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Frequency and Intensity of Occupational Burnout and Its Determinants among Midwives

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Abstract

Background: Burnout syndrome comprises three dimensions, namely emotional exhaustion, depersonalization, and decreased personal accomplishment. Regarding the difficulties in the midwifery profession, midwives are at risk of burnout.
Objectives: This study aimed to determine the intensity and frequency of burnout and its related factors in midwives working in healthcare centers of Tehran, Iran.
Methods: In this cross-sectional study, 300 midwives were selected by the cluster-random method. Data collection tools were demographic and Maslach burnout questionnaires. The data analysis was performed in SPSS software (version 16).
Results: The mean scores of burnout frequency and intensity in midwives were 54.31±14.54 and 62.71±17.46, respectively. Among the three dimensions of occupational burnout, the highest frequency (50%) and intensity (59.3%) were related to decreased personal accomplishment. Occupational burnout and its dimensions had a significant relationship with the variables of high workload, unwillingness to do their job, work shifts, and service department (P<0.05).
Conclusion: High workload, unwillingness to do the midwifery job, and long consecutive or night shifts in the hospital increase the rate of occupational burnout among midwives. In addition to the loss of capital and reduction of productivity, occupational burnout can reduce the quality of midwifery care and decrease the satisfaction of clients. It is suggested that by using the results of this study, appropriate measures be taken to reduce the burnout of midwives.

Keywords: Health services centers, Iran, Midwives, Occupational burnout

1. Background

Today, all scholars are aware of the importance and role of human sources as a development factor in the country (1). Accordingly, human sources are recognized as the main source of service, survival, and success of organizations (2). Due to their prominent role in each organization, consideration is given to occupational issues, like burnout, to enhance the performance of employees, reduce absence from the job, and ultimately increase productivity (3). The term "burnout" was first defined by Freudenberg in the 1960s, as a syndrome of decreasing physical and mental ability that occurs in people who work in the helping professions and spend more working hours in close and direct relation with others (4). Maslach and Jackson described burnout as a syndrome that is composed of three dimensions: 1) emotional exhaustion (feeling of mental ability discharges), 2) depersonalization (negative reaction, lack of sensation along with excessive indifference towards the service recipients), and reduction of personal accomplishment (reduced sense of competence and success in the profession) and is due to job-related stressors (5).

Although burnout is experienced across occupational groups (6), there is a significant difference between them (7). The US Department of Information Office acknowledges that among the various occupations, healthcare professionals account for one of the highest levels of occupational burnout (8). Currently, burnout is a serious problem in all health systems and according to available statistics, one out of seven working people suffer from this problem. It is estimated that the cost of burnout in Europe and the United States is 50-75 million dollars annually (9-11).

Burnout leads to negative consequences for the individual, family, organization, and society (12). It can create organizational complications, such as staff moral deficiency, defective job performance, reduced production, absence from work, inappropriate personal behavior with clients, negative attitude towards the occupation, and lower job satisfaction (12,13). For the worker, it can cause physical impairment, such as physical exhaustion, boredom, insomnia, alcoholism, and psychological problems, including indifference, discouragement, frustration, reduced empathy, and depression. In addition, burnout may be associated with family and marital problems (14-16).

Based on previously conducted studies, healthcare personnel frequently and directly experience death, suffering, injuries, long work hours, short vacations, lack of personnel, responsibility for

patients, and psychological and physical stress. Long-term continuation of the experience of these stressors leads to burnout (17, 18). In their study, Akizuki and Fujimura (2007) found that 16%, 12%, and 21% of midwives experienced emotional exhaustion, depersonalization, and lack of individual accomplishment, respectively. They also found that marital status, work experience, working hours, and overtime had a significant relationship with emotional exhaustion and depersonalization (19).

Results of another study showed high levels of burnout in all three dimensions in Senegalese midwives, and more than one-third of midwives sought to change their jobs (20). In a study conducted on Australian midwives, 60.7%, 30.3%, and 30.3% of the participants had experienced moderate to high levels of emotional exhaustion, individual incompetence, and depersonalization (21). As many surveys show, there are high levels of burnout in midwives, and various individual, interpersonal, and organizational factors interfere with it. It should be noted that each one of the studies evaluated a specific aspect of these factors (22).

Midwives are one of the most important healthcare providers and act as a strong force in the implementation of health programs in each country; hence, the lack of their services can lead to irreparable results.

