

BMJ Open Life satisfaction, job satisfaction, life orientation and occupational burnout among nurses and midwives in medical institutions in Poland: a cross-sectional study

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ABSTRACT

Objectives To assess life satisfaction, job satisfaction, life orientation and the level of professional burnout in a group of professionally active nurses and midwives.

Design A cross-sectional study.

Setting This study was conducted between March and October of 2017 during specialisation training at the European Centre for Postgraduate Education in Wrocław, Poland.

Participants A group of 350 professionally active nurses (n=293) and midwives (n=57) were enrolled in the study.

Outcome measures Associations between burnout and selected life-related and job-related outcomes using (1) the Satisfaction With Job Scale, (2) the Satisfaction With Life Scale (SWLS), (3) the Life Orientation Test-Revised, (4) the Maslach Burnout Inventory and the Authors' Designed Questionnaire regarding sociodemographic factors. The level of statistical significance was set at $p < 0.05$ (with a CI of 95%).

Results The vast majority of participants were those in the ages of 41–50 years old (40.57%), women (96.86%) and people with bachelor's degree (46.29%). The average overall rate for occupational burnout was 34.67 per 100 points. Assessment of occupational burnout subscale showed that the most significant factor was emotional exhaustion at 39.14 points (SD=28.15). Job satisfaction, life satisfaction and life orientation assessed with SWLS significantly affects each of the occupational burnout subscales ($p < 0.05$).

Conclusions The level of occupational burnout in nurses and midwives appeared to be low. It has been revealed that such determinants as life satisfaction, job satisfaction and life orientation do not allow for developing an occupational burnout.

INTRODUCTION

Occupational activity is an essential aspect of life for the majority of people, and as a source of satisfaction, it can contribute to an increase in overall life satisfaction. According to the literature, job satisfaction is associated

Strengths and limitations of this study

- Our study is one of the first to quantitatively assess the occupational burnout among Polish nurses and midwives, considering the selected life-related and job-related outcomes.
- We used well-established and standardised tools to address burnout phenomenon in this population of healthcare providers.
- The professional group of midwives was also included in the study, which is an additional strength, and the entire study was conducted on a large group of 350 subjects.
- The study lacks of an external control group. Also, group division into two subgroups midwives and nurses was not provided. Such presentation of differences or similarities in wide range of variables studied between these professional groups could be an additional asset of the study.

with the individual's ability to pursue goals, values and beliefs.¹

While an increase in satisfaction contributes to a greater or lesser extent to an employee's commitment and efficiency, a decrease in satisfaction increases the risk of unfavourable phenomena, such as increased absenteeism or changing jobs.^{2,3} Some researchers postulate that one should not distinguish the various negative effects of dissatisfaction but should treat them as one factor.⁴

Among the factors affecting job satisfaction are listed professional achievements, chances for higher qualifications and the appreciation of superiors.⁵ Professional satisfaction among Polish nurses is widely described in the literature as an important predictor affecting the quality of the provided healthcare services. The nurse, who is working in a profession

of public trust, is exposed to stressful factors related to health protection and saving human lives. Permanent difficult and stressful situations and the mental and physical exhaustion that often accompanies nursing can contribute to a lack of motivation, indifference and even illness.^{6–8}

As a result of constant stress, nurses may experience a 'burnout syndrome', which negatively affects not only the nurse but also the patients in their care.^{9 10} The concept of occupational burnout itself reflects a social problem that has been escalating in recent years, the description of which was created very spontaneously. Burnout is a psychological syndrome emerging as a prolonged response to chronic interpersonal stressors on the job.¹¹ It involves feelings of emotional exhaustion, depersonalisation and diminished personal accomplishment at work.¹²

One of the factors directly related to the occurrence of occupational burnout is satisfaction with life. There are many definitions of 'life satisfaction' in the literature; however, they are not equivalent in meaning. It is assumed that this concept refers to the successful ageing and positive self-assessment of living conditions, which can also be an indicator of general well-being.¹³

Some researchers have conceptualised burnout according to potential sources of psychological fatigue such as personal, client and work-related domains.¹⁴ The phenomenon of occupational burnout results from experiencing increased anxiety or the lack of expected results of activities for a long time.¹⁵ The phenomenon of occupational burnout does not cover all professional groups and exists especially where close interpersonal contact requires full involvement.¹⁶

