

# Journal of Occupational Health and Epidemiology



Journal Homepage: https://johe.rums.ac.ir/

# Job Burnout among Employees and Therapists in Counseling Centers for Behavioral Diseases in Iran

Morteza Mehraeen<sup>1</sup>, Marjan Faghih<sup>2</sup>, Hassan Joulaei<sup>3</sup>, Seyed Ahmad Seyed Alinaghi<sup>4</sup>, Farzane Pirmadah<sup>5</sup>, Wali Amini<sup>6</sup>, Parvin Afsar Kazerooni<sup>7</sup>, Fariba Qhiasi<sup>8</sup>, Soloman Yeilaghi<sup>9</sup>, Marjan Meshkati<sup>10</sup>, Nasim Nasiri Moghadam<sup>11</sup>, Farzane Hosseini<sup>12</sup>, Mohammad Reza Miri<sup>13</sup>, Zahra Heydari<sup>14</sup>, Mohammadreza Heydari<sup>15\*</sup>

- 1. M.Sc. in Clinical Psychology, HIV/AIDS Research Center, Institute of Health, Shiraz University of Medical Sciences, Shiraz, Iran.
- 2. Assistant Prof., Dept. of Biostatistics, School of Medicine, Arak University of Medical Sciences, Arak, Markazi, Iran.
- 3. Assosiated Prof., Health Policy Research Center, Institute of Health, Shiraz University of Medical Sciences, Shiraz, Iran.
- 4. Assosiated Prof., Iranian Research Center for HIV/AIDS, Tehran University of Medical Sciences, Tehran, Iran.
- 5. M.Sc. in Public Health Nutrition, International Campus, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.
- 6. Pharm.D., Non-Governmental Expert Pharmacist, Kurdistan University of Medical Sciences, Kurdistan, Iran.
- 7. M.D. in Social Medicine, Community Medicine Specialist, Previous National HIV/AIDS/STI Program Manager, Center for Communicable Disease Control, Ministry of Health and Medical Education, Tehran, Iran.
- 8. M.Sc. in Sociology, HIV/AIDS Research Center, Institute of Health, Shiraz University of Medical Sciences, Shiraz, Iran.
- 9. B.Sc. in Public Health, Expert and Director of Counseling and Behavioral Disorders, Kermanshah University of Medical Sciences, Kermanshah, Iran
- 10. M.D., Expert of HIV/AIDS in Isfahan University of Medical Sciences, Isfahan University of Medical Sciences, Isfahan, Iran.
- 11. M.D., HIV/AIDS Expert, Kerman University of Medical Sciences, Kerman, Iran.
- 12. M.D., Voluntary Counselling and Testing Center, Health Deputy, Birjand University of Medical Sciences, Birjand, Iran.
- 13. Ph.D. in Biotechnology, Persian Gulf Marine Biotechnology Research Center, the Persian Gulf Biomedical Sciences Research Institute, Bushehr University of Medical Sciences, Bushehr, Iran.
- 14. M.Sc. in Candidate of Nano Bio Technology, Dept. of Cell and Molecular Biology, Faculty of life Sciences and Biotechnology, Shahid Behesti University, Tehran, Iran.
- 15. Assistant Prof., HIV/AIDS Research Center, Institute of Health, Shiraz University of Medical Sciences, Shiraz, Iran.



Citation: Mehraeein M, Faghih M, Joulaei M, Seyed Alinaghi SA, Pirmadah F, Amini W, Afsar Kazerooni P, Qhiasi F, Yeilaghi S, Meshkati M, Nasiri Moghadam N, Hosseini F, Miri MR, Heydari Z, Heydari M. Job Burnout among Employees and Therapists in Counseling Centers for Behavioral Diseases in Iran. J Occup Health Epidemiol. 2023;12(4):227-33.

Copyright: © 2023 The Author(s); Published by Rafsanjan University of Medical Sciences. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<a href="https://creativecommons.org/licenses/by/4.0">https://creativecommons.org/licenses/by/4.0</a>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

# **Article Info**

# \* Corresponding author: Mohammadreza Heydari, E-mail:

heydari280@yahoo.com

Article history Received: Oct 2022 Accepted: Oct 2023



10. 61186/johe.12.4.227

**Print ISSN:** 2251-8096 **Online ISSN:** 2252-0902

Peer review under responsibility of Journal of Occupational Health and Epidemiology

# Abstract

**Background:** Job burnout is more frequent in stressful and high-risk jobs. Healthcare workers, especially Voluntary Counseling and Testing (VCT) workers and therapists, are more exposed to job burnout. This study aimed to compare the burnout rate among the staff and therapists working in behavioral disease counseling centers and health centers in 9 provinces of Iran.

