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Professional burnout syndrome among nurses and midwives depending on the place of work

Zespół wypalenia zawodowego wśród pielegniarek i położnych w zależności od miejsca pracy

ABSTRACT

Professional burnout is a common problem occurring among employees whose job is related to other people, and additionally involves providing them with assistance. Therefore, one of such risk groups is the medical personnel, especially nurses and midwives. Scientific research shows that various factors have a different effect on the occurrence of professional burnout. The aim of the study was to review Polish and foreign scientific literature on the syndrome of professional burnout among nurses and midwives. On the basis of the literature review, it has been shown that the occurrence of professional burnout depends not only on education, seniority and salary, but also on human interactions at the workplace, level of social competence, and methods of coping with stress. It would not be possible to identify these factors if it wasn't for the use of research tools in form of various types of questionnaires, e.g. Maslach Burnout Inventory (MBI) and Copenhagen Burnout Inventory (CBI). It is extremely important to undertake preventive and prophylactic activities to protect the medical personnel against this phenomenon.

Keywords: professional burnout, nurses, midwives

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STRESZCZENIE

Wypalenie zawodowe to powszechny problem występujący wśród pracowników, których praca jest związana z innymi ludźmi, a dodatkowo wiąże się z udzielaniem im pomocy. W związku z tym, jedną z grup ryzyka jest personel medyczny, a w szczególności pielęgniarki i położne. Badania naukowe wskazują, że różne czynniki mają odmienny wpływ na występowanie wypalenia zawodowego. Celem pracy był przegląd polskiego i zagranicznego piśmiennictwa naukowego dotyczącego zespołu wypalenia zawodowego wśród pielęgniarek i położnych. Na podstawie przeglądu piśmiennictwa wykazano, że istotny wpływ na wystąpienie zespołu wypalenia zawodowego mają nie tylko wykształcenie, staż pracy i zarobki, ale również relacje międzyludzkie w miejscu pracy, poziom kompetencji społecznych i style radzenia sobie ze stresem. Określenie tych czynników nie byłoby możliwe, gdyby nie wykorzystanie narzędzi badawczych, jakimi są różnego rodzaju kwestionariusze, np. Kwestionariusz Wypalenia Zawodowego (ang. *Maslach Burnout Inventory*, MBI) i Kopenhaski Inwentarz Wypalenia Zawodowego (ang. *Copenhagen Burnout Inventory*, CBI). Niezmiernie istotne jest podjęcie działań prewencyjnych i profilaktycznych, aby móc chronić personel medyczny przed tym zjawiskiem.

Słowa kluczowe: wypalenie zawodowe, pielęgniarki, położne

BACKGROUND

Professional burnout is a term introduced in the literature in the 1970's, although researchers think it to have existed much earlier. The term professional burnout syndrome was coined by an American psychiatrist and analyst Herbert J. Freudenberger in 1974, who used it to describe an energy decline in an employee, occurring as a result of being overwhelmed by problems of others (Ober, Karwot, 2017). 1974 is considered as the year when scientific research on the professional burnout syndrome started. In the 80's of the 20th century, many controlled studies were developed in the form of scientific papers. Christina Maslach, the author of the Maslach Burnout Inventory (MBI), defined the professional burnout syndrome as a psychological syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment, which may occur in subjects working with other people in a certain specific manner (Dawidziuk et al., 2011; Cybulska et al., 2019). Burnout is a major derivative of excessive burden of professional interactions and excessively responsible tasks, and frequently a reaction to chronic stress. It is characterised by a slow, frequently unnoticed, building-up (Cybulska et al., 2019). Maslach categorised professional burnout in three aspects: emotional exhaustion, depersonalisation, and reduced personal accomplishment. Emotional

exhaustion refers to a sense of excessive mental burden and reduction in resources. Depersonalisation is manifested in a negative, sometimes impersonal or highly indifferent reaction to other people who receive a service or care provided by a given person. A reduced sense of self-accomplishment is a manifestation of the employee's reduced sense of competence, and achieving professional success (Dawidziuk *et al.*, 2011; Cybulska *et al.*, 2019).

Professional burnout is not an orderly process. It may have a different course in each person. Burnout phases do not always come one after another in the same way, they may occur simultaneously, and a return to previous phases is also possible. Co-workers are typically the first to notice symptoms of professional burnout, so it is worth being sensitive to their suggestions and treat them seriously as a signal of being in danger of this phenomenon. No strict criteria defining if the person is burnt out or not have been established. One can only assess the severity of the burnout symptoms (Dawidziuk *et al.*, 2011).

