


# Adaptive capacity of midwives participating in pregnancy termination procedures: Polish experience

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## Abstract

A cross-sectional study was conducted in 181 midwives working in hospitals in Poland. The midwives completed professional psychological tests (CISS questionnaire, EPQ-R questionnaire, OLBI questionnaire) and a questionnaire developed for this study. Midwives participating in pregnancy termination procedures most commonly used the task-oriented coping style. The emotion-oriented coping style was positively related to burnout in the group which performed pregnancy terminations. The analysis showed that the higher the indices of neuroticism, the greater the severity of burnout in both groups. The results indicate the need to conduct an initial assessment of personality resources when employing midwives to the wards.

## Keywords

burnout, coping with stress, midwives, personal resources, pregnancy termination, stress, termination of pregnancy

## Introduction

The process of burning out may largely depend on personal resources, including certain personality traits, as well as specific demands at work, such as performing pregnancy terminations. Job Demands-Resources Model (JD-R model) is a widely researched theoretical framework, which aims to explain the process of burning out and its outcomes (Schaufeli, 2017). It emphasizes the role of two aspects of a job: demands and resources. The first ones are defined as: “aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs” (Schaufeli, 2017). The definition of the latter is: “job resources are aspects of the job that (. . .) are functional in achieving work goals, reduce job demands and the associated physiological and psychological costs, stimulate personal growth and development” (Schaufeli, 2017).

Medical progress and the development of more and more precise methods used in prenatal diagnosis contribute to the increase in the number of pregnancy termination procedures performed in Poland due to fetal malformations. In 2017, according to the official data, 1057 of such procedures were reported in our country—including 1035 pregnancy terminations that followed prenatal diagnosis results, 22

procedures were performed due to the threat to mother’s life and health, and no pregnancy termination—as a result of a prohibited act (e.g. rape) (The Council of Ministers of the Republic of Poland, 2019).

Currently, in many publications regarding medical abortion, the greatest importance is attached to the care of the safety and comfort of women during the conducted procedure (Mortari et al., 2012; Schwandt et al., 2013; Weitz et al., 2013). However, it is worth remembering that the comfort of patients depends mainly on the support of professional medical personnel participating in all stages of the procedure (Zaręba et al., 2018). It should be noted that on

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the one hand, medical staff who conduct such interventions or participate in them may experience difficult feelings and doubts, for example of ethical or moral nature (Gmeiner et al., 2000). On the other hand, those people face the necessity to perform specific activities resulting from their professional duties. Such circumstances may create a strong emotional load and, as a result, contribute to increasing occupational stress. This, in turn, may result in the development and acceleration of the dynamics of the burnout. Personal resources such as coping styles and personality traits play a particular role in stress management.

The issue of personal resources in coping with stress has been quite extensively discussed in health psychology. In 1984 year Lazarus and Folkman made an attempt to define the concept of personal resources, describing them as a set of all the factors that people use to cope with stress (Lazarus and Folkman, 1984). The classification of resources given by Lazarus and Folkman encompasses such factors as health and energy, positive beliefs, ability to solve problems and social competences (Ogińska-Bulik, 2006). The Transactional Model of Stress and Coping Theory by Lazarus and Folkman was complemented with the Meaning Making Model by Crystal Park and Susan Folkman. According to the authors stress experienced by an individual results from the discrepancy between the perception of a current difficult situation and the general understanding of one's life. In order to reduce stress an individual performs cognitive operations which make it possible to match the perception of a confronted situation with the general understanding of one's life. As a result, it may be referred to as meaning-focused coping, which is viewed as a mediator in the assessment and adaptation to chronic stressors, also those associated with professional activity (Riley and Park, 2014). However, Hobfoll formulated the concept of resource conservation in a different way. In his publication, the resource is an available and rare factor that an individual tries to maintain and protect. One would like to maintain these resources that belong to them and to obtain those that they do not yet possess. These resources included: objects, conditions, personal resources and energy resources (Hobfoll, 1989). Mudyń paid attention to the relativity of the concept of a resource stating that "anything personal (e.g. matter, energy, information) can become a personal resource if it is used by an individual to meet his/her immediate needs or to achieve his/her long-term goals" (Mudyń, 2003). According to Strelau an actual or even a perceived loss of resources may become a source of stress (Strelau, 2004). A detailed definition and description of the concept of resources was presented by Şek in 2003. She divided resources into internal and external ones. The former consist of resources of the physical, biological and socio-cultural nature, the latter include human biological resources (genetic determinants, structure of the central nervous system, physiological efficiency of the body, resistance to disease), psychological resources (temperament, intellect,

