



Selected Socio-demographic Factors Influencing the Development of Occupational Burnout Syndrome in Polish Psychiatric Nurses Working in Locked Wards in the Vicinity of Warsaw

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Abstract

Introduction: A nurse is a member of a therapeutic team who has the closest and most frequent contact with the patient. Being exposed to high levels of prolonged stress caused by the unpredictable behaviour of their patients, nurses working in mental health hospitals are under particular pressure.

Research objectives: The aim of the following research is to analyse how selected socio-demographic variables influence the development of the general level of work-related burnout and its single components among psychiatric nurses.

Research material and methods: The research was conducted on a group of 76 psychiatric nurses (N=76) from two hospitals in the vicinity of Warsaw. For the purposes of the research, a survey has been used with a two-part standardised questionnaire: the Maslach Burnout Inventory (MBI) and the General Health Questionnaire – 28 (GHQ-28) developed by David Goldberg for mental health evaluation – both adapted into Polish.

Findings: An analysis of variables based on the MBI questionnaire reveals that the educational background statistically differentiates the levels of two aspects of occupational burnout syndrome: emotional exhaustion and the assessment of personal accomplishment as well as influencing the general level of work-related burnout. An analysis of a correlation between different aspects of health and the number of years worked in nursing, which has been conducted using the questionnaire GHQ-28, shows that the latter correlates positively with some aspects of the former.

Conclusions: Higher educational background of the nurses taking part in the survey has an impact on the general level of work-related burnout. With the increase of work experience in a given workplace, rises the level of mental health problems and emotional exhaustion.

Key words: occupational burnout syndrome, psychiatric nursing staff, exhaustion, educational background

Background

Work-related burnout syndrome has been one of the most researched topics in the field of health and occupational psychology in recent years. According to the World Health Organisation (WHO), around three hundred million employees worldwide are affected by various health problems as a result of chronic stress at work [1]. Occupational burnout is one of the negative consequences of unmodified work-related stress [2]. This phenomenon has been examined worldwide for the last forty years, in particular among social workers and health care professionals [3]. The subject of *emotional labour* is part of a broader problem of social values where the distinction between work and private life becomes increasingly blurred [4]. Today, the importance of nursing personnel in the Polish health care system is growing. The group constitutes an essential element of the system. It plays a vital role in health promotion and prevention of diseases in various aspects of people's lives. In terms of staffing levels, the situation of Polish nurses proves to be difficult. As stated in the report of the Nurses and Midwifery Council (Naczelna Izba Pielęgniarek I Położnych, NIPiP), there will be 4.7 nurses per 1000 people in 2020 and in the largest Masovian district - 5.44 nurses per 1000 people. Nevertheless, it is the largest group of medical professionals working in health care [5,6].

Nursing professionals are required to demonstrate good organisational skills, patience and compassion for another person, which clearly differentiates this profession from the others. In addition, psychological stress, low salary, lack of close cooperation within the medical team and difficult communication with patients and their families have a considerable impact on the development of occupational burnout syndrome. Being exposed to high levels of prolonged stress caused by the unpredictable behaviour of their patients, nurses working in mental health hospitals are under particular pressure [7,8]. The necessity to employ coercive measures towards aggressive patients intensifies nurses' fear for their own safety thus contributing to the development of work-related burnout

syndrome [9]. The need for safety is a fundamental human need. It enhances the confidence and developmental opportunities of a person and it implies a lack of danger of losing important values such as life, health, job or respect [10]. Mental health patients often refuse to take medicine or to give consent to medical treatment and they are usually admitted to hospital on a court order which, in turn, escalates their aggression. The hospitalisation period in a psychiatric clinic in Poland is long and it takes 30.3 days on average [10,12,13].

Prolonged emotional pressure and tiredness of mental health nurses can cause automatism as well as a tendency to perceive the reality in a stereotypical way [13]. For that reason it appears to be vital to take preventive steps with regards to the impact on the health and productivity of nursing staff but also the quality of care of their patients [13,14].

The aim of the following study is to analyse how selected socio-demographic variables such as the level of education, job seniority, and age of the respondents influence the development of the general level of work-related burnout and its single components among psychiatric nurses.