Grab distinguishes 4 types of burnout symptoms, and divides them into four groups: physical, emotional and behavioural, familial and social, and work-related. The most dominant are: excessive fatigue, emotional exhaustion of resources, loss of energy to action, increased irritability, inadequacy of emotional reactions, high impulsiveness, depression, lack of sparkliness,

increase in the necessary effort to perform professional tasks (Dawidziuk *et al.*, 2011). Kaslow and Schulman pointed to eight sings indicating the phenomenon of professional burnout:

- resentment associated with going out to work,
- constant complaints of noticeable unwillingness to work or overworking,
- sense of isolation of the environment,
- · general life pessimism,
- gradually increasing negative contacts with patients,
- lack of patience and irritability,
- frequent sickness and disorders on the part of the vegetative system without diagnosed causes.
- suicidal tendencies (Dawidziuk et al., 2011).

There are scales measuring the level of professional burnout. However, they are more useful for the comparison of results obtained by various researchers than for individual diagnosis and assessment of the severity of this syndrome. The subject of professional burnout syndrome has often been addressed in the literature and scientific research. Then, the method of a diagnostic survey with the use of the above-mentioned scales and questionnaires showed satisfactory efficacy (Dawidziuk *et al.*, 2011).

The aim of the study was to review Polish and foreign scientific literature on the syndrome of professional burnout among nurses and midwives.

PROFESSIONAL BURNOUT SYNDROME IN NURSES AND MIDWIVES

Kupcewicz *et al.* studied the effect of selected socio-demographic variables related to the work environment on the level of emotional exhaustion, depersonalisation, professional satisfaction and general index of professional burnout among nurses. Nearly 60% of the studied nurses correctly defined professional burnout. The study participants presented a low level of professional burnout symptoms. A significant correlation was revealed between the level of education and seniority, and the aspect of emotional exhaustion. Subjects with a master's degree or shorter length of employment were characterised by a lower level of professional burnout than subjects with

different education and longer employment. It was shown that the financial situation had a significant influence on the level of professional burnout in a broad perspective. This included a general index of professional burnout and all its three dimensions - emotional exhaustion, depersonalisation and no sense of personal accomplishment. Relations with co-workers were also important, since the better they were, the less intense was the feeling that a given person was professionally burnt-out (Kupcewicz, Szczypiński, 2018). The nursing personnel studied by Wieder-Huszla et al. revealed symptoms of professional burnout in every aspect of the syndrome, i.e. high level of emotional exhaustion and depersonalisation, and low professional satisfaction. Subjects with a higher education level achieved lower results on the scale of emotional exhaustion. The place of work and position had an impact on emotional exhaustion (Wieder-Huszla et al., 2016).

Results of a study conducted by Schneider-Matyka et al. confirmed occurrence of burnout symptoms in nearly 40% of the respondents, and nearly half were in danger of this syndrome. What is more, depersonalisation was a major factor contributing to the sense of professional burnout among nurses. On this basis it was hypothesised that it was a form of coping with stress and a method of reducing involvement in patients' problems. And the stress occurring at work was usually caused by too many duties and high requirements imposed on nurses, as well as lack of social support. An increase in emotional tension, external and intrapsychic stress resulted in an increase in the general index of professional burnout and reduced assessment of the subject's welfare (Schneider-Matyka et al., 2017).

A study conducted by Sowińska *et al.* revealed no statistically significant correlation between professional satisfaction and a sense of professional burnout in nurses. The results illustrating the scale of professional burnout were worrying, since more than a half of the respondents felt or had felt professional burnout. The conducted analysis did not reveal a significant increase in the number of burnt-out subjects together with an increase in seniority (Sowińska *et al.*, 2012). As reported by nurses, the main cause of the