**Material and Method:** This cross-sectional study was conducted in 9 provinces of Iran from January 2020 to March 2020. For this research, 94 VCT workers as the experimental group, and 103 public clinic workers participated as the available sampling group. To collect the data, the Meslesh questionnaire was used and descriptive statistics (frequency, percentage, mean, etc.) and inferential methods were applied for statistical analysis (t-test, one-way analysis of variance and Tukey post hoc test, chi - square test and Spearman correlation test). (P< 0.05)

**Results:** Our finding showed that 33% of health center workers and 32% of VCT workers had burnout, but the difference was not statistically significant. Most Health Center (HC) workers who showed burnout were working in the southern province of Iran (Bushehr and Bandar Abbas), and the most VCT workers who showed burnout were working in the western province of Iran (Kermanshah and Kurdistan).

**Conclusion:** Although the rate of burnout in the staff of these two centers is very similar, it can be concluded that due to the small number of people referred to AIDS centers compared to the large number of patients in health centers, working with people with HIV/AIDS is so difficult.

**Keywords:** Burnout, Psychological, Occupational Stress, Acquired Immunodeficiency Syndrome, Iran.

# Introduction

Burnout, also known as psychoburning, is a social and personal complication that often occurs in city dwellers and among office workers. Excessive work with more life and financial risks has been found to increase the likelihood of burnout in individuals [1]. On the other hand, the simplicity and inactivity of the worker and the less need for creativity, motivation and variability in work also increase burnout in employees [2]. So, at both ends of the spectrum, the risk of burnout is higher.

Burnout is defined as psychological distress and loss of mental ability in the workplace. Research has shown that burnout is directly related to job dissatisfaction, family and marital problems, inability to individually and collectively plan, loss or leave the job, and neurotic disorders such as depression and generalized anxiety disorder. Of course, we do not mean a cause-and-effect relationship. Still, it can be said that these factors intensify each other's performance and prevent a person from being able to perform tasks correctly and accurately [3].

Burnout, on the one hand, is related to a person's resilience in the workplace and his social support, and on the other hand, is related to the difficulty of work and the degree of conflict with the clients or physical and psychological risk [4].

High workload and riskiness, low resilience, and lack of social support quickly led to burnout. Nurses, firefighters, police, psychiatric therapists and staff of chemical and nuclear centers are more prone to this disorder due to high levels of stress [5].

There is a difference between therapists and nurses how working in the healthcare system. Some of them worked with many low-risk patients, such as physicians and nurses who worked in outpatient clinics; in contrast, some physicians and nurses worked with a small number but high-risk individuals, such as criminals and people with personality disorders and high-risk behaviors. Nurses, midwiferies and physicians who worked in Voluntary Counseling and Testing (VCT) are in the second category. Although the number of clients in this group is small, the risk is very high. Numerous studies have shown a relationship between burnout and nursing and caregiving jobs [6-8].

Rezaei et al., in a review and meta-analysis, have shown burnout among Iranian nurses is about 36%. Meta-regression indicated that sample size and year of data collection, mean age of samples, female-to-male ratio, and geographic regions were not statistically significantly associated with the prevalence of burnout [9].

In another study, Alidosti et al. have shown in nurses, with an increase in the subscales of depersonalization (63.6%) and emotional exhaustion (64.2%), burnout

decreased [10] however, regarding lack of personal accomplishments, most of them (65.6%) reported higher levels of burnout.

Also, in Ariapooran et al., the burnout symptoms were demonstrated in 15.03% of Iranian nurses. Social support (significant other, family, and friends) was negatively correlated with burnout [11].

Assadi et al. have shown that 22.6% of Tehran's nurses had burnout, and 39.2% of them had a low level of emotional exhaustion and a high level of productivity [12].