emotional and interpersonal competence) and spiritual resources (sense of meaning and transgression) (Şek, 2003). A special role in dealing with occupational stress is played by such personal resources as coping strategies and personality traits. It is widely believed that some of the personality traits that one possesses make it easier or more difficult for them to fight stress (Bishop, 2007).

An increased risk of burnout in people with specific personality traits is noted by many experts. A strong influence of neuroticism, the inability to cope with stress and hypersensitivity to the development of occupational burnout is reported by Maslach et al. (2001), as well as other authors who conducted studies on teachers (Cano-Garcia et al., 2005; Poraj, 2009), nurses (Bühler and Land, 2004; Ganjeh et al., 2009; Shimizutani et al., 2008), and midwives (Plotka et al., 2005). Occupational burnout in nurses contributed to higher absenteeism and poor work performance (Dyrbye et al., 2019).

Lazarus and Folkman described two types of coping with stress: problem-oriented and emotion-oriented (Lazarus and Folkman, 1984). The first one defines a variety of activities aimed at an objective change of a situation and the problem which is related to it. The second type of coping focuses on reducing the emotional tension resulting from a stressful situation. This type of coping occurs when a person in a difficult situation feels that they cannot take any action that could change their situation (Bishop, 2007). Each type of coping involves specific strategies and styles (Endler and Parker, 1994; Miles and Carter, 1985).

The research performed on war veterans showed that the choice of avoidant and emotional coping strategies correlated with post-traumatic stress disorder (PTSD) (Strelau, 2004). In this study it was decided to use the classification developed by Endler and Parker as its basis. It includes three main coping styles: task-, emotion-, and avoidance-oriented. The task-oriented style determines the way of coping with stress by planning and undertaking tasks. In a stressful situation, people who exhibit such a style try to change a difficult situation by undertaking specific actions. People who are characterized by the emotion-oriented style tend to focus on their own emotional experiences in a stressful situation. The actions taken by them are not aimed at changing a difficult situation, but are only an attempt to reduce the perceived emotional tension. The avoidance-oriented style characterizes people who try to avoid thinking about and experiencing difficult and stressful situations. Such avoidance may take a form of engaging in substitutive activities (e.g. sleeping, watching television, overeating) or seeking social contacts. The distraction then takes a form of spending time with other people and talking about neutral topics, not related to the stressful situation (Endler and Parker, 1994).

In the present study, we understand participation in medical pregnancy termination as a work demand. Personal resources included in the study are personality traits as described by the Eysenck's personality theory and coping styles as described by Endler and Parker (1994).

The aim of this study is to investigate the relationship between personality traits, styles of coping with stress and occupational burnout among midwives participating and not participating in pregnancy termination procedures.

## Material and method

The study was approved by the Institutional Bioethics Committee (approval number AKBE/79/2019). The participants of the study were midwives working in medical institutions in Mazowieckie and Lubelskie Provinces (Central and Eastern Poland). As regards the investigated convenience sample of 300 midwives invited to participate in the research project, 200 agreed to do so. Due to missing data, a total of 181 correctly filled questionnaires was used in analyses. A 100% return rate was achieved with 90.5% of questionnaires being completed correctly. The study group ( $n=94$ ) participated in medical abortion procedures at work, while the control group ( $n=87$ ) did not. Inclusion criteria for the study were: working as a midwife in a public facility and consent to participate in the study.