phenomenon of professional burnout, similarly to the study of Kupcewicz et al., was low salary and bad working conditions, as well as conflicts with co-workers, since they have a negative impact on the sense of professional satisfaction (Kupcewicz, Szczypiński, 2018; Sowińska et al., 2012). Cegła et al. found out that the size and financial situation of the nurse's family has an impact on the level of professional burnout. The occurrence of the professional burnout syndrome among nurses depends on the height of their salary (Cegła et al., 2010). In the group of nurses studies by Nowak-Starz et al., as many as 90% claimed that their professional work had a negative impact on their family life, and pointed to their own professional burnout. The nurses who transferred negative emotions from work to home significantly more frequently reported lack of satisfaction from their job, and professional burnout (Nowak-Starz, Kozak, Zdziebło, 2013). Results of studies conducted by Nowacka et al. prove a significant correlation between the work-home interaction and professional burnout in nurses who reported high emotional exhaustion and depersonalisation, as well as reduced personal accomplishment (Nowacka et al., 2020). Nurses from the study of Nowak-Starz et al. were largely exposed to mental burden having a negative effect on their work. The majority of the studied nurses felt satisfaction from their work, but a large number of nurses recognised symptoms of chronic stress and fatigue, which may suggest lack of any kind of support from co-workers and superiors. According to a large proportion of the study subjects, shift work and work position are unfavourable factors in the process of professional burnout (Nowak-Starz, Kozak, Zdziebło, 2013). Additionally, lack of adequate access to professional development may constitute a factor promoting professional burnout. Despite its all burdensome aspects, work is a source of satisfaction for a large majority of the respondents (Sowińska et al., 2012).

Kędra *et al.* conducted a study showing that lack of satisfaction from work is considered one of the main reasons for the development of professional burnout syndrome. With regard to observed and felt symptoms of professional burnout, it must be emphasised that symptoms

on an interpersonal level were observed and reported with much lower frequency and intensity that those occurring on an individual and organisational level (Kedra, Sanak, 2013). In another study, Kędra et al. obtained results which led to the conclusion that the job of a nurse is related to the occurrence of stress factors, which may be divided into factors specific to this profession and factors related to working conditions. Stress factors reported most frequently included heavy workload, responsibility for the health of others and dissatisfaction and grievances of patients and their families. And the important factor causing loss of satisfaction from work and leading to professional burnout is excessive workload (Kędra, Nowocień, 2015). Marcysiak et al. conducted a study showing that age and seniority of nurses had no effect on the development of professional burnout. However, coping with stress was an important factor affecting the occurrence and further development of professional burnout syndrome in the study group; therefore, it is worth educating people on stressors occurring in this profession, and on methods and strategies of handling stress (Marcysiak, Dabrowska, Marcysiak, 2014). Cipora et al. conducted a study which showed that age, marital status, place of residence, education and place of work did not significantly differentiated the overall index of professional burnout and its particular components. But the level of professional burnout increased together with seniority in the study nurses (Cipora et al., 2014).

A subjective feeling of professional burnout symptoms among nurses was the subject of studies by Nowakowska et al., who used a questionnaire survey of the Copenhagen Burnout Inventory (CBI). The questions referred to three types of burnout: personal, work-related and patient-related. On the basis of the nurses' answers, it was concluded that they revealed worrying symptoms that could indicate fatigue, physical and emotional exhaustion, both in the aspect of personal life, working life and including contact with patients. Moreover, the nurses had a more pejorative assessment of work-related areas than of areas related to contacts with patients. The analysis of the topic of work-related professional burnout included the aspects

of seniority and education of nurses. The longer employment the nurses had, the strongest symptoms of professional burnout they presented. The personnel with the shortest and longest period of employment felt the most that their work was exhausting. Subjects with higher education complained of professional burnout symptoms to a lesser degree, and they less frequently perceived their work as tiring. In addition, they were able to find time for their family and friends. Most of the study nurses were aware that their work was difficult, but they tried not to transfer that to their relations with patients. Studies show that the issue of professional burnout with regard to contacts with patients should be analysed in relation to the department where a given nurse works. It was demonstrated that the question whether or not to continue work was asked most frequently by nurses from the departments of internal diseases, cardiology and urology, in contrast to the personnel working at the emergency department, anaesthesiology or neurology (Nowakowska, Rasińska, et al., 2017; Nowakowska, Roszak et al., 2017). In the nurse population studied by Kowalczuk et al., the occurrence of stress was dependant on the place of work of the study subjects. The highest exposure to stress was observed for nurses working at the surgical department, while the lowest exposure for nurses working at the paediatric department. The highest level of professional burnout in the three dimensions was experienced by the nurses working at the department of internal diseases, and the lowest level was felt by the nurses working at the paediatric department (Kowalczuk et al., 2011).