Occupational burnout is not a consequence of one event, but it is the result of slowly debilitating processes. The phenomenon of occupational burnout develops gradually and progresses as a result of unbalanced interactions between the expectations of people and their ability to bear burdens. Factors influencing the occurrence of burnout include individual factors such as sex, age, the level of endurance and commitment, the level of self-esteem, the nature of work and professional beliefs.¹⁷ The second group of factors which foster the emergence of burnout syndrome are situational factors such as time pressure, a lack of social support, a lack of autonomy, conflicts, work intensity, a lack of a sense of reciprocity and a hierarchy.¹⁸

The available literature indicates that occupational burnout significantly affects the temperament of employees, leads to their inaction and contributes to a reduced quality of services.^{19 20} Moreover, medical staff may experience emotional instability, a decreased willingness to work and growing irritation.^{21 22} Significant psychological burdens and constant frustration resulting from work fatigue are predictors of occupational burnout risk in a group of nurses.

In the available literature on the subject, there are reports regarding life satisfaction, job satisfaction and occupational burnout in the professional nurses. There

Table 1 Sociodemographic characteristics of study participants (n=350)

Character	N	%
Age		
23–30 years	92	26.29
31–40 years	50	14.29
41–50 years	142	40.57
51–60 years	61	17.43
61 years and more	5	1.43
Sex		
Female	339	96.86
Male	11	3.14
Education		
Medical high school	67	19.14
Medical college of further education	28	8.00
Bachelor	162	46.29
Master	90	25.71
Other	3	0.86

are still few studies focusing on burnout phenomenon among midwives. Therefore, the aim of the study was to assess life satisfaction, job satisfaction, life orientation and the level of occupational burnout in a group of professionally active nurses and midwives.

Early detection of the phenomenon of occupational burnout is an indispensable element of social and environmental support for healthcare providers. Actions should be taken to reduce long-term depression resulting from the specifics of the nurses and midwives job.

MATERIAL AND METHODS

Study design and settings

A cross-sectional, descriptive, analytical design using a questionnaire was employed for this study. Study design and reporting format are in accordance with the recommended Strengthening the Reporting of Observational Studies in Epidemiology guidelines for observational clinical studies. The study was conducted in a group of 350 professionally active nurses (n=293) and midwives (n=57) and included 11 men. Detailed characteristics of the study participants are shown in [table 1](#) and [table 2](#). This study was conducted between March and October of 2017 during specialisation training for nurses and midwives at the European Centre for Postgraduate Education in Wroclaw, Poland.

Recruitment

Participation in the study was anonymous and voluntary. Recruitment procedure was carried out by contacting professionally active nurses and midwives and inviting them to participate in specialisation training at the European Centre for Postgraduate Education in Wroclaw,

Table 2 Occupational characteristics of study participants (n=350)

Character	N	%
Occupation		
Nurse	293	83.71
Midwife	57	16.29
Work experience		
0–5 years	89	25.43
6–10 years	36	10.29
11–15 years	17	4.86
16–20 years	41	11.71
21 years and more	167	47.71
Main place of work		
Hospital	311	88.86
Open care	23	6.57
Other	16	4.57
Working system		
8 hours (07:00–15:00)	77	22.00
12 hours (07:00–19:00 and 19:00–07:00)	258	73.71
Other	15	4.29
Monthly net salary		
1000–2000 PLN	55	15.71
2001–3000 PLN	201	57.43
3001–4000 PLN	69	19.71
4001–5000 PLN	17	4.86
5001–6000 PLN	4	1.14
6001 PLN and more	4	1.14

Poland. Contact was established via telephone, email and regular mail providing information on the study objectives. The inclusion criteria to participate in the study were: having a permit to practice nursing and being a registered nurse, having current professional activity, giving consent to participate in the study and being over the age of 18.

Ethical considerations and permissions

The study protocol was approved. The study was carried out in accordance with the Declaration of Helsinki guidance of the World Medical Association and Good Clinical Practice recommendations. All subjects gave their informed consent for inclusion before they participated in the study. They were informed of its purpose and course, and of the possibility of withdrawing from the study at any stage. This study was conducted under a research project funded by the Ministry of Science and Higher Education in Poland as a part of a statutory grant of the Wrocław Medical University for maintaining research potential (no. ST.E020.17.050).