Material and methods

The research was conducted on a group of (N=76) mental health professionals in March 2019 with 93.4% of female and 6.6% of male respondents involved. The average age of the examined group was 40 years old. 28.9% were people under 40 years of age. 52.6% of respondents were between 41 and 50 years of age. 18.4% of respondents were over 50 years old. The average work experience among studied nurses was 21 years and 6 months, however the average work experience in the same place of work was 16 years and 1 month. The respondents work in two psychiatric clinics in the vicinity of Warsaw. 40% of all mental health patients in Poland are hospitalised in the Masovian district [11].

The research is based on a method of diagnostic survey with two standardised questionnaires serving as a research tool. One of them is a Polish version of the Maslach Burnout Inventory (MBI) adapted by Tomasz

Pasikowski in the form of a self-test with two answer options: 'yes' and 'no'. It consists of 22 items related to three aspects of occupational burnout: emotional exhaustion (EE), depersonalisation (DEP) and a low sense of personal accomplishment (PA). There are separate results for each of the subscales. It is possible, however, to establish a general level of occupational burnout [16].

The second test used in the survey was a standardised questionnaire translated by Dorota Merez. It is a four-scale test which includes somatic symptoms, anxiety and insomnia, symptoms of depression and other mental health problems. The results of each separate scale constitute a general score [17]. Apart from the questionnaires, the survey includes questions about respondents' salary and personal information.

The group taking part in the survey consisted of both nurses who completed psychiatric courses or had a psychiatric specialisation (N=20) and nurses without a specialisation (N=56). 17.1% of the respondents finished secondary education, 42.1% completed higher vocational education, 35.5% of which held a bachelor's degree in nursing, while the rest of 6.6% had a bachelor's degree in a field other than nursing. 40.8% of nurses had an MA degree with 39.5% with an MA in nursing and 1.3% with an MA in a different field of study. In terms of marital status, 76.3% of nurses were married, 9.2% – divorced, 13.2% – singles and 1.3% – widowed.

A statistical analysis has been carried out by means of an IBM SPSS Statistics 25 pack. Here, the descriptive statistics for each of the measured variables have been calculated and the consistency of the distribution of variables with the normal distribution has been tested. For that purpose, the Shapiro-Wilk test has been used and a number of correlations with Spearman's rank correlation coefficient (Spearman's rho) have been tested. Additionally, the Kruskal-Wallis testing method has been employed – a non-parametric equivalence of a one-way analysis of variance for independent samples. Statistically significant results of the Kruskal-Wallis test have been complemented using post hoc tests. The data has been then analysed with a chi-squared test where a significance threshold of $\alpha=0.05$ has been set. The p-values from 0.05 to 0.1 have been interpre-

ted as significant on the level of statistical tendency. Furthermore, the basic descriptive statistics of the analysed variables have been calculated and a normality distribution tests have been performed. According to the results, the distribution of all analysed variables deviates indeed from the normal distribution. Considering the results of the test, the non-equipotency of the test group and their small number, a contrastive analysis with non-parametric tests has been carried out – a non-parametric equivalence of a one-way analysis of variance and Spearman's rank correlation coefficient.

Results

An analysis of variables with an MBI questionnaire reveals that educational background differentiates statistically the level of two aspects of occupational burnout: emotional exhaustion and the assessment of personal accomplishment but also the overall value of work-related burnout. As for depersonalisation, no significant statistical differentiation has been confirmed. Table 1 shows the results of the variance analysis. The results obtained in a paired comparison of the assessment of personal accomplishment indicate that the respondents with secondary education achieve lower results than those with an MA degree in nursing ($p=0.008$), a bachelor's degree in nursing ($p=0.005$) and a bachelor's degree in a different subject field ($p=0.018$). A paired comparison of the overall value of occupational burnout shows a statistical difference between nurses who completed secondary education and those with a bachelor's degree in nursing ($p=0.008$, Figure 1).

There is a cause-effect relationship between occupational burnout and work experience in general as well as work experience in a given workplace. Furthermore, a positive correlation between emotional exhaustion and work experience in a given workplace has been established. This means that emotional exhaustion increases proportionally with the years of work experience in a given workplace. Also, there is a weak negative correlation between work experience and the asses-

sment of personal accomplishment. In other words, the longer the experience, the lower the evaluation of personal accomplishment (Table 2).

