału oraz zbadanie wpływu cech demograficznych na jego powstawanie.

**Materiał i metody.** W części empirycznej opisano metodę pracy, analizy danych, ich opracowanie oraz badania statystyczne. Do zebrania potrzebnych informacji użyto standaryzowanego Kwestionariusza Wypalenia Zawodowego (Burnout Measure, BM). Uzyskane dane przedstawiono w wykresach.

**Wyniki.** Wynikiem badania jest odkrycie, że występowanie syndromu wypalenia zawodowego w zawodzie pielęgniarki jest znaczące, jednak nie zaobserwowano istotnych różnic pomiędzy różnymi miejscami pracy. Analizy statystyczne pokazały wpływ czynników demograficznych na występowanie syndromu wypalenia zawodowego. Statystycznie istotnymi cechami były wiek badanych i długość ich praktyki.

Wnioski. W oparciu o wyniki badania, można stwierdzić, iż konieczne jest wzmocnienie przeciwdziałania wypaleniu zawodowemu wśród pielęgniarek. Występowanie syndromu zostało potwierdzone w niniejszym badaniu. Średnia wartość indeksów BM dla wszystkich badanych pielęgniarek wynosiła 3.40, zaś indeks BM dla pielęgniarek z grupy A wyniósł 3.44, natomiast z grupy B 3.36. Te średnie wartości jasno pokazują, iż znajdują się one w obszarze "obecności oznak wypalenia". W tej kategorii indeksu BM występują istotne oznaki wypalenia, jednak nie jest to jeszcze rozwinięty syndrom wypalenia zawodowego. Niepokojące okazało się odkrycie, iż trzy pielęgniarki z grupy B znalazły się w przedziale 5 indeksu BM, co oznacza stan alarmowy, wymagający szukania profesjonalnej pomocy.

Słowa kluczowe:

syndrom wypalenia zawodowego, pielęgniarka, badanie

#### **ABSTRACT**

#### THE INCIDENCE OF BURNOUT IN NURSING PRACTICE

**Introduction.** The burnout syndrome is significantly associated with nursing profession. Individuals suffering from the syndrome manifest important health problems. More information about prevalence and risk factors for burnout is needed to prevent the syndrome and to determine the most appropriate clinical interventions when the disorder appears.

**Aim.** The aim of the submitted thesis is to map existence of burnout syndrome in the nurse profession, to compare its existence according to the type department and to find out impact of the demographic characteristics on the burnout syndrome origin.

**Material and methods.** In the empirical part we describe work method, data analyses, their processing and statistical testing. To collect information we used standardized questionnaire, Burnout Measure (BM) — burnout questionnaire. Acquired data are interpreted in charts.

**Results.** Result of our research is to find out that existence of burnout syndrome in profession of nurse is considerable, while we do not observe significant differences between different types of workplace. We have identified by statistical processing the impact of demographic index on the occurrence of burnout syndrome. As statistically important we consider in light of burnout syndrome occurrence characteristic, age and duration of practice. Result of our research is to find out that existence of burnout syndrome in profession is considerable, while we do not observe significant differences between different types of workplace.

**Conclusions.** Based on our results we recognize that it is necessary to strengthen the burnout syndrome prevention among nurses. The occurrence of burnout syndrome was confirmed in our study. The average value of BM indices in our sample was 3.40 for all nurses, a BM index of 3.44 for nurses in sample A and a BM index of 3.36 for nurses in group B. These average values of burnout clearly show that their averages are in the range of "presence of signals of burnout" In this category of the BM index there are significant signs of burnout, but it is not developed burnout syndrome. One alarming finding was that three nurses in sample B found themselves in BM index band 5, which means an emergency state in which it is necessary to seek professional help.