Data collection and research tools

All participants received five questionnaires. These consisted of a sociodemographic questionnaire (SDQ) designed by the authors, as well as standardised questionnaire tools which had been previously validated and adapted to Polish conditions: Satisfaction With Job Scale (SWJS), Life Orientation Test-Revised (LOT-R) and Maslach Burnout Inventory (MBI).

Sociodemographic questionnaire

The first part consisted of questions pertaining to the population group—age, gender, level of education, marital status and place of residence. The second part dealt with occupational data such as profession, level of experience, main place of work, work system in hours per day and net salary per month.

Satisfaction With Job Scale

The SWJS allows for the assessment of the sense of life satisfaction. The final result of the SWJS is the total number of points derived from five questions (the range is 5–35 points). Higher scores indicate greater job satisfaction. There are no standards for the SWJS questionnaire which determine whether the obtained result is high or low. The SWJS scale has a so-called ‘centre point’ that is set at 20 points (four points per question), meaning that the participant is neither happy nor dissatisfied with his or her work.^{23 24}

Satisfaction With Life Scale

The Satisfaction With Life Scale (SWLS) scale is used for subjective assessment of the sense of life satisfaction and is a research tool that can be used for the examination of both patients and healthy people. It is a five-item scale designed to measure global cognitive judgements of one’s life satisfaction (not a measure of either positive or negative affect). The results between 1 and 4 sten score determine the lower sense of life satisfaction, 5 and 6 as average and from 7 to 10 as high.^{25 26}

Life Orientation Test-Revised

The LOT-R test allows assessing the life orientation of the study participants. The results of LOT-R in the study were converted into sten scores, in accordance with the applicable standards given in the key to this questionnaire. The results between 1 and 4 indicate a low level of optimism (ie, a tendency to pessimism), 5–6 indicate the average level of optimism (ie, neutral attitude) and the results 7–10 shows a high level of optimism (ie, the tendency to optimism).^{27 28}

Maslach Burnout Inventory

The MBI is the most commonly used tool to assess the risk of burnout. It consists of 22 items related to three aspects of occupational burnout: emotional exhaustion (EE), depersonalisation (DEP) and personal accomplishment (PA). The results on each of these subscales are expressed on a scale of 0–100, where a higher score means a higher level of professional burnout. In addition, the overall

burnout rate is also calculated, being the average of three subscales. High scores in the subscales of EE and DEP and low sense of PA in the subscale allow to state that the examined person is burned out occupationally.^{29 30}

Statistical analyses

The analysis of each quantitative variable was conducted by calculating the mean (M), SD, median (Me), lower (Q1) and upper quartile (Q3) and minimum (Min) and maximum (Max) values. The normality of empirical distribution of quantitative variables was verified by the Shapiro-Wilk test. Correlations between quantitative variables were analysed using a Spearman correlation coefficient (due to non-normality of analysed variables).

Correlation coefficients were interpreted as follows: $|r| \geq 0.9$ —very strong correlation; $0.7 \leq |r| < 0.9$ —strong correlation; $0.5 \leq |r| < 0.7$ —moderately strong correlation; $0.3 \leq |r| < 0.5$ —weak correlation; $|r| \geq 0.3$ —very weak (negligible) correlation. Statistical analysis was performed using the R software, V.3.4.3. The level of statistical significance was set at $p \leq 0.05$ (with a CI of 95%).

Patient and public involvement

Patients and public were not involved in the study.

RESULTS

Analysis of sociodemographic data

The most numerous age group among the study participants ($n=350$) was the group of 41–50 (40.57%) and 23–30-year-olds (26.29%). The vast majority of participants are women (96.86%) and people with bachelor's degree (46.29%) and master's degree (25.71%) (table 1).

Analysis of occupational data

Based on the analysis of data on the professional work of the studied participants ($n=350$), it was observed that the largest group were nurses (83.71%) in comparison to the midwives (16.29%). Taking into account the work experience, the group most often indicated the answer '21 years and more' (47.71%) and '0–5 years' (25.43%). The main place of work was closed care—the hospital (88.86%) and the basic contract among the surveyed participants was an employment contract (84.00%). As a working system, the shift system (73.71%) and work in the 8-hour period (22.00%) were most often indicated. Based on the data analysis of monthly net salary, it was observed that the most frequently indicated salary was

the range of 2001–3000 PLN which ranges about 585–880 USD (57.43%) and 3001–4000 PLN which ranges about 880–1170 USD (19.71%) (table 2).