Deldar et al. have shown a positive and significant relation between age, frequency of on-calls, and emotional exhaustion in psychiatric nurses [13]. Also, Moghaddasi et al. in Shahrecord determined that 34.6% of nurses were at a high level of exhaustion. 28.8 of the participants were at high DP.95.7% of nurses experienced high levels of reduced PA. Although they did not report the scores of EE and PA significantly, 29% of participant nurses had burnout [14].

As can be seen, there are no accurate statistics about nurses' burnout, especially staff of health centers in Iran. It may be due to the place of data collection, sample size, and duration of nursing worked time who participate in these studies [15].

However, neither has explicitly examined burnout in VCT staff nor compared these differences between the two groups. Examining this issue can help health policymakers set more accurate scientific and practical plans to serve and reduce progressive burnout in at-risk groups. Therefore, the purpose of this study was to compare the burnout of staff and therapists of HC and VCTs in 9 provinces of Iran.

## Materials and Methods

cross-sectional study was performed simultaneously in 9 provinces of Iran. Participants include all staff (including nurses, security guards, statistics experts, admission staff, archivists, midwives, etc.) and therapists (including clinical psychologists, general practitioners, psychiatrists, specialist doctors, etc.) who worked in counseling centers as the experimental group and all number and positions of staff and therapists from Health centers were selected as the control groups. All staff who had inclusion criteria enrolled in the study without a sampling method. For subgroup analysis, all provinces were divided into four regions. Central includes: Tehran and Isfahan; South includes: Fars and Bushehr; East includes: Kerman, Yazd, and South Khorasan; and West includes: Kurdistan and Kermanshah. Vice-Chancellor supported this work for Research of Shiraz University of Medical Sciences under the under-plan code 98-01-59-20280 with the ethical code IR.SUMS.REC.1398.8651

Table 1. Information	on the frequency	y of study participants
Tuble 1. Illioi illiation	on the frequenc	, or study participants

Number Province -	VCT		HCs				
	Staff	Therapist	Sum	Staff	Therapist	Sum	
1	Fars	20	5	25	20	5	25
2	Bushehr	3	1	4	5	0	5
3	Isfahan	11	1	12	10	3	13
4	Kerman	5	3	8	4	2	6
5	Kermanshah	10	3	13	6	1	7
6	Tehran	14	3	17	24	4	28
7	South Khorasan	2	2	4	2	1	3
8	Kurdistan	6	2	8	10	2	12
9	Yazd	2	1	3	3	1	4
	Sum	73	21	94	84	19	103

Include criteria: All of the employees in VCTs and HCs who had the employees' characteristics.

#### Exclude criteria:

- Everyone who didn't want to continue participating the research
- No job counterpart in the VCT.
- Personnel who have worked for less than two consecutive years in these centers.
- Personnel who have been left work for more than two weeks due to illness, childbirth, or a business trip.
- People who filled out questionnaires by chance, randomly, and incompletely.
- People with a history of mental disorders.

To conduct this research, the Maslash burnout questionnaire was completed under supervision of a trainee in each province. This research was conducted from January 2020 to March 2020. Collected data were analyzed by SPSS 23 software in two levels of descriptive statistics (frequency, distribution table, percentage, mean, standard deviation, etc.) and inferential (t-test, one-way analysis of variance, and Tukey post hoc test, chi-square test, and Spearman correlation test). The Shapiro-Wilk test was also used to check the normality of the variables. The baseline significance level in all tests is considered 0.05.

Maslash Burnout Questionnaire: This questionnaire consists of 25 items that measure Emotional Exhaustion, Depersonalization and Personal Accomplishment and involvement in the context of job activity and is especially used to measure burnout in professional groups such as nurses and teachers .This questionnaire measures the intensity and frequency of each item. The items of this questionnaire are scored on a 7-point

Likert scale. The options of this test are marked with never, very low, low, medium, above average, high, and very high, which expresses his feelings according to the available options when the subject reads this scale.

The interpretation of the obtained scores is as follows: In the emotional fatigue dimension, scores of 27 or higher indicate a high level of emotional fatigue; A score below 16 is a sign of low fatigue; in the dimension of depersonalization, scores of 13 or more indicate a high level of depersonalization, a score below 6 indicates a low level of depersonalization, and scores of 7-12 indicate a moderate degree of depersonalization. In the dimension of personal self-sufficiency, scores of 31 or less indicate a low level of personal self-sufficiency, and a high score (32-39) indicates moderate personal self-sufficiency [3].