DEPARTMENTS OF ANAESTHESIOLOGY AND INTENSIVE CARE

Nursing is considered a profession in danger of burnout, due to everyday exposure to difficult situations, such as pain and death. Moreover, certain departments, such as intensive care units, may be stressful due to a high level of morbidity and mortality, as well as ethical dilemmas. Professional burnout causes deterioration in the quality of care, increasing the risk of patient death due to poor performance and errors in the health care environment (Ramírez-Elvira *et al.*, 2021).

Professional burnout syndrome occurs in subjects whose work involves frequent and intense contacts with people; thus, it primarily affects health care professionals. Intensive care units are very stressful environments, which may lead to a more frequent occurrence of professional burnout especially emotional exhaustion and poor personal accomplishment (Friganović, Selič, 2020). Ramírez-Elvira et al. conducted an analysis of the level, prevalence, and related factors of professional burnout in nurses working at intensive care units. Fifteen articles were found for a systematic review, and four for a meta-analysis. The estimated incidence of high emotional exhaustion was 31%, high depersonalisation - 18%, and low personal accomplishment – 46%. In the aspect of professional burnout, emotional exhaustion was significantly correlated with depression and personality factors. The risk of professional burnout syndrome was also affected by sociodemographic factors (youth, marital status - single, lower professional experience at the intensive care unit), and working conditions (heavy workload and longer working hours) (Ramírez-Elvira et al., 2021). Aragão et al. demonstrated that the incidence of professional burnout among nurses was 53.6%. Moreover, a correlation was observed with age, smoking tobacco, working hours at the night shift, employment relationship, having a title of intensive therapy specialist, number of patients on duty, monthly income, and active and demanding work (Aragão et al., 2021). Cybulska et al. analysed the incidence of professional burnout syndrome among nurse anaesthetists working at intensive care units and at operating theatres. A correlation between seniority and the level of professional burnout was demonstrated: a longer period of employment at anaesthesiology and intensive care results in a reduced level of work satisfaction felt by nurses. Nevertheless, they presented quite high level of professional satisfaction, and achieved average results in the criteria of depersonalisation and emotional exhaustion (Cybulska et al., 2019). In another study, Cybulska et al. demonstrated that social skills of nurse anaesthetists had an influence on the occurrence of professional burnout syndrome. Nurse anaesthetists with higher social competence are less emotionally exhausted. A higher level of competences used in situations of social exposure of nurses reduces the risk of emotional exhaustion related to work, and the threat of professional burnout (Cybulska et al., 2017). In their studies, Kotarba et al. focused on the assessment of the effect of demographic factors and those related to the working environment on the style of coping with stress, and symptoms of professional burnout in nurses employed at intensive care units of university hospitals. The conducted studies show that nurses working at intensive care unit prefer coping with stress by focusing on the task. The style of coping with occupational stress depends on demographic factors and perception of the working environment. Non-adaptive style of coping with occupational stress coincides with somatic symptoms of professional burnout syndrome (Kotarba, Borowiak, 2018).

Results of studies conducted by Lickiewicz et al. show that there are differences in the level of burnout and in the strategy of coping with stress among doctors and nurses. Thus, it may have serious consequences for decisions made by medical personnel, which may translate into the treatment quality and efficacy. This may be related to the sense of lower education and lower social status of nurses as perceived by others. It is important to adopt various prophylactic measures to prevent burnout and to improve the quality of life, depending on the type of stressors (Lickiewicz et al., 2021). Interventions aiming at fulfilling social and psychological needs of health care professionals should be immediately implemented by the hospital management in order to reduce psychological stress. It appears important to organise trainings and prophylactic programmes in mixed groups of both doctors and nurses, which could have a positive effect on the strategy of coping with stress and would increase trust and integrity of the therapeutic team (Lickiewicz et al., 2021; Saravanabavan, Sivakumar, Hisham, 2019). Hu et al. conducted a national, cross-sectional study to examine the level of professional burnout and related factors among doctors and nurses working at intensive care units in Mainland China. The professional burnout index among doctors and nurses at intensive care units in Mainland China was 69.7%. The above study provided basic data on professional burnout

among Chinese medical personnel from before the COVID-19 pandemic, which may help to analyse and interpret professional burnout during the COVID-19 pandemic (Hu *et al.*, 2021).