Assessment of job satisfaction (SWJS)

The average score obtained by the participants in the SWJS questionnaire was 19.76 (SD=5.36, M=20, Min=6, Max=35, Q1=16, Q3=23.94), where the score of 20 is considered a 'center point'. It can, therefore, be discussed that the participants are neither satisfied nor dissatisfied with their work.

Assessment of life satisfaction (SWLS)

Based on the assessment of the results obtained in the SWLS questionnaire, it was observed that 160 participants (46%) were high, 128 participants (37%) average and 62 participants (18%) low sense of life satisfaction.

Assessment of life orientation (LOT-R)

The analysis of the results of the LOT-R questionnaire showed that 131 participants (37.43%) had a neutral orientation, 130 participants (37.14%) were prone to optimism and 89 participants (25.43%) were prone to pessimism.

Assessment of occupational burnout (MBI)

The results of the analysis of the MBI questionnaire showed that the average overall rate for occupational burnout was 34.67 per 100 points. Assessment of occupational burnout subscale showed that the most significant factor was EE at 39.14 points (SD=28.15, M=33.33, Min=0, Max=100, Q1=11.11, Q3=65.62), a slightly smaller was PA at 35.44 points (SD=27.22, M=26.79, Min=0, Max=96.3, Q1=12.5, Q3=50) and in the smallest was DEP of 29.41 points (SD=27.95, M=20, Min=0, Max=96.3, Q1=0, Q3=40).

Impact of each scales on the level of occupational burnout

Further analysis was performed to determine the impact of job satisfaction on the level of occupational burnout. The SJWS result did not have a normal distribution ($p < 0.05$ in the Shapiro-Wilk test), so the Spearman correlation coefficient was used for the analysis. It was shown that job satisfaction significantly affects each of the occupational burnout subscales ($p < 0.05$). These dependencies are negative, that is, the greater job satisfaction, the less sense of professional burnout (table 3 and figure 1).

Table 3 Spearman's correlation coefficient analysis for the level occupational burnout and job satisfaction

MBI	Correlation with Satisfaction With Job Scale			
	Correlation coefficient	P value	Direction	Strength
Emotional exhaustion	−0.489	<0.001	Negative	Weak
Depersonalisation	−0.158	0.003	Negative	Very weak
Reduced personal accomplishment	−0.447	<0.001	Negative	Weak
Overall score	−0.474	<0.001	Negative	weak

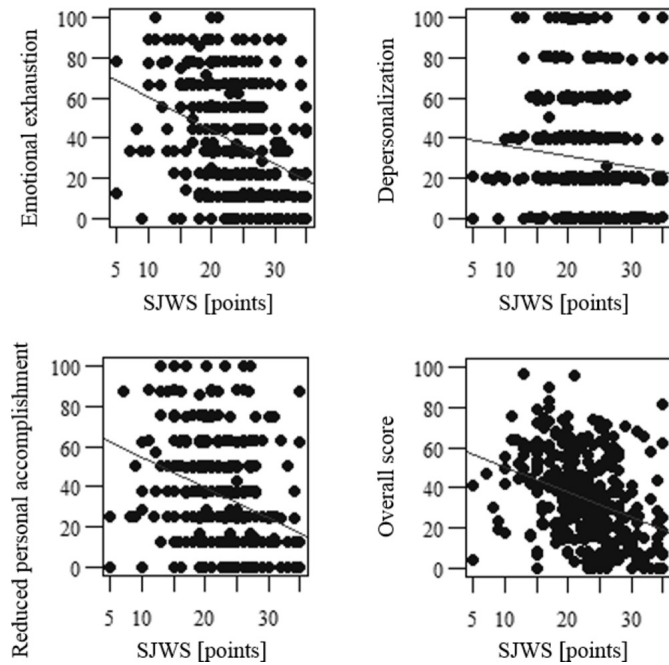


Figure 1 The linear correlation between job satisfaction and domains of the occupational burnout. SJWS, Satisfaction With Job Scale.