2. Objectives

Therefore, preserving the present workforces and promoting the physical and mental health of those working in the midwifery professions can have a significant effect on their performance, as well as on the quantity and quality of service provision (23, 24). Considering the consequences of burnout on individuals and organizations, and the limited number of studies that have examined burnout dimensions in Iranian midwives, this study aimed to determine the intensity and frequency of burnout and its determinants in midwives working in healthcare centers and hospitals in Tehran, Iran.

3. Methods

This cross-sectional study was conducted on 300 midwives working in healthcare centers and hospitals in Tehran. In this study, by examining Iranian and foreign studies, using the formula for estimating the sample size with a 95% confidence interval, estimating the 50% prevalence of burnout, and accepting the error rate of 0.05, the sample size was calculated at 240 subjects. Finally, it was increased to 300 people, and the samples were selected by cluster sampling method. The clusters included all hospitals and health centers affiliated to Tehran University of Medical Sciences that were listed and randomly selected. Next, all midwives working in these centers who met the inclusion criteria and were willing to participate were included in the study.

The inclusion criteria were work experience of at least 1 month, no consumption of sedatives, and lack of the experience of severe stress, such as the death of a spouse or loved one during the past months. The exclusion criteria were unwillingness to continue completing research tools. Data collection was initiated after informed consent was obtained from the participants. It should be noted that research objectives were explained and confidentiality of information was ensured.

The data collection tools included a demographic questionnaire and the Maslach Burnout Inventory. The validity and reliability of its Persian version have been confirmed in studies performed by Kouhpayeh Zadeh et al. (2011) and Masoudi et al. (2008) (22, 25). In the present study, its validity and reliability were evaluated by the content validity and test-re-test methods, respectively. The correlation coefficient between the two tests was calculated at 0.8. The Maslach Burnout Inventory consists of 22 items, including emotional exhaustion (n=9), depersonalization (n=5), and decreased personal accomplishment (n=8). In each dimension, the obtained score is divided into three categories, namely low, moderate, and severe.

Moreover, for each question, the participant was asked to indicate the frequency of burnout with scores from zero (never) to six (every day) and the intensity of burnout with scores from zero (no) to seven (very high). Accordingly, the ranges of scores in intensity and frequency dimension were 0-154) and 0-132, respectively (26). Data analysis was performed in SPSS software (version 16) using descriptive and inferential statistics, including t-test, Tukey test, ANOVA, and multivariate regression. It should be mentioned that a p-value of ≤ 0.05 was considered statistically significant.

4. Results

Based on the findings, the mean age of participants was 33.99 years. Moreover, almost 87% of participants had a bachelor's degree and 63.7% of them were married. In addition, 71.3% of the subjects considered their monthly income enough, 42% were permanent employees, and 45.7% had circulating shifts. In terms of workload, 58.7% of participants stated that their workload is high. Besides, 62.7% of midwives reported that they did not exercise at all, and the exercise rate was less than 5 h per week in 30.6% of those who exercised.

The mean score of burnout frequency in midwives was 54.31±14.54 and the mean score of burnout intensity was 62.71±17.46. The results also showed that intensity and frequency of burnout in most midwives were 73.7% and 76.7%, respectively which

is a moderate level. Among the three dimensions of burnout, the highest frequency (50%) and intensity (59.3%) were related to the lack of individual accomplishment. Table 1 summarizes the distribution of frequency, mean, and standard deviation of burnout dimensions.

Multivariate regression was used to investigate the effect of individual and occupational variables on the different dimensions of burnout. Results showed that high workload, unwillingness to do their job, and work setting (hospital or health centers) are effective on burnout (Table 2).

Regarding the effect of individual and occupational variables on the different dimensions of burnout, the results showed that high workload, unwillingness and indifference towards the job, hospital employment, employment in the maternity, NICU, prenatal care wards, and employment in the emergency midwifery clinic added 6.36, 8.63, 2.89, 4.15, 17.99, to the mean score of emotional exhaustion (Table 3). Furthermore, based on multivariate regression, the age range of 20-49 years, unwillingness to do their job, and working at the hospital added 4.23, 2.10, and 1.43 scores to the mean score of depersonalization (Table 4). Regarding the third dimension, results also showed that working in the evening, night, long, and circulating shifts and unwillingness to do their job reduced the mean score of individual accomplishment by 2.66 and 3.97, respectively (Table 5).