Majchrowska et al. attempted to diagnose stress factors and professional burnout among nurses from a hospital emergency department. The group of respondents was homogeneous with regard to the performed work and occupied position, but differed in seniority. In general, it was stated that they represented a uniform group with regard to the achieved results. The studies showed that the effect of seniority is an independent variable among nurses. The main source of stress is an excessive number of patients. Although the nurses feel stress at work, they do not feel professional burnout. It is worth emphasising that the nurses also feel stress mobilising them to work, which contributes to mitigation of the effects of the negative stress. In working off their stress, sincere conversation and support of direct supervisors of the nurses is really helpful (Majchrowska, Tomkiewicz, 2015).

In order to protect the nursing personnel of the departments of anaesthesiology and intensive care against negative consequences of moral distress that could lead to professional burnout, one should implement psychological interventions supporting the person's performance, especially in the group of workers with long period of employment in anaesthesiology and intensive care, and ins subjects taking up another job at the position of nurse anaesthetist and intensive care nurse (Borkowska, Borkowski, Gaszyński, 2019).

OPERATING SUITE AND MEDICAL TREATMENT FACILITIES

Nurses working at medical treatment positions are largely exposed to the risk of professional burnout. This is due to high physical and emotional burden associated with these positions (Basińska, Wilczek-Rużyczka, 2011). Working at an operating theatre is associated with specific burden and requirements, mainly responsibility for the patient's life and health, which exposes the employee to stress, which may lead to development of professional burnout. Szewczyk *et al.* studied the problem of professional burnout

among surgical nurses of hospitals in Wrocław. Shift work can intensify the phenomenon of professional burnout and lack of satisfaction from work. The shorter period of employment, the lower professional burnout of nurses, and they are more satisfied with the type of the job they perform. Marital status also has an impact on professional burnout and work satisfaction: persons who are in a relationship have higher satisfaction from work and a lower level of professional burnout (Szewczyk et al., 2017). The study nurses reported pronounced problems with sleep. 61% of them complained of sleep disorders. The most emphasised was general unsatisfactory duration of sleep (41%). Low, but significant, correlations between sleep difficulties, fatigue after work and more severe emotional exhaustion were revealed. It was recorded that sleeplessness was interrelated with depersonalisation. Nurse working in a 12-hour system were more tired directly after work and reported greater sleep difficulties than their colleagues who worked shorter hours (Basińska, Wilczek-Rużyczka, 2011). In the relevant literature, authors also mention a factor of physical load contributing to fatigue, which is too many repetitions of the tasks performed (movement monotypicality). Thus, nurses working at medical treatment facilities are especially exposed to overload of the musculoskeletal system (necessity of work in the upright position, forced bent position) (Pytel-Kopczyńska, 2013).

Work at the treatment facility makes it necessary to receive a large amount of complex information and make quick decisions, work under time pressure or in situations which are difficult to plan, which is related to a sense of lack of control. Contacts with both patients and their families often take place in a stressful atmosphere of high agitation, which may contribute to an increasing emotional tension (Karkowski, 2013).

DEPARTMENTS OF ONCOLOGY AND PALLIATIVE CARE

Nurses working at oncological departments belong to a group showing high degree of professional burnout. A job whose essence is taking care of a person with a diagnosed cancer, often at an advanced stage preventing successful treatment,

exhausts by its intensity and constant movement around issues of life and death. Uchmanowicz et al. concluded that in the study group of haematological nurses there were signs of professional burnout. There was a noticeable relationship of some symptoms with the stress experienced at the place of work, which generates symptoms of burnout. This is confirmed by results obtained in the study group: impaired concentration, discouragement, lack of motivation, problems with sleep, irritability, lack of patience towards patients. There is also a noticeable unfavourable effect of defective information flow on the psychophysical condition of the study subjects. Lack of energy and strength, loss of motivation to work, errors and mistakes, discouragement reported by nurses working with oncological patients cause a feeling that they are not very good at work. The observed correlation between stress and professional burnout mostly refers to nurses with higher seniority, and, what is related thereto, with bigger experience (Uchmanowicz, Jankowska-Polańska, Bronowicka, 2013). In their study, Kołpa et al. aimed at presenting the level of professional burnout among nurses working at oncological departments. They used the Maslach Burnout Inventory (MBI) questionnaire and the authors' own survey questionnaire. A high level of emotional exhaustion was observed in 62% of respondents. 30% of the analysed nurses revealed the highest level of depersonalisation. More than half of the study nurses (64%) felt high index of personal accomplishment. Higher education was associated with a reduced index of burnout in all the three sub-scales. More frequent participation in various forms of post-graduate education caused a significant reduction in the level of professional burnout and reduced the indices in the subscales of emotional exhaustion and a sense of loss of personal accomplishment. In addition, it was found that satisfaction with the salary was not correlated with the occurrence of the professional burnout syndrome (Kołpa, Jurkiewicz, Broda, 2017).