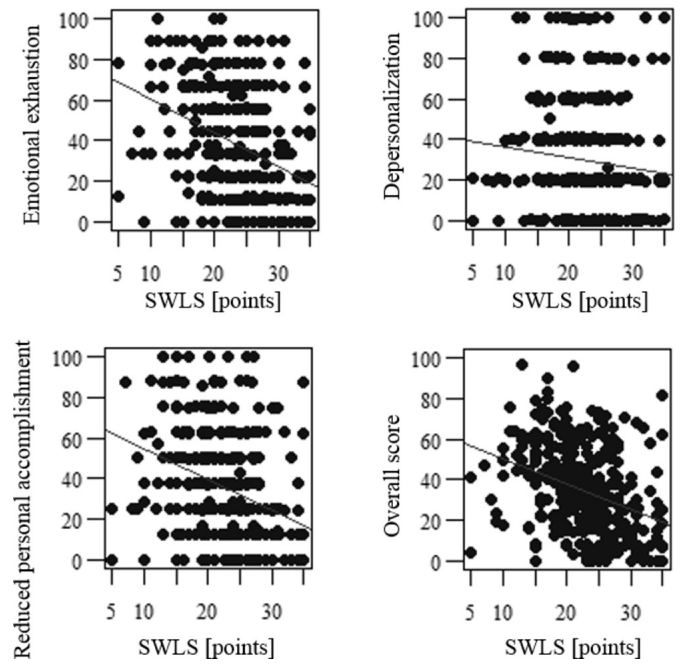


Figure 2 The linear correlation between life satisfaction and domains of the occupational burnout. SWLS, Satisfaction With Life Scale.

Further analysis was performed to determine the impact of life satisfaction on the level of occupational burnout. It has been shown that life satisfaction assessed with SWLS significantly affects each of the occupational burnout subscales ($p < 0.05$). These dependencies are negative, that is, the greater the life satisfaction, the lower the sense of burnout (table 4 and figure 2).

Further analysis was performed to determine the impact of life orientation on the level of occupational burnout. It was observed that life orientation significantly influences each of the occupational burnout subscales ($p < 0.05$). These dependencies are negative, that is, the higher the LOT-R score (greater propensity to optimism), the lower the sense of burnout (table 5 and figure 3).

DISCUSSION

Because of their close contact with others, nurses and midwives hold professions of great social importance. Everyday work under changing conditions, high degrees of mental and physical stress and shift work may lead to development of burnout syndrome in these professionals.

In one of the most common definitions of professional burnout, special attention is paid to emotional exhaustion, which is treated as one of the first symptoms of this phenomenon.^{31 32}

The relationship between occupational burnout and the performance of professionals who provide assistance to others has been documented in recent studies.³³ However, it is emphasised in the literature that this phenomenon most often concerns medical professionals, especially nurses.^{34 35} Analysis of burnout among various medical professionals, that is, doctors, pharmacists and nurses, revealed that burnout is most often commonly found in nursing staff.³⁶

Based on available scientific reports, this paper attempts to determine the extent of the burnout problem among nurses and midwives and to assess the levels of job satisfaction among these professionals. This study involved a group of 350 professionally active nurses and midwives at various workplaces, that is, closed care and open care. The obtained results indicate a disturbing phenomenon related to the age demographics among medical

Table 4 Spearman’s correlation coefficient analysis for the level occupational burnout and life satisfaction

Maslach Burnout Inventory	Correlation with Satisfaction With Life Scale			
	Correlation coefficient	P value	Direction	Strength
Emotional exhaustion	-0.36	<0.001	Negative	weak
Depersonalisation	-0.148	0.005	Negative	very weak
Reduced personal accomplishment	-0.35	<0.001	Negative	weak
Overall score	-0.371	<0.001	Negative	weak

Table 5 Spearman's correlation coefficient analysis for the level occupational burnout and life orientation

Maslach Burnout Inventory	Correlation with Life Orientation Test-Revised			
	Correlation coefficient	P value	Direction	Strength
Emotional exhaustion	-0.32	<0.001	Negative	Weak
Depersonalisation	-0.147	0.006	Negative	Very weak
Reduced personal accomplishment	-0.325	<0.001	Negative	Weak
Overall score	-0.337	<0.001	Negative	Weak

staff, including nurses. In our study, the majority of the surveyed participants were over 40 years of age.