Key words:

burnout syndrome, nurse, research

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## INTRODUCTION

Burnout syndrome is a well-known phenomenon today, when a state is reached of extreme exhaustion, inner distancing, a strong decline in performance and various psychosomatic disorders, though it is not officially a disease [1]. According to ICD/International Classification of Diseases of the World Health Organization / burnout syndrome is included in the additional category of diagnoses, therefore it is not classified as a disease. Burnout is legally recognized as an occupational disease in two countries, in Spain and in the United States. This is a serious problem that directly affects the worker. Feeling burnout is the intermediate result of several risk factors [2]. Burnout is not the result of the accumulation of isolated traumatic events; chronic exposure is associated with situational stressors combined with unrealistic and unreasonable expectations. Professions focused on helping others are subjects of a specific risk because of their high exposure to emotional burden and the demands of professional performance [3]. The number of phases or stages of the development of burnout syndrome differ depending on the author. Alfried Langle characterized the process of burning out in three phases, also describes the burnout "is life without life and one's own life loses value" [4].

- 1. The first phase is marked by the enthusiasm with which the person enters employment. After the excitement has subsided, usually motivating forces other than enthusiasm become more prominent (usually money).
- 2. Phase of utilitarian interest; the person works, but wants to know "what for?"
- 3. The third phase is the "ash phase" the person and his enthusiasm extinguished, losing respect for the value of other people, things, the objective and even himself he will fall into an existential vacuum, his life is meaningless [5].

#### Prevention of burnout syndrome

Kebza, Šolcová based on the results found in the survey that investigated the prevalence of burnout among nurses in intensive departments and standard types of department, proposes the following protective recommendations for clinical practice:

- enable nurses working in the difficult departments to have counselling with psychologist
- incorporate interpersonal communication and communication training into nurses' education
- analyse the critical, professional, psychological and social situations in the workplace
- occasionally spend time away from their workplace support for team building which will help getting to know people outside the workplace [6].

More and more authors now highlight the role of teambuilding in preventing burnout among health professionals. Teambuilding uses specific procedures aimed at developing group processes, interpersonal ties and social interactions. It focuses on building self-confidence and quality of human relations. Thus it also indirectly affects

conflict resolution, smoothes over problematic issues [6,7]. The problems of medical facilities, demands of nursing work, difficulties in communication of nurses with colleagues and with patients are the reasons that justify the use of teambuilding as a tool for improving the quality of our work, teamwork and to protect nurses from burnout or frustration [7,8].



## Research problem

The paper is focused on the issue of burnout syndrome and its occurrence in nursing practice.

## Formulation of hypothesis:

H1 We expect that there is a statistically significant difference between the averages of BM indices (BM index - the result of the standardized Burnout questionnaire) for nurses working in standard inpatient departments and nurses working in intensive care workplaces,

**H2** We expect that there is a statistically significant relationship between the averages of the BM indices and age of nurses,

H3 We expect that there is no statistically significant relationship between the marital status of nurses and averages of BM indices.

## **MATERIALS AND METHODS**

The aim was to determine the prevalence of burnout in the nursing profession. Information and data necessary for our investigation were obtained through a standardized questionnaire BM - Burnout Measure - of psychological burnout. To collect pieces of information, we used a standardized questionnaire Burnout Measure (BM) - Burnout questionnaire. The second part consists of a standardized questionnaire Burnout Ayala M. Elliott Aronstona Pinesovej and 1981 (taken from the book Half Křivohlavý -How not to lose enthusiasm. The data obtained through a questionnaire BM (Burnout Measure) Ayala Pinesovej and Eliot Aronson was analyzed using the Mann - Whitney U test, as well as using the Kruskal-Wallis test. For each hypothesis we specify which test was used. Kruskal--Wallis test was used in cases where we wanted to determine whether there is a statistically significant difference between the two groups over the values obtained. Statistical analysis of data using the above non-parametric tests realized the significance level of 0.05. The level of significance to us is a level of risk that we take the wrong argument, that we accept the argument that in fact the case.

## Characteristics of respondents

The choice of respondents was deliberate, it was a systematic mechanical selection and the criterion was working in a standard inpatient department or department of inpatient intensive medicine. The total number of distributed questionnaires was 130, of which the return rate was

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#### Implementation of research

The collection of data using the standardized questionnaire was conducted in the months of January 2015 -January 2016, at health facilities of the Prešov and Košice regions. A total of 130 questionnaires were delivered, of which 130 were returned, so the return rate was 100%.