In order to conduct the study a battery of questionnaires was used, which included:

- (a) Coping Inventory for Stressful Situations (CISS) questionnaire,
- (b) Eysenck Personality Questionnaire-Revised (EPQ-R) questionnaire,
- (c) Oldenburg Occupational Burnout Questionnaire (OLBI) questionnaire.

Moreover, the midwives were asked to complete a questionnaire which described their psychosocial profile and was developed especially for the purpose of the study.

The CISS questionnaire consists of 48 statements describing behaviors that people display in difficult and stressful situations. The scale examines three main styles of coping with stress: task-oriented coping (TOC), emotion-oriented coping (EOC), and avoidance-oriented coping (AOC). In order to assess the reliability of the CISS questionnaire, Cronbach's  $\alpha$  coefficients were calculated to assess the internal consistency of this tool. The study showed a high internal consistency of individual scales (coefficients of correlation in the range of 0.78–0.90) and a satisfactory stability (test-retest correlations in a 2–3 week interval ranged between 0.73 and 0.80).

The EPQ-R questionnaire is used to examine dimensions of personality. The questionnaire is based on the personality theory of Eysenck and consists of the following basic scales: Extraversion (E), Neuroticism (N), Psychoticism (P), Lie scale (L), and additional scales: Addiction (A), and Criminality scale (C).

The internal consistency of individual EPQ-R scales was estimated taking into account Cronbach's  $\alpha$  coefficients, estimated separately for each group of subjects. As regards the Psychoticism scale, Cronbach's  $\alpha$  coefficients were the

lowest—0.62–0.72. In the Neuroticism scale they depended on the studied group—from 0.86 to 0.88, for the Extraversion scale from 0.78 to 0.81, for the Lie scale from 0.76 to 0.84. As regards Cronbach's  $\alpha$  for the additional scales: in the Addiction scale it ranged from 0.78 to 0.84, and in the Criminality scale from 0.74 to 0.82. The reliability of the scale of the Polish EPQ-R version assessed on the basis of internal consistency coefficients is satisfactory, except for the Psychoticism scale, which is also characterized by its low reliability in the original version of the test. The stability of the EPQ-R scale was examined by performing a double-test study with the same group of people with an interval of 3 weeks. High coefficients of correlation were obtained (from 0.80 to 0.91, depending on the scale). The stability of the results obtained using this diagnostic tool was found to be fully satisfactory.

The OLBI is used to study occupational burnout (Halbesleben and Demerouti, 2005). The results illustrate the level of occupational burnout on two scales: exhaustion and disengagement. Exhaustion is defined as a result of prolonged physical, mental, and emotional tensions resulting from overloads and stressors in the workplace. Disengagement is understood as lack of interest in the activities performed at work, mechanical performance of tasks, lack of enthusiasm, and unwillingness to work (Demerouti et al., 2001). The reliability of the English version of OLBI scale, which was assessed on the basis of internal consistency ratios, was found to be satisfactory: Cronbach's  $\alpha$  (0.74–0.87). The test-retest stability of the EPQ scale is satisfactory. A moderate level of coefficients of correlation was obtained ( $r=0.51$ ,  $p < 0.001$  for exhaustion scale,  $r=0.48$ ,  $p < 0.01$  for disengagement scale).

Prior to the performance of proper analyses, the preliminary ones had been carried out, which included descriptive statistics: numerical and percentage frequencies, means and standard deviations. The normality of the results was evaluated with the Kolmogorov-Smirnov test. To determine the relationship between the consequences of participation in pregnancy termination procedures, personality traits and strategies of coping with stress, the Pearson's  $r$  analysis of correlation was used. The level of significance was set at  $p < 0.05$  as the criterion for statistical assumption. The analyses were carried out using the SPSS 10.0 (SPSS Inc. Chicago) statistical package.