Currently, both nursing and midwifery in Poland are professions dominated by ageing workers. Moreover, there is a declining interest in these medical professions among young women and men.^{6 37}

There are studies suggesting that a high level of education affects the rate of occupational burnout. People with more education are more likely to have high expectations of themselves and to take on more responsibility and more demanding positions at work.³⁸ It should also be noted that a shift system is associated with lowered quality of life and may pose safety risks for patients as well as nurses.^{20 39} Long 12-hour shifts and irregular working hours are considered risk factors for the development of occupational burnout.⁴⁰

Job satisfaction is one of the main factors determining the attitude of medical staff towards work and patients and affecting the quality of services provided. Job satisfaction is a general, positive assessment of work, in which some negative factors cannot be excluded.^{41 42} Factors that positively influence job satisfaction include high income,

professional prestige and younger employee age.⁴³ Interestingly, Güleriyüz *et al*⁴⁴ identify emotional intelligence as a positive factor influencing job satisfaction in nurses. On the other hand, negative factors include excessive professional expectations.⁴⁵ In a study by Kędra *et al*,⁴⁶ negative influences on job satisfaction also included an excess of duties and demanding requirements at work. Moreover, among the less important factors were listed shortcomings of cooperation at the nurse–doctor level and between nurses and other medical personnel. Also, Applebaum *et al*⁴⁷ in their descriptive, correlational study revealed that common environmental stressors in the work environment can be stressful to staff and influence job satisfaction and, ultimately, intention to change jobs. In our study, the average job satisfaction levels of participants were noted based on the analysis of the results of the SJWS questionnaire.

Life satisfaction is a component of quality of life. Several factors can affect one's level of life satisfaction, including personality traits, life events and one's current mood.⁴⁸ The relationship between level of life satisfaction and job satisfaction in the nursing environment has been documented in the literature.^{49 50} The results obtained by us indicate that almost half of the participants had a high sense of life satisfaction according to the SWLS questionnaire. In the study by Wysokiński *et al*⁵¹ carried out on a group of 891 nurses, the average level of life satisfaction according to the SWLS questionnaire was 19.60 points. The available literature indicates that a higher level of life satisfaction is achieved by people in committed relationships. Our study group consists mostly of nurses and midwives in committed relationships, so this study confirms worldwide reports.^{52 53}

The role of nurses and midwives is to provide help and care and to participate in the recovery of each patient. Nursing forces staff to be emotionally involved in their work, and this high level of emotional involvement can lead to fatigue, exhaustion, frustration and, consequently, burnout syndrome.

An analysis of the levels of occupational burnout among the study participants demonstrated that half of them had occupational burnout at the lower level, and half had burnout scores higher than 33.38 points. Thus, an average level of occupational burnout was observed among the studied nurses and midwives. The present study presents similar results to those in the available literature. Average results for burnout in the MBI questionnaire among

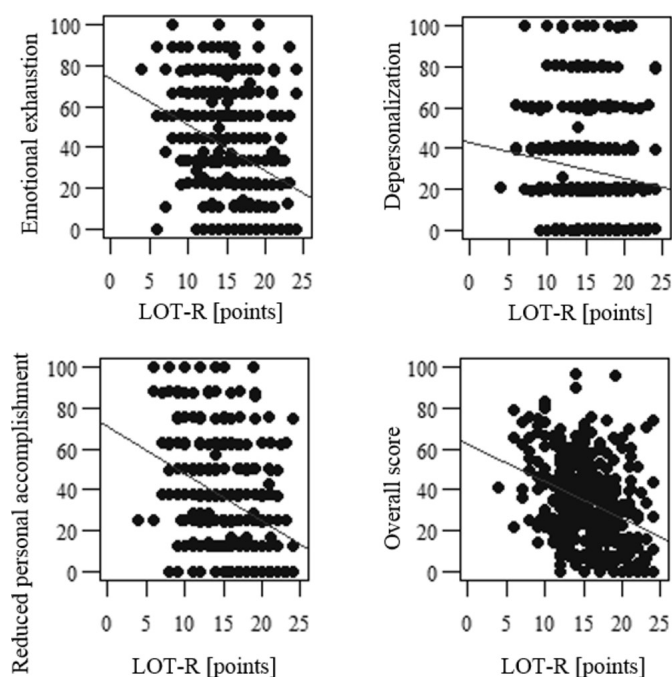


Figure 3 The linear correlation between life orientation and domains of the occupational burnout. LOT-R, Life Orientation Test-Revised.