Table 1. Frequency distribution of burnout dimensions in terms of intensity and frequency of exposure in the midwives working in health centers affiliated to Tehran University of Medical Sciences

Burnout dimensions		Intensity		Frequency	
		Number	Percentage	Number	Percentage
Emotional exhaustion	Low	179	59.7	162	54
	Moderate	91	30.3	87	29
	Severe	30	10	51	17
Total		300	100	300	100
Mean (±SD)		23.49±12.71		18.40±10.95	
Minimum-maximum		0-63		0-54	
Depersonalization	Low	225	75	238	79.3
	Moderate	61	20.3	43	14.3
	Severe	14	4.7	19	6.3
Total		300	100	300	100
Mean (± SD)		4.50±5.41		3.39±4.38	
Minimum-maximum		0-35		0-29	
Decreased personal accomplishment	Low	38	12.7	70	23
	Moderate	84	28	80	27
	Severe	178	59.3	150	50
Total		300	100	300	100
Mean (±SD)		34.72±8.57		32.52±9.4	
Minimum-maximum		0-56		0-48	

Table 2. Results of multivariate regression analysis of the factors affecting total burnout

Independent variable		Std. Error	Beta	p-value
Workload	Moderate	-	-	-
	High	1.94	7.22	<0.0001
Willingness towards job	Yes	-	-	-
	No and indifferent	2.44	6.14	0.012
Service department	Family Health Unit	-	-	-
	Maternity ward, NICU, Prenatal care	2.06	6.00	0.004
	Emergency midwifery clinic	5.72	22.89	<0.0001

NICU: neonatal intensive care unit

Table 3. Results of multivariate regression analysis of the factors affecting emotional exhaustion

Independent variable		Std. Error	Beta	p-value
Workload	Moderate	-	-	-
	High	1.33	6.36	<0.0001
Willingness towards job	Yes	-	-	-
	No and indifferent	1.65	8.63	<0.0001
Workplace	Health Centers	-	-	-
	Hospital	1.49	2.89	0.05

Table 4. Results of multivariate regression analysis of the factors affecting depersonalization

Independent variable		Std. Error	Beta	p-value
Age range	50-59	-	-	-
	39-49, 29-40, 20-30	1.79	4.23	0.019
Willingness towards job	Yes	-	-	-
	No and indifferent	0.78	2.10	0.008
Workplace	Health Centers	-	-	-
	Hospital	0.65	1.43	0.029

Table 5. Results of multivariate regression analysis of the factors affecting decreased personal accomplishment

Independent variable		Std. Error	Beta	p-value
Work shift	Morning	-	-	-
	Evening, night, long, circulating	0.95	2.56	0.008
Willingness towards job	Yes	-	-	-
	No and indifferent	1.23	3.97	0.001

5. Discussion

Based on the results, the intensity and frequency of burnout in the majority of participants were at a moderate level. Studies have shown that the midwives working in an organization, such as hospitals, health centers, and clinics are always under stress due to management, organizational, and environmental stressors that can lead to burnout (10, 18, 27). Results of this study are consistent with those of the studies conducted by Alparslan and Doganer (2009), Oncel, Ozer, Efe (2007), and Akizuki (2007) as they also found the level of burnout in midwives to be moderate (6, 19, 28). However, in studies conducted by Rouleau et al. (2012) and Mollart et al. (2011), high levels of burnout were reported among midwives which is inconsistent with the results of present research (20, 21).

Midwives play an important role in healthcare centers, families, and communities. Burnout among them can be a result of tension in the work environment since according to previous studies, midwives work under special conditions in which the needs of clients are greater and high workload and environmental stress can expose them to burnout (27, 28). In the present study, evaluation of the burnout dimension showed that most midwives are partially experiencing emotional exhaustion. In addition, in the studies by Alparslan and Doganer (2009) and Akizuki & Fujimura (2007), midwives reported emotional exhaustion (6, 19, 17).

Inconsistent with the finding of the present study, Mollart et al. (2011) found that two-thirds of midwives had experienced moderate to high levels of emotional exhaustion (21). Rouleau et al. (2012) also found that there was a high level of emotional exhaustion in midwives (20). Emotional exhaustion is a condition in which a person loses all positive emotions toward clients while providing care and experiences a kind of excessive indifference toward client and profession. The emergence of such a situation in the midwives is a considerable concern as it can interfere with providing their services (29).

In terms of the second dimension of burnout, most midwives reported some degree of depersonalization. In this regard, it can be said that when people work in environments that provide them with no appropriate encouragement, sense of efficiency, intuition, and intellectual comfort, they lose their personal perspective in the care of patients (30). Oncel et al. (2007) and Alparslan and Doganer (2009) reported mild degrees of depersonalization in midwives (6, 28), while Rouleau et al. (2012) and Mollart et al. (2011) reported high levels of depersonalization in midwives which were not in line with the results of the present research.