## Results

The average age in the sample was 40.79 (SD=8.55). The majority of surveyed midwives (83; 46%) live in a big city of over 200,000 residents. The study also included midwives living in smaller cities (41%), and residents of villages, who constituted the lowest percentage (13%) of the respondents.

A total of 75 participants (42%) completed secondary education. The study also included midwives with a

**Table 1.** Differences in the study variables between midwives participating and non-participating in terminations ( $n = 181$ ).

Variable	0 ( $n = 87$ )		1 ( $n = 94$ )		t-value	p-value
	M	SD	M	SD		
Task-oriented coping style	5.93	1.82	5.54	1.81	1.43	0.153
Emotion-oriented coping style	5.80	1.83	5.85	1.86	-0.15	0.880
Avoidance-oriented coping style	5.40	1.54	5.52	1.66	-0.50	0.615
Distraction	5.21	1.67	5.61	1.69	-0.35	0.730
Social diversion	5.61	1.69	5.62	2.10	-0.31	0.975
Neuroticism	5.60	1.89	5.77	2.04	-0.58	0.559
Extraversion	5.15	2.19	4.85	1.94	0.96	0.336
Psychoticism	4.71	2.09	4.97	2.21	-0.80	0.422
Lie/social desirability	5.55	1.70	5.01	1.47	2.32	0.027
Addiction	6.03	1.64	6.24	1.71	-0.82	0.412
Criminality	5.43	1.84	5.59	2.08	-0.54	0.590

M: median; SD: standard deviation.

**Table 2.** Occupational burnout and styles of coping with stress—in a group of midwives not participating in pregnancy termination procedures.

Coping with stress						
Burnout		Task-oriented style	Emotion-oriented style	Avoidance-oriented style	Distraction	Social diversion
Exhaustion	<i>r</i>	-0.240	0.181	-0.203	-0.119	-0.242
	<i>p</i>	<b>0.025</b>	0.094	0.06	0.272	<b>0.024</b>
Disengagement	<i>r</i>	-0.222	0.179	-0.234	-0.161	-0.282
	<i>p</i>	<b>0.038</b>	0.096	0.029	0.136	<b>0.008</b>

*r*: Pearson correlation coefficient (*r*-value); *p*: *p*-value.

Note. Bold value signifies  $p < 0.05$ .

university master's degree (25%) and midwives with a bachelor's degree (33%). The average length of seniority in the study group of midwives is 16.73 years ( $SD = 8.63$ ).

The majority of examined midwives were married (68%). The study also included single (never married) women (19%), divorcees (7%), persons living in an informal relationship (4%) and four widows (2%). Among the examined midwives, 94 (51.9%) participated in medical abortions, while 87 (48.1%) never participated in such procedures.

We compared two subgroups of midwives (participating vs non-participating in terminations of pregnancy) with regard to psychological variables measured in the study. The obtained results are presented in Table 1.

The only significant difference between the investigated groups of midwives was detected in the Lie Scale of EPQ-R, where group 0 reached a higher result than group 1. The remaining variables did not differ significantly between compared groups. To explore the relationship between burnout and coping styles, correlation analyses were calculated for two groups of midwives separately (Tables 2 and 3).

In the group of midwives not participating in the termination of pregnancy, exhaustion was negatively correlated with the task-oriented style, and social diversion subscale. Similar correlations were found for the disengagement scale of OLBI, but there, a negative correlation with the avoidant style was also detected. It means that the higher the levels of task-oriented coping and social diversion, the lower the level of exhaustion and disengagement was. Additionally, higher avoidant coping translated into less disengagement (Table 2).

In the group of midwives participating in pregnancy terminations, significant positive correlations were found between both indices of burnout and emotion-oriented coping. The higher the values of the emotional coping style, the stronger burnout was observed (Table 3).