A GHQ-28 analysis of the correlation between different aspects of health (somatic symptoms, anxiety and insomnia, symptoms of depression and other mental health problems) and work experience shows that work experience in a given workplace correlates positively with some of the aspects of health. In the case of mental health problems, the correlation is statistically positively significant. The longer work experience in a given workplace, the higher the level of mental health problems. The remaining correlations have not reached the level of statistical significance but merely the level of statistical tendency. This is the correlation between work experience in a given workplace and somatic symptoms, anxiety and insomnia and general health (Table 3).

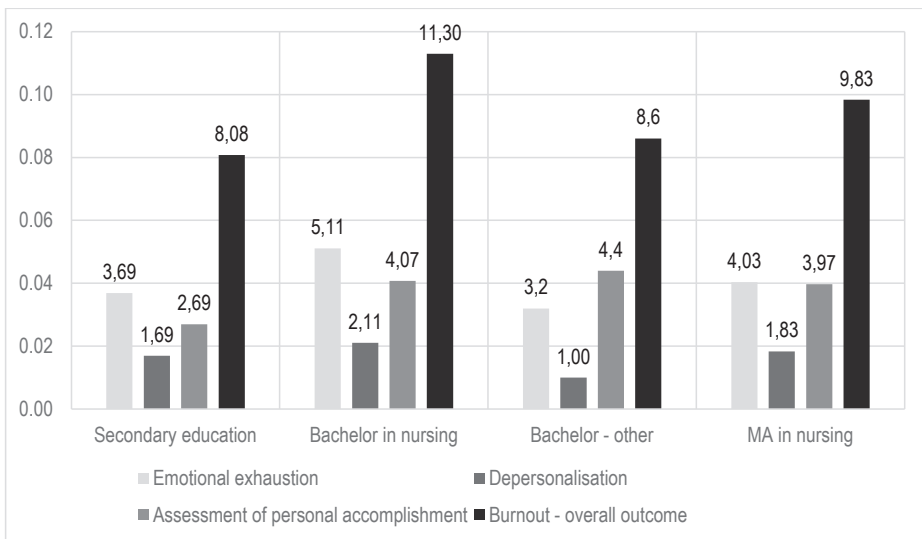


Figure 1. An average value of occupational burnout depending on educational background

Table 1. Occupational burnout depending on educational background – a comparison

		M	H	p
Emotional exhaustion	Secondary education	3.00	10.59	0.014
	Bachelor in nursing	5.00		
	Bachelor – other	2.00		
	MA in nursing	3.00		
Depersonalisation	Secondary education	1.00	4.86	0.182
	Bachelor in nursing	2.00		
	Bachelor – other	1.00		
	MA in nursing	2.00		
Assessment of personal accomplishment	Secondary education	3.00	14.89	0.002
	Bachelor in nursing	4.00		
	Bachelor – other	4.00		
	MA in nursing	4.00		
Burnout – overall value	Secondary education	8.00	11.46	0.010
	Bachelor in nursing	11.00		
	Bachelor – other	8.00		
	MA in nursing	9.00		

M – average value, H – statistics of the Kruskal-Wallis test, p – significance

Table 2. Correlation between work experience and occupational burnout

		Work experience in nursing	Work experience in a given workplace
Emotional exhaustion	Spearman's rho	0.05	0.23
	p	0.648	0.048
Depersonalisation	Spearman's rho	-0.14	0.03
	p	0.235	0.777
Assessment of personal accomplishment	Spearman's rho	-0.20	-0.06
	p	0.083	0.619
Burnout – overall value	Spearman's rho	-0.11	0.12
	p	0.364	0.300

Spearman's rho – correlation coefficient, p – significance

Table 3. A correlation between work experience and different aspects of health

		Work experience in nursing	Work experience in a given workplace
Somatic symptoms	Spearman's rho	-0.05	0.21
	p	0.650	0.071
Anxiety and insomnia	Spearman's rho	0.09	0.21
	p	0.445	0.066
Mental health problems	Spearman's rho	0.08	0.24
	p	0.473	0.041
Symptoms of depression	Spearman's rho	0.03	0.03
	p	0.786	0.774
General health - overall results	Spearman's rho	0.05	0.23
	p	0.702	0.050

Spearman's rho - correlation coefficient, p - significance

Discussion

The subject of occupational burnout among nursing staff has been widely examined in a Polish and international context. The aim of the following study was to research the correlation between different socio-demographic variables and the development of occupational symptoms among nurses working in psychiatric wards.