Professional burnout and secondary traumatic stress are the main consequences of stress experienced at work by employees helping suffering patients or victims of trauma. Ogińska-Bulik studied a correlation between professional

burnout and secondary traumatic stress among nurses working at palliative care. The achieved results confirmed a positive correlation between professional burnout and secondary traumatic stress in the study group of nurses. It was also shown that the main predictor of secondary traumatic stress is lack of involvement in work, and the main predictor professional burnout is evasion (Ogińska-Bulik, 2018).

DEPARTMENTS OF PSYCHIATRY

Zaczyk et al. studied a correlation between aggression of patients at closed psychiatric wards and professional burnout of nurses working therein. It turned out that nurses experience not only acts of verbal or passive aggression, but they also fall victim to physical aggression, such as pushing, kicking, hitting or attacking with tools. Threats, epithets and bullying are situations experienced by even 90% of the study nurses. More than 70% of respondents were exposed to sexual violence. Aside to psychical trauma, the nurses complained of physical pain. In addition, 73% of nurses admitted that they felt anxiety and fear during the care of an aggressive patient due to experienced aggression in the past. Support was given to nurses mostly by peer workers and family members, less frequently by the superiors. Few people decide to turn to professional help. The study gave evidence for a correlation between the occurrence of professional burnout and experience of aggression at the place of work. Depending on the analysed aspect, the level of burnout is average or high (Zaczyk, 2018). Another study conducted by Wilczek-Rużyczka E. et al. revealed that nurses providing palliative care are professionally burnt out. Most of the respondents felt emotional exhaustion and reduced sense of personal accomplishment at a high degree. They were not able to cope with stress and they suffered from such disorders as insomnia, depression or neurosis. The conducted studies also revealed that the respondents felt work satisfaction, but they did not have satisfaction from the salary. Professional burnout was lower in subjects declaring better coping with stress, those who had emotional support and were satisfied with the salary (Wilczek-Rużyczka, Zaczyk, Obrzut, 2017).

PAEDIATRIC DEPARTMENTS

The analysis of results of a study conducted by Haor et al. enabled drawing conclusions with regard to paediatric nurses. The group of study nurses is dominated by subjects at a risk of professional burnout syndrome, i.e. overloaded type A and burnt out type B. Respondents with less seniority significantly less frequently present a required type of behaviour related to work, i.e. healthy and sparing. Nurses with a longer period of employment, despite showing better strategies of problem solving, significantly more often present reduced involvement in the matters of their work and profession. Readiness to devote one's strengths to perform a professional task is getting lower together with the respondents' age. Typical behaviour and experiences related to work indicate a high level of the risk of stress and professional burnout syndrome in the study group of paediatric nurses (Haor et al., 2014).

The aim of the study of Wei et al. was to determine the perception of self-care strategy in order to fight professional burnout among nurses and doctors at paediatric intensive care facilities. This was a qualitative descriptive study of a phenomenological nature. The study was conducted at a 20-bed paediatric intensive care unit and 8-bed intermediate care unit of a children's hospital in the United States. Information leaflets and e-mails were used to conduct the study. Six major strategies of self-care were identified: finding meaning in work, connecting with an energy source, nurturing interpersonal connections, developing an attitude of positivity, performing emotional hygiene, and recognizing one's uniqueness and contributions at work. Therefore, it must me mentioned that development of effective self-care strategies contributes to the improvement in physical and mental well-being of health care professionals and to the reduction of professional burnout. Health care professionals should take care of themselves so as to provide the best possible care to others (Wei *et al.*, 2020). The aim of a study conducted by Yazıcı et al. was to identify variables related to the professional burnout syndrome at paediatric intensive care units and paediatric departments of emergency medicine at the sites located in various parts of Turkey. The survey was completed by 570 study participants in total. The main discovery of this study was that 76.1% of employees working at paediatric intensive care units and paediatric departments of emergency medicine suffered from professional burnout syndrome. The most prominent subscale of professional burnout was emotional exhaustion (62.5%). The incidence of professional burnout was higher among the employees of paediatric departments of emergency medicine than that of paediatric intensive care units. The incidence of professional burnout with regard to the subscales of emotional exhaustion and depersonalisation was higher among the employees of paediatric intensive care units. The professional burnout index was also significantly higher in younger workers, women, subjects working 51 hours a week or more, subjects with a low monthly salary, single or divorced persons, persons with no children, no home, persons who do not take regular exercise or regular breakfasts, persons whose total employment is less than 1 year, or persons without a car or a hobby. The risk of professional burnout was higher when the daily number of patients at the paediatric department of emergency medicine was equal to or higher than 44, and when the number of patients at the paediatric intensive care unit was higher than 3 per 1 nurse. It may be seen from the conducted study that development of early intervention programmes aimed at preventing professional burnout may help avoid medical personnel shortages and also reduce health care costs related to infections (Yazıcı et al., 2021).