A similar set of analyses was conducted for personality variables (Table 4).

In the group not taking part in the termination of pregnancy, significant relationships between the neuroticism scale and all burnout indicators in the OLBI scale were found (Table 4). Positive correlations were observed, which means

**Table 3.** Occupational burnout and styles of coping with stress—for a group of midwives participating in pregnancy termination procedures.

Coping with stress						
Burnout		Task-oriented style	Emotion-oriented style	Avoidance-oriented style	Distraction	Social diversion
Exhaustion	<i>r</i>	−0.110	0.388	−0.033	0.026	−0.114
	<i>p</i>	0.297	<b>0.000</b>	0.758	0.808	0.278
Disengagement	<i>r</i>	−0.112	0.288	−0.005	0.078	−0.125
	<i>p</i>	0.287	<b>0.005</b>	0.965	0.462	0.235

*r*: Pearson correlation coefficient (*r*-value); *p*: *p*-value.  
 Note. Bold value signifies  $p < 0.05$ .

**Table 4.** Occupational burnout and personality traits in the group of midwives not participating in pregnancy termination procedures.

Personality							
Occupational burnout		Neuroticism	Extroversion	Psychotism	Lying	Criminality	Addictiveness
Exhaustion	<i>r</i>	0.343	−0.156	0.102	−0.072	0.370	0.395
	<i>p</i>	<b>0.001</b>	0.152	0.351	0.511	<b>0.000</b>	<b>0.000</b>
Disengagement	<i>r</i>	0.282	−0.282	0.150	−0.058	0.294	0.363
	<i>p</i>	<b>0.008</b>	<b>0.009</b>	0.169	0.594	<b>0.000</b>	<b>0.000</b>

*r*: Pearson correlation coefficient (*r*-value); *p*: *p*-value.  
 Note. Bold value signifies  $p < 0.05$ .

**Table 5.** Occupational burnout and personality traits in the group of midwives participating in pregnancy termination procedures.

Personality							
Occupational burnout		Neuroticism	Extroversion	Psychotism	Lying	Criminality	Addictiveness
Exhaustion	<i>r</i>	0.331	−0.119	−0.085	0.126	0.257	0.240
	<i>p</i>	<b>0.001</b>	0.261	0.419	0.232	<b>0.013</b>	<b>0.021</b>
Disengagement	<i>r</i>	0.246	−0.135	0.107	−0.101	0.257	0.167
	<i>p</i>	<b>0.018</b>	0.199	0.311	0.336	<b>0.013</b>	0.112

*r*: Pearson correlation coefficient (*r*-value); *p*: *p*-value.  
 Note. Bold values signifies  $p < 0.05$ .

that the higher the values of neuroticism, the higher the values of all burnout indices in the OLBI scale were observed.

Both indices of burnout were also positively related to the criminality and addiction scales. A negative correlation between the extroversion scale and disengagement was also revealed (Table 5).

Similarly to the previous group, in the group of midwives participating in terminations, a significant relationship between neuroticism as well as criminality in the EPQ-R scale and both occupational burnout indices in the OLBI scale was observed. A positive correlation was revealed, which indicates that the higher the values of neuroticism and the higher the values of criminality, the higher the values of all burnout indicators in the OLBI scale were noted.

A positive correlation between the addictiveness scale and emotional exhaustion was observed. Thus, higher values of indicators of addiction translated into higher values of the exhaustion indicator in the OLBI scale.