The following variables have been analysed: age, gender, marital status, work experience in a nursing setting, work experience in a given workplace, educational background as well as courses and training completed. The level of education and work experience in a given workplace are important factors in determining the quality of life of mental health nurses as confirmed by the results of the author's own research. According to these, educational background and work experience in psychiatric wards differentiate statistically the overall value of occupational burnout, emotional exhaustion and the assessment of personal accomplish-

shment. Occupational burnout affects an increasing number of psychiatric nurses [18] causing a decrease in their productivity and the quality of patients' care. Work-related burnout syndrome has an impact on nurses' health and their work absence and it is the cause of a growing frustration among this particular group of health professionals [19].

In an MBI test carried out by Klejda and Szewczyk, in which fifty psychiatric nurses took part, 30% of nurses achieved the highest score in the aspect of emotional exhaustion and 20% – in work satisfaction [9]. A Swedish study conducted by A. Berg and I. R. Hallberg involving a qualitative transcription of semi-structured interviews with twenty two psychiatric nurses reveals that the most challenging task appears to be coping with the unpredictable behaviour of patients. Nurses in psychiatric settings need to be prepared for unpredictable situations, in which they are left on their own. Their struggle with professional autonomy leads to a loss of work-related reliance. Nurses have also less influence on decisions about general care plans even though they have a number of duties to perform. The study highlighted the contextual aspects such as organisational obstacles, difficulties in the work environment and a poor cooperation with patients [20]. According to a Dutch study conducted by Peter de Looft and his co-authors on a group of 114 psychiatric nurses, the experience of physical aggression is closely linked to the symptoms of occupational burnout. The highest correlation between aggression and work-related burnout has been established among nurses claiming to possess a greater ability to cope with stress [21]. In another study carried out by Grzywna and Cieślik using an MBI questionnaire, in which seventy psychiatric nurses working in locked wards took part, 87.1% of them perceive their work environment as stressful [10]. A study by Rużyczka and her co-authors with an MBI and an Effort Reward Imbalance (ERI) questionnaires, the latter assessing work environment, in which 104 nurses from various wards took part, reveals that emotional exhaustion correlates with all levels of occupational stress. Moreover, there is a link between the educational level of nurses and work-related burnout. The higher the level of education in non-surgical nurses, the lower their emotional exhaustion

while a higher educational level of surgical nurses causes an increase in dissatisfaction with rewards. An analysis of a correlation between work experience and the age of non-surgical nurses demonstrates that the level of emotional exhaustion rises with the nurses' age. In addition, the older the age of the nurses and the longer their work experience, the lower the sense of lack of personal accomplishment. No correlation has been established between occupational burnout and the age and work experience among non-surgical nurses [22]. Emotional exhaustion and depersonalisation were the main aspects of occupational burnout found among randomly selected 250 nurses from the South of Poland in a study conducted by Wilczek-Rużyczka and Iska-Golec using an MBI inventory [23]. In a study on 110 nurses of various specialisms in which an MBI questionnaire has been used, Kupcewicz and Szczypiński show that work experience has a statistical impact on the level of emotional exhaustion – the latter increases with the years worked in nursing [24].

A study by Zaczyk and co-authors on a group of 74 mental health nurses from the South of Poland using an MBI inventory and a questionnaire of the author's own survey reveals a link between aggression experienced by psychiatric nurses and two aspects of occupational burnout in particular: emotional exhaustion and depersonalisation [25].

In conclusion, it can be stated that occupational burnout of nurses proves to be a work-related problem which requires preventive measures. There is a need for an in-depth research of the factors influencing the development of occupational burnout in psychiatric nurses. This particular group of professionals has not been examined sufficiently and the following study confirms that there are discrepancies between the factors leading to the development of work-related burnout in nurses in psychiatric wards and those of different specialisms.

Conclusions

The analysed group of psychiatric nurses proves to be affected by two dimensions of occupational burnout: emotional exhaustion and asses-

sment of personal accomplishment. A higher educational background of the nurses has an impact on the overall value of work-related burnout. It has been established that both emotional exhaustion and the level of mental health problems increase with the number of years worked in a given workplace. Furthermore, there is a correlation between the length of the employment period in a given workplace and somatic symptoms such as anxiety, insomnia as well as general health and well-being.

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