nurses were also demonstrated by Klajda and Szewczyk,⁵⁴ who also showed the highest degree of nurse burnout at the emotional level. In our study, the assessment of the MBI questionnaire subscales showed that the primary determinant of occupational burnout scores was level of EE, followed by lack of PA and DEP.

Also, Piko *et al*⁵⁵ noted the highest level of occupational burnout at the emotional level in a group of Hungarian nurses. It was also observed that emotional exhaustion was strongly related to job dissatisfaction, which is a risk factor for occupational burnout. The analysis of our own research brings us to the conclusion that job satisfaction significantly affects each of the occupational burnout subscales. A significant relationship between occupational burnout and life satisfaction and life orientation was also noted. Higher levels of life satisfaction and higher life orientation scores (ie, a greater tendency to optimism) were significantly associated with lower levels of burnout.

The nurse and midwife professions require a lot of commitment to working with and caring for patients. High emotional involvement, everyday contact with patients in various stages of disease, shift work and high levels of stress can take a huge physical and mental toll, leading to the development of burnout symptoms. The multitasking nature of nurse and midwife professions, a specific organisational structure, shift work, long working hours, poor infrastructure, inadequate resources, limited equipment and materials, as well as a shortage of staff, can also be risk factors for the burnout syndrome.

In summary, this cross-sectional, descriptive, analytical study among a group of 350 professionally active nurses and midwives in Poland assessing the life satisfaction, job satisfaction, life orientation and the level of occupational burnout. What is new, this is one of the few studies in Poland. An analysis of the levels of occupational burnout among the studied nurses and midwives demonstrated that half of them had occupational burnout at the lower level; thus, an average level of occupational burnout was observed. Also, a significant relationship between occupational burnout and life satisfaction and life orientation was also noted; the higher levels of life satisfaction and orientation were significantly associated with lower levels of burnout. We confirmed that burnout is still an important phenomenon in the healthcare system because employees are exposed to stress in both the mental and emotional spheres, as well as there is a need for further research, which will cover the aspects of mechanisms for the development of burnout syndrome.

Limitations

There are some potential limitations for this study that should be mentioned. First of all, the study lacks of an external control group, which would be valuable to compare the obtained results of burnout with controls. Also, study group could be divided into two comparative groups of nurses and midwives regarding selected specifications of their professional activities. Such presentation of differences or similarities in wide range of variables

studied between these professional groups could be an additional asset of the study. And the last but not least, an interest would be to compare burnout levels obtained in our study with nurses from other units such as oncology, primary care, emergency or paediatrics.

Practical implications

Recently, there has been a growing interest in the phenomenon of occupational burnout among medical staff, in particular in the group of nurses and midwives. Burnout is an important phenomenon in the healthcare system because employees are exposed to stress in both the mental and emotional spheres. There is a need for further research, which will cover the aspects of mechanisms for the development of burnout syndrome and highlight the main factors affecting its progress.

Particularly important for the prevention of burnout is the improvement of the working environment, finding free time for staff, learning how to manage stress or even remunerating employees for improving their professional qualifications.⁵⁶ Also the importance of creation the role of so-called the clinical career leadership among nurses should be emphasised. Changes in the healthcare system may have a positive impact on their sensations towards professional life.⁵⁷ Burnout clearly impacts on the mental health and well-being of nurses, which is most likely compromising productivity, performance and the quality of patient care and may lead to rationing of care.

CONCLUSIONS

The level of occupational burnout appeared to be low in the examined group of the Polish nurses and midwives. It has been revealed that job satisfaction and life satisfaction are determinants, which do not allow for developing an occupational burnout.

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Competing interests None declared.

Patient consent for publication Not required.

Ethics approval The study was approved by the Independent Bioethics Committee of the Wrocław Medical University, Poland.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement The authors confirm that all data underlying the findings described in this manuscript is fully available to all interested researchers upon request.

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