## Discussion

Freudenberger claimed that “burnout is the state of fatigue or frustration which results from (. . .) devoting to an issue, lifestyle or relationship which did not lead to an anticipated reward” (Freudenberger and Richelson, 1980). The analysis of correlation between personality traits and the level of occupational burnout in the present study showed that the higher the rates of neuroticism, the greater the severity of burnout was observed. In both groups a



higher level of neuroticism increased the risk of burnout. Neurotic people have an especially sensitive nervous system and low resistance to stress. Emotions that arise in them are strong and long-lasting, and in a difficult situation they are susceptible to experiencing negative emotions, anxiety, irritation or frustration (Borys et al., 2003). They perceive difficult situations not as a challenge, but as a threat. In a professional situation, they re-experience their mistakes and failures for a long time and with high intensity, they attach less importance to successes, which they are sometimes unable to notice or attribute them to others. Such perception of work and tasks, which are related to it, clearly reduces the sense of professional satisfaction and increases the risk of occupational burnout (Borys et al., 2003). The relationship between neuroticism and burnout was first described in 1978 by Katz and Kahn (1978). It happened shortly after Freudenberg who described the phenomenon of burnout for the first time in the scientific literature in 1974. His publication "Staff burn-out" included observations related to burnout in the work of volunteers who were helping at a center for drug addicts. Subsequently, in 1980 he expanded his view in a publication entitled "The High Cost of High Achievement" (Freudenberg and Richelson, 1980). Volunteers at a center for drug addicts were initially full of idealistic views and optimistic attitude to tasks which they were supposed to perform. After a year of hard work they were losing energy, experienced reduced motivation, disengagement and numerous psychosomatic symptoms. The relationship between neuroticism and burnout was also emphasized in a paper by Maslach et al. (2001). Their analysis demonstrated that in the studied group of nurses the increased level of professional burnout correlated with an increase in the level of stressors concerning relationships with patients in nurses with a high level of neuroticism and a low level of extraversion. Similarly, Shimizutani studied Japanese nurses employed at university hospitals and indicated neuroticism to be one of fundamental predictors of burnout in medical personnel (Shimizutani et al., 2008). However, the study did not encompass the level of requirement for supervision in the workplace and a subjective perception of having an influence on the course of work. Those variables were comprised in a study by De Rijk et al. (1998). The study showed that burnout is more common in persons with a high need of supervision and working at facilities where they have a negligible influence on the course of work. Similar observations regarding a group of nurses of intensive therapy units were reported by Buhler and Land (2004). Analogous correlations were demonstrated in presented study. Suleiman-Mortos et al. performed a systematic review and a meta-analysis of research conducted in midwives. They demonstrated the prevalence of 50% for personal burnout, 40% for work-related burnout, and 10% for client-related burnout (Suleiman-Mortos et al., 2020). The majority of midwives presented personal and work-related burnout. The authors also emphasized the

significance of personal factors and working conditions in the etiology of occupational burnout. Young, less experienced and single midwives were characterized by a higher level of occupational burnout.

The results of analyses in the group of midwives participating in pregnancy termination procedures showed that the second factor significantly increasing the risk of negative consequences of participation in pregnancy termination is the emotion-oriented style of coping with stress. The higher its indices, the greater the intensity of burnout was found. The emotion-oriented style is manifested by people showing tendencies in a difficult and stressful situation to focus primarily on themselves and their own emotional experiences (Labrague et al., 2018). The present study demonstrated that midwives who prefer this style of coping with stress and participate in pregnancy termination procedures are absorbed in experiencing their own grief, sadness, guilt, anger or irritation. They feel an increased psychological tension and also more often feel depressed. People who prefer the emotion-oriented style of coping with stress try to reduce the emotional tension through wishful thinking and fantasizing. The methods of action and activities undertaken in a stressful situation are aimed at limiting the excessive expression of experienced emotions. Fantasizing is a way to improve their well-being—anticipation and expectation of an overly optimistic solution to the problematic situation: "tomorrow everything will change" (Kokoszka, 2004). Disappointment with the lack of desirable changes in a difficult job situation, for example, a resignation of superiors from performing pregnancy termination procedures, or a transfer to another ward where such procedures are not performed, are the causes of emotional discomfort, depression and part of the development of burnout. The negative influence of the emotional style of coping on the level of occupational burnout is confirmed by the results of research conducted in Poland and abroad, among both nurses and a group of midwives (Bakker and Heuven, 2006; Wilczek-Rużyczka and Król, 2003). The presented study revealed that psychiatric nurses were more commonly involved in task-oriented coping (mean—58.4). The avoidance-oriented style was less common (mean—46.7) and the emotion-oriented style was observed the least frequently (mean—42.8). Furthermore, it was demonstrated that those midwives who presented the emotion-oriented style more commonly reported an elevated level of work-related stress. As regards the present study slightly different results were found in a group of midwives participating in pregnancy termination procedures. The mean values for particular stress coping styles were: task-oriented coping style (mean—56.89), emotion-oriented style (mean—46.49), and avoidance-oriented style (mean—43.61). As regards the group of midwives who did not participate in this kind of procedures the respective means were as follows: task-oriented style—58.80, emotion-oriented style—46.73, and avoidance-oriented style—43.61. Emotion-oriented coping in a group of midwives who participated in pregnancy