#### RESULTS

## Analysis and interpretation of research results

H1 We expect that there is a statistically significant difference between the averages of BM indices (BM index - the result of the standardized Burnout questionnaire) for nurses working in standard inpatient departments and nurses working in intensive care workplaces.

In hypothesis H1 we want to discover if there is a statistically significant difference in average BM Index for nurses in standard inpatient departments. We evaluate the hypothesis based on the Mann-Whitney U test as we are comparing the difference in two groups.

Tab. 1. Average value of BM index.

Type of workplace		Average value of BM index	
Inpatient department	Α	(n-65) 3.44	
Department of intensive medicine	В	(n-65) 3.66	

# Statistical analysis for hypothesis H1

The calculated value of the test characteristic p is 0.589, which is a value greater than the significance level of 0.05, i.e.  $P=0.589>\alpha=0.05$ . Based on the validity of this relationship, we have not confirmed the assumption of hypothesis H1 and therefore it holds that there is no statistically significant difference in the average BM Index of nurses working in standard types of inpatient departments and intensive care workplaces. We can search for the consequences of this non-confirmation, for example, in the subjective assessment of respondents, their age structure etc. Therefore we cannot generalize the conclusion, it is valid only for the sample of respondents analysed by us. A general conclusion would require a broader set of respondents.

H2 We expect that there is a statistically significant relationship between the averages of the BM indices and age of nurses.

Tab. 2. Relationship between BM index and age of nurse.

Questionnaire item	Standard departments		Specialised departments	
	n	%	n	%
Up to 30 years of age	10	7.7	15	11.5
From 31 to 49 years	36	27.7	29	22.3
Above 50 years	19	14.6	21	16.2

Another item of identification, we mapped the age of the respondents. The largest group of the total number of respondents were nurses aged 31-49 years equal to 65 (52.3%). In group A, the greatest share were nurses aged 31-49 years in the number of 36 (27.7%), the second largest group in this set were nurses over 50 years of age equal to 19 (14.6%). In group B, the highest number of nurses were aged 31- 49 years totalling 29 (22.3%) and the second largest representation was nurses over 50, in the number of 21 (16.2%). The smallest representation in both sets of nurses were those under 30 years of age, the number across 49 standard departments was 10 (7.7%) and in intensive departments it was 15 (11.5%).

■ Tab. 3. Relationship of the value of the BM index, age and type of workplace.

AGE	State of BM-A	State of BM-B	
Up to 30 years of age	2.75	3.12	
From 31 to 49 years	3.55	3.42	
Above 50 years	3.63	3.60	

The average BM index reached by nurses in group B with more than 15 years of experience was 3.52. On the other hand, the lowest BM index was found in nurses from group A working up to 5 years – with a value of BM index of 2.63. On the basis of these results we can therefore say that the level occurrence of burnout syndrome grows with the number of years worked in both comparative groups of nurses.

H3 We expect that there is no statistically significant relationship between the marital status of nurses and averages of BM indices.

In the identification item in which we mapped the marital status of respondents, the largest group were married nurses with a total number of 87 (66.9 %), of which 51 (39.2 %) were nurses from group A and 36 (27.7 %) were nurses from group B. A less numerous group was formed of 23 single nurses with 9 respondents from group B and 14 respondents from group A.

Tab. 4. Nurses according to workplace.

Questionnaire item	Group A		Group B	
	n	%	n	%
Single	9	6.9	14	10.8
Married	51	39.2	36	27.7
Divorced	2	1.5	13	10.0
Widow	3	2.4	2	1.5

Tab. 5. Relationship of the BM index value, marital status and type of department.

Marital status	State of BM- Group A	State of BM- Group B
Single	2.77	2.98
Married	3.47	3.51
Divorced	3.78	3.95
Widow	3.57	3.23

The highest scores of BM index were found in nurses in group B who were divorced - value 3.95, whereas the lowest average BM index was found in nurses in group A when these nurses were single – value BM 2.77. The most numerous group in both samples were married nurses, where the average BM index was 3.51 in group A and 3.47 in group B.