MIDWIVES

The work of a midwife is related to bearing psychological costs, and is frequently a stress-inducing factor (Gruszczyńska *et al.*, 2014). Sokolińska *et al.* undertook to assess the level of empathy and skills of working with emotions among midwives employed at selected hospitals. In the study group, the midwives had a high level of empathy and they skilfully handled emotions at work. The level of empathy shown by midwives is independent of the place of living, marital status, seniority or education. Due to a complex nature of the work and numerous factors affecting the tasks of nurses and

midwives, studies on empathy should take into account the phenomenon of professional burnout as a factor reducing emphatic skills towards other people (Sokolińska, Gotlib, 2017). A study of Gruszczyńska et al. indicates that the level of stress felt in relation to work may lead to the development of professional burnout syndrome, and that the seniority of the midwife does not affect their subjective assessment of mental load related to work (Gruszczyńska et al., 2014). A study conducted by Jankowiak et al. demonstrates that midwives experience symptoms of the professional burnout syndrome as an effect of numerous factors. Working at night and by shifts results in fatigue, sleep disorders and impaired social functions. Stress has a material impact on professional work, but also on biological functioning. Additionally, midwives are exposed to aggression of patients and their families (Jankowiak et al., 2011). Baran et al. are authors of a study whose aim was to measure the incidence of occupational crisis events and non-occupational traumatic events, and their relation to the professional burnout. It was assumed that contact with traumatic events may increase stress at work, or even lead to burnout. The studies showed significant exposure of the respondents to crisis and traumatic events, but it turned out that the exposure did not have a direct impact on the level of professional burnout. This problem requires further exploration, especially in the area of coping and resources (Baran, Piatek, 2011).

Banasiewicz et al. conducted a study on selected characteristics of the working environment, and professional burnout of midwives participating in abortion procedures. In the group of midwives participating in the abortion procedures, higher rate of professional burnout was observed as compared to the group of midwives who did not take part in pregnancy termination. The most difficult was to participate in so-called late terminations conducted in the second trimester of pregnancy. Some features of the working environment, such as the amount and quality of social support and a sense of control at the place of work reduce the probability of professional burnout. In the group of midwives participating in abortion procedures, social support at the place of work, especially its emotional and instrumental form,

protects against professional burnout, particularly against distancing from professional tasks and lack of devotion to work. A sense of control at the place of work affects the level of professional burnout. The higher sense of control over what is going on while performing duties, the lower probability of professional burnout. However, in the group of midwives participating in abortion procedures, this correlation did not reach the statistical significance level for cognitive control (Banasiewicz *et al.*, 2017).

Lampert conducted studies on the subject of occupational stress and professional burnout syndrome among midwives working at hospitals where the gynaecology and obstetrics profile was conducted at different referral levels. The stress felt by midwives was maintained on a high level in all study subjects, regardless of the referral level of the department where they worked. The level of professional burnout of midwives varied depending on the referral level of the department. A significantly higher level of professional burnout was observed among midwives working at level I departments than among midwives working at level II and III departments. The most common source of stress for the study midwives was a sense of responsibility and lack of rewards. Midwives working at departments of various referral levels used similar methods of coping with occupational stress (physical activity, support of the family and peer workers, access to psychological help, keeping balance between private and professional life, and regular participation in professional training. Future studies on the subjects of occupational stress and burnout in midwives should be extended by increasing the study group size and conducting studies also at other departments than the labour room. A comparison of results obtained from studies conducted in different groups would enable identification of stress factors occurring generally in the midwife profession and detecting those characteristic of the work at a given department (Lampert, 2020).