termination procedures significantly correlated with all indices of professional burnout in the OLBI scale. The level of professional burnout increased with higher indices of the emotional style of coping with stress. The results obtained by Wilczek-Rużyczka and Król in 2003 indirectly corresponded with the present results. In the emotion-oriented coping style concentrating on one's own needs is a typical property as regards experiencing stress (Wilczek-Rużyczka and Król, 2003). Therefore, the experience of stress may be increased. Mentioned authors noted that such respondents reported an increased level of work-related stress. The present study revealed that the emotion-oriented style in individuals confronted with pregnancy termination procedures corresponded with higher results as regards professional burnout indices. As regards views concerning the reasons for professional burnout the results of both studies are part of the model JD-R model described by Demerouti et al. (2001). From this perspective professional burnout is described as a consequence of long-term work-related stress due to excessive requirements. Stress intensity depends on the worker's resources. In this context the present results seem interesting. In the group of midwives who did not participate in pregnancy termination procedures higher values of the avoidance-oriented style indices (substyle: social desirability) corresponded with lower values of the index of professional burnout: disengagement in the OLBI scale. The avoidance-oriented style mainly consists in avoiding thinking about and confronting the situation which causes stress. It may be assumed that avoidance is a factor which protects from professional burnout, especially as regards disengagement which means distanced attitude to professional responsibilities, aims, values appreciated in the workplace, attitude toward one's subordinates, associates, and supervisors (Baka, 2011; Bakker and Heuven, 2006). Despite the lack of statistically significant differences the task-oriented coping style dominated in both groups with the predominance observed in the group of midwives who did not participate in pregnancy termination procedures (means: 56.89 vs 58.80). It may be assumed that persons facing a professional challenge will attempt at solving the problem concentrating on the task. However, in a situation when individuals perceive a requirement as exceeding their capabilities, they may engage into other activities in order to avoid confronting with the problem. Although it is difficult to say what social desirability might involve in specific situations when performing professional responsibilities. However, considering the fact that social desirability in avoidance-oriented style aims at forgetting difficulties associated with the problematic situation it may be assumed that such persons might tend to engage into other professional responsibilities (the work of a midwife largely involves initiating social contacts) which were assessed as less demanding. Furthermore, this coping style may finally result in finding and delegating a so called "proxy" in order to perform the professional task which might be assessed as difficult.