Regarding the third dimension of burnout, the results of this study indicated that most midwives experienced a lack of individual accomplishment with high intensity and frequency. This finding is consistent with the results of studies conducted by Doganer and Alparslan (2009), Mollart et al. (2011), and Rouleau et al. (2012) (6, 20, 21). The sense of individual achievement occurs when a person can influence the policies of the organization, and thereby display their abilities (10). Oncel et al (2007) found that most of the midwives experienced a lack of individual accomplishment with moderate intensity (28).

It can be said that midwives are placed in special situations due to their job, which increases the tension and anxiety cycle in them; accordingly, this stress and anxiety affect the productivity of not only the individual but also the whole system (8, 31-33). In this study, the workload, willingness to do the job, and workplace were most related to emotional exhaustion. Accordingly, those with high workloads, unwillingness to do their job, and employed in hospitals, experienced more emotional exhaustion. Willingness to do the job and workplace was the most related to depersonalization and the people who were reluctant to do their job and worked in a hospital reported higher levels of depersonalization.

Lack of individual accomplishment had the strongest relationship with work shifts and unwillingness to do their job. In terms of total burnout, those with high workloads, unwillingness to do their job, or hospital work setting experienced more burnout. With regard to the higher rate of burnout among midwives working in hospitals, compared to health centers, it seems that the high workload as well as circulating and night shifts in hospitals caused such a difference in the level of burnout.

In the present study, midwives who worked only in the morning shift reported significantly lower levels of lack of individual accomplishment, compared to midwives working in other shifts. This result is similar to the findings of a study performed by Tavan et al. (2016) and Habibi et al. (2015). In relation to shift work, the disruption of sleep patterns, disturbance of the biological balance of the body, and stress can affect the increase in burnout (34, 35). In explaining the cause of higher levels of burnout in people who are not interested in their work, it seems that willingness and a positive attitude

toward oneself, one's profession, and job satisfaction can lead to an increase in self-esteem, efficiency, and intellectual comfort. Moreover, it can reduce stress levels, and thereby occupational burnout (36).

Furthermore, in the present study, multivariate regression showed that age had the strongest relationship with depersonalization and that younger subjects reported more depersonalization. Along with this finding, Hosseini et al. (2011) and Lin et al. (2009) also reported a negative correlation between age and depersonalization, and younger health care providers reported higher levels of depersonalization. It can be explained that as people become older, their work experience increases; accordingly, people become less aggravated and can better adapt themselves to new conditions. In this regard, it is possible to teach young people how to avoid burnout by teaching them problem-solving skills and holding stress management workshops for them (26, 37).

Since training midwifery staff imposes high costs on the healthcare system of the country, their burnout causes loss of capital and reduces productivity. Hence, identification of at-risk midwives and application of therapeutic interventions, such as interventions about stress coping skills and enhancement of protective personality factors, can be helpful in the prevention of burnout. It is also suggested that burnout can be resolved by adopting preventive measures to reduce stressful occupational factors, including the provision of adequate midwifery staff for working in relevant departments, balanced work hours, provision of facilities and equipment for midwifery wards, evaluation of the abilities of people who enter this job and employment of interested people, encouragement of teamwork, involvement of employees in professional decision-making, development of problem-solving skills, stress management, encouragement of the personnel to exercise and perform healthy activities, and lifestyle modification instruction.

One limitation of this study was its cross-sectional design. The cross-sectional design did not provide cause and effect inferences; therefore, common relationships found among the variables of this study could be examined in a prospective longitudinal study. Second, the results may not be representative of the entire healthcare workers in Iran due to geographical and cultural differences.

6. Conclusion

The most important strength of the present study was that it was one of the few studies which examined the prevalence of burnout frequency and intensity and its related factors in Iranian midwives.

Regarding the report of burnout, emotional exhaustion, depersonalization, and lack of individual accomplishment in the midwives, it is recommended that health authorities and managers use the results of this research to find ways to reduce midwifery burnout. It is also necessary for managers to periodically evaluate burnout situations in their employees and identify factors affecting burnout to improve them. Moreover, studying burnout among midwives working in different environments and at different periods can help managers in terms of logical analysis and conclusions.

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Conflicts of interest

The authors declare no potential conflicts of interest.

Ethical Considerations

This research was approved by the Ethics Committee of Tehran University of Medical Sciences (Ethical Code: 91/d/130/684) and informed written consent was obtained from all participants.

Authors' Contributions

N.M.S., FZ.K., and Z.B. contributed to the conception and design of the present study. N.M. contributed to the acquisition of data. FZ.K., and Z.A. analyzed the data with feedback from all authors. All authors wrote the manuscript , contributed to the interpretation of the data and the critical review of the manuscript and approved the final version of the manuscript.

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