PROFESSIONAL BURNOUT SYNDROME AMONG STUDENTS OF MEDICAL FACULTIES

Discussing the issues related to professional burnout syndrome, one must indicate that this phenomenon occurs already among students of medical faculties. A study conducted by Pieniawska et al. showed that symptoms related to professional burnout were reported by a worrying percentage of students, and the increase in their frequency reached its peak at the sixth year of medical studies. The opinion on medical studies expressed by students was poorer after the start of studies. Students were dissatisfied with the method of conducting classes at their universities and expressed concerns with regard to their future work in the profession. A large number of students also considered going abroad after graduation. When asked about the opportunity of choose their studies once again, almost 1/3 of the respondents answered that they would not choose medicine for the second time. These worrying symptoms occurring among students require a more in-depth analysis and introducing prevention of burnout in this population (Pieniawska et al., 2017). A study conducted by Łoza indicates that the phenomenon of professional burnout was gradually increasing in the group of medical students during one-year observation. The same group of students of medicine was analysed in 2014 and 2015, during their fourth and fifth year of six-year studies at the medical faculty. After a year, professional burnout among students increased significantly from 27 to 31%, reaching ≥ 27 points in the subscale of emotional exhaustion. At the same time, satisfaction from professional achievements also showed a growing tendency. Professional burnout syndrome is a phenomenon increasing proportionally to the length of studies. Although its risk is increasing rapidly during studies, the most dramatic symptoms are observed much later, only during the professional life. Therefore, the most important conclusion is to start prophylaxis as early as possible, i.e. already during studies (Łoza, 2016).

Gil-Calderón *et al.* showed evidence that professional burnout is a problem faced by medical students in Spain. The study showed that students who receive support of their families are predisposed to this phenomenon to a lesser extent. It was also demonstrated that the problem increases with the number of years spent at the university (Gil-Calderón *et al.*, 2021). Thun-Hohenstein *et al.* conducted a study concerning

professional burnout in students of the Private Medical in Salzburg. The respondents had to complete three surveys: at the beginning and end of the academic year, and at the beginning of the next academic year. The results showed that in each case the level of professional burnout is higher among female students than male students. Lower values are reached at the beginning of the academic year, and higher at the end of the year. Then, the values decrease, but at the beginning of the new academic year they are higher in comparison to the beginning of the previous year. Academic and psychological support, and adequately balanced workload constitute some ideas how to solve the problem of professional burnout among students, which should not be neglected at universities (Thun-Hohenstein et al., 2021). Taking into account the conclusions drawn from the above studies, future studies should also focus on professional burnout among students of nursing and obstetric medicine.

CONCLUSION

On the basis of the analysed articles it may be concluded that the level of professional burnout in the categories of emotional exhaustion and depersonalisation ranges from medium to high. In spite of this, nurses and midwives assess their level of professional satisfaction quite high. They have a more negative opinion on the area related to work organisation than to contacts with patients and their families. Professional burnout in nurses and midwives occurs on a larger scale than in other professional groups, which may result in a reduced quality of care provided to patients. Emphasis is often placed on the role of prophylaxis in order to prevent professional burnout syndrome. For example, Zaczyk et al. recommend participation in courses and workshops focusing on methods of coping with stress and aggression at the place of work (Zaczyk, 2018).

Effective activities reducing the risk of professional burnout should include those implemented by both the employee and their work establishment. In the first case, the employee should be equipped with adequate knowledge, provided with proper working conditions and encouraged to act. In the other case, the employer should first

realise that the problem is real, then diagnose the problem, and next undertake appropriate actions to eliminate it. Relevant literature suggests numerous methods and specific activities to avoid or at least minimise the effects of professional burnout (Kedra, Sanak, 2013). The employer should consider development of a supportive work environment. This goal may be achieved by training the management personnel, emphasising the importance of team work and good management of working time. Psychological support and adequate motivation of the employees would also be of great importance (Wilczek-Rużyczka, Zaczyk, Obrzut, 2017). It is necessary to extend the range of studies regarding professional burnout among nurses and midwives, and to provide this professional group with greater psychological support (Sowińska et al., 2012).

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