Statistical analyses also confirmed the association between occupational burnout and the tendency to addiction. A positive correlation was demonstrated in both groups of midwives, participating and not participating in pregnancy termination procedures. In midwives taking part in pregnancy terminations, statistical analyses showed that the higher the exhaustion indicators in the OLBI scale, the higher the indicator of tendency to addiction in the EPQ-R test. People with a tendency to addiction are characterized by low self-esteem, pessimism, reluctance to engage in situations requiring long-term effort, and failure to cope with life's requirements (Jaworowska, 2011). The tendencies and manifestations of addiction occurring in the group of medical personnel is a topic which is extremely rarely raised in the scientific literature. There is a widespread stereotype that the knowledge about the development and treatment of addictions in medical personnel is a sufficient protecting factor against alcoholism, nicotinism or behavioral addictions (Kenna and Wood, 2004; Shimizutani et al., 2008). The inability to cope with long-term chronic stress that is associated with the participation in pregnancy termination procedures may make midwives undertake attempts to reduce stress, for example, by using various types of psychoactive drugs (causing drug addiction, alcoholism, and nicotinism) (DuPont et al., 2009; Jex et al., 1992). The relationship between burnout and addictive tendencies was confirmed by numerous authors (Cronin-Stubbs and Brophy, 1985; Rubington, 1984). The problem of alleviating occupational stress through the abuse of psychoactive substances among Polish medical professionals was also noticed by Marcinkowski and Olejniczak in their study from 2006 (Marcinkowski and Olejniczak, 2006).

Currently, professional literature offers an increasing amount of information concerning the possibility of assistance and new forms of therapy in nurses and midwives exposed to occupational stress and burnout, such as end-of-shift meetings and team bonding sessions (O'Riordan et al., 2020). Considering the meaning-focused coping theory developed on the basis of the theory by Lazarus and Folkman it is difficult to provide a definite answer concerning the factors which affect the results of the present study. Notably, the issue of the general assessment of the stressor is significant. It was reported that the studied midwives may have differed in terms of the way of interpreting events which had to be confronted (Riley and Park, 2014). A positive interpretation contributes to a more rapid restoration of balance in an individual after a stressful event was experienced. Therefore, the stress is relieved and the symptoms of depression, posttraumatic stress and occupational burnout may be reduced.

### *Limitations of the study*

All the questions included in the questionnaire were closed-ended type which prevented the respondents from expressing the opinion in their own words. The average duration of

completing the questionnaires was about 1 hour. The duration was difficult to accept by some of the respondents. It significantly affected the number of persons who consented to participate in the study. Only 67% of the target group midwives agreed to participate which may result from social stigmatization of the issue. A similar difficulty referred to the selection of a location in which the study was conducted, because pregnancy terminations are performed only at several facilities in Poland which may also contribute to the lack of representativeness of the sample for the whole population in the country.

## Conclusion

Healthcare workers, in relation to their choice of profession, have taken a particular note to the satisfaction of saving the health and lives of patients entrusted to them. Meanwhile, taking care of the well-being of patients in medical practice is sometimes more complex. According to Wyatt (2001) a complete emotional neutral attitude of a physician and medical personnel is not possible in issues of reproduction and abortion. Moreover, such an attitude would be inhumane (Wyatt, 2001). The criteria for the acceptability of the termination of pregnancy are the subject of undecidable ethical debates, which result to a greater extent from deeply-ingrained beliefs than philosophical arguments (Haidt, 2014). A study based on a partially structured interview conducted in 15 physicians, nurses, and midwives participating in pregnancy termination procedures demonstrated that they reported a dilemma between proceeding according to the law and their own conscience in case of offering pregnancy termination after 22 gestational weeks (Statham et al., 2006). If the nature of these activities deviates from their beliefs and world-view, strong and long-lasting emotions appear. This condition causes a rapid depletion of defense mechanisms and drastically approximates occupational burnout. Every effort should be made to reduce all of its harmful consequences, including the occupational burnout of medical personnel.

Factors that increase the likelihood of negative consequences of assistance during terminations of pregnancy procedures in the form of burnout are: neuroticism and emotional style of coping with stress.

The results of the research indicate the need to conduct an initial assessment of personality resources when employing midwives in wards where work is associated with a high psychological burden. In the education cycle of healthcare workers, effective competences should be developed to deal with factors resulting from occupational stress. In this way, midwives may increase their resistance to traumatic events related to their profession.

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