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# DISCUSSION

The most extensive study in the European Union dealing with burnout among nurses is the NEXT study, with a target sample of 32,850 nurses and was carried out in 10 EU countries including Slovakia. It mapped the source of physical and mental stress among nurses and concluded that in Slovakia, every fourth nurse is suffering from burnout. Slovakia, thus found itself in the second place in the incidence of burnout after nurses in Belgium [8,9]. The occurrence of burnout syndrome was confirmed in our study. The average value of BM indices in our sample was 3.40 for all nurses, a BM index of 3.44 for nurses in sample A and a BM index of 3.36 for nurses in group B. These average values of burnout clearly show that their averages are in the range of "presence of signals of burnout" In this category of the BM index there are significant signs of burnout, but it is not developed burnout syndrome. One alarming finding was that three nurses in sample B found themselves in BM index band 5, which means an emergency state in which it is necessary to seek professional help.

In hypothesis 1 we established that we expect statistically significance differences of BM indices among nurses in groups A and B. We tested the significance using the Mann-Whitney test with a significance level of 0.05.

The finding was that there was no statistically significant difference in the BM index for nurses in groups A and B. Hudáková, in her paper, monitored the average BM indices among nurses working in standard departments compared to that of nurses working in outpatient departments using the same measuring tool as we do in our research. On the basis of statistical processing, the sample showed statistical significance of the influence of the type of department on burnout syndrome. It concluded that the nurses working in inpatient departments are at higher risk of burnout, as their average BM Index value is 4, which is on the border of certifiability. It should also be noted that in small communities, where the respondents know each other, even simple questions in which we ask for demographic information could lead the respondents to fear of their anonymity violation. This can result in their not stating true feelings and responses.

In the second hypothesis we wanted to verify the statistical significance of the relationship between the age of nurses and burnout, where we expected that the relationship of age and burnout syndrome is statistically significant.

The expectation of the hypothesis was confirmed to us, i.e. there is a statistical significance of the relationship. The relationship of the age of nurses and burnout is also mentioned by Morovicsová, who conducted research among nurses working in departments of internal medicine and oncology. When analysing BM averages, we concluded that with increasing age, the average of BM indices increases. The lowest BM indices were nurses up to 30 years of age (average = 2.94 BM), while the highest was nurses over 50 years of age (average = 3.62 BM). The link between age and burnout is described by the Šeblová and Kebza, who analysed the incidence of the syndrome among emergency service workers. Haškovcová. states

that with increasing age, the number of nurses with a tendency towards and suffering from burnout also increases. According to the authors, at risk groups there are nurses between 18 and 29 years of age because of greater vulnerability, lack of experience in dealing with problems. There is also the opinion stated by Kebza and Šolcová that in terms of development of burnout syndrome, demographic characteristics such as age, education, marital status or length of service are considered to be neutral factors [6].

The third hypothesis verified the statistical significance of the impact of marital status on the occurrence of burnout syndrome in nurses.

In our sample of nurses, we conclude that the highest BM index scores were found in divorced nurses (overall average BM 3.87) and the lowest level of burnout was in single nurses (overall average BM index 2.86). This situation has a significant impact, as in our opinion the burnout syndrome is affected not only by the work environment but also family base, social and family contacts or the presence of a loved one in the form of a life partner. Even on the basis of these facts, divorced nurses had higher average BM indices than married sisters or divorced ones. Based on statistical processing, a significant relationship between marital status and the incidence of the syndrome was not shown. Similar results were also stated by Hudáková who found that the average value of BM indices is higher for divorced nurses (BM 3.4) than for other nurses [10].

The statistical significance of the impact of marital status on burnout was also not shown in their study. Based on statistical treatment and outcomes that resulted from it, we can conclude that marital status has no statistical significance in the development of burnout. This fact is described in the studies mentioned above with the same result [11].

## CONCLUSIONS

Based on the analysis of the results, we can conclude that the rate of prevalence of burnout in the profession of nursing is significant. This is also confirmed by available research and studies on these issues. Burnout is a phenomenon that threatens every nurse, with a significant role in its development played by various external or internal factors. Therefore, in our view, the basis of prevention, is nurses knowledge about how to prevent burnout and be able to use it in practical life. Finally, we also drew attention to a proactive approach of hospital management on this issue.

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