The validity of this questionnaire in Iran was done by Akbari et al. (2011). The validity coefficient of this questionnaire was reported as 0.93 in the total score and between 0.71 - 0.92 in the individual scales using Cronbach's alpha [16].

# **Results**

In this study, 197 staff participated from 9 provinces of Iran; one hundred three of them (52.3%) were health center employers, and 94 of them (47.7%) were employed in VCT centers. The range of age was between 20 - 63 years, with a mean age of  $39.97 \pm 9.02$  (mean  $\pm$  SD). One hundred and thirty-one were women (66.5%), and sixty-six were men (33.5%).

According to the result of Table 2, sex, age, Work experience, and employment to a second job we had a significant difference between the two centers.

Table2. Demographic status of participants

Variab	le	НС	VCT	Statistic	P-value
Sex -	Male	25 (24.27)	41(43.61)	8.256a	0.004
Sex –	Female	78(75.72)	53(56.38)	6.230	0.004
	20-30	28 (27.2)	8 (8.51)	14.15 <sup>a</sup>	0.003
A == (V===)	31-40	26 (25.24)	37 (39.36)		
Age (Year)	41-50	37 (35.92)	35 (37.23)	14.13	
·	≥50	12 (11.65)	14 (14.89)		
_	Single	28 (27.1)	15 (16)	_	
Marital status	Married	73 (70.9)	75 (79.8)	4.22a	0.12
·	Divorce	2 (2)	4 (4.2)		
	Primary education	9 (8.75)	8 (8.5)		
	Associate	5 (4.85)	7 (7.4)		0.28
Education	Bachelor	58 (56 .31)	39 (41.5)	5.04 <sup>a</sup>	
	Master	13 (12.62)	20 (21.3)	-	
·	Physician	18 (17.47)	20 (21.3)		
	Official	46 (44.6)	51 (54.25)	_	0.26
<u>-</u>	Contractual	23 (22.3)	18 (19.14)	•	
Employment status	Apprenticeship	8 (7.8)	3 (3.19)	4.98 <sup>a</sup>	
	Contracting	25 (24.3)	22 (23.4)	_	
·	Others	1(1)	0(0)		
Position -	Physician	19 (18.4)	21 (22.35)	0.287a	0.59
r osmon	Personnel	84 (81.6)	73 (77.65)	0.207	0.39
*** 1 4*	Part time	16 (15.53)	24 (25.53)	2.003	0.46
Work time -	Full time	87 (84.46)	70 (74.46)	3.98ª	
	1-72	79 (76.69)	44 (46.8)		< 0.001
-	73-144	15 (14.58)	26 (27.65)	27.97 <sup>b</sup>	
Work experience (month)	145-216	3 (2.91)	18 (19.14)		
<u>-</u>	217-288	3(2.91)	2 (2.12)		
	289-360	3 (2.91)	4 (4.25)	= 	
Second ich	Yes	15 (14.56)	26 (27.65)	5 26a	0.02
Second job -	No	88 (85.43)	68 (72.34)	5.26 <sup>a</sup>	0.02

a=Chi-square test b=Fisher's exact test

No significant relationship was found in the analysis of the relationship between the overall burnout score and demographic information ( $p \ge 0.05$ ).

According to the data in Table 3, 64% of the staff of both centers experience high burnout and 33% moderate burnout; although this difference between the two centers is not significant ( $p\ge0.05$ ), the number of people with high burnout score in health centers is far from the VCTs.

The provinces under study were divided into four subgroups. Among the 34 people who suffered from burnout in health centers, most (32.4%) were in the South and the least (5.9%) were in the East. Of the 30 burnout cases in VCT, most (36.7%) were in the West, and the lowest (16.17%) were in the East and South. The results of comparing the mean score of frequency and severity of burnout for all qualitative demographic

In health centers, employees' mean frequency of personal accomplishment was  $31.61 \pm 8.93$ , and its mean severity was  $34.9 \pm 9.58$ . Also, physicians' mean frequency of personal accomplishment was  $39.42 \pm 2.54$ , and its mean severity was  $40.78 \pm 4.89$ . Statistical analysis showed that personal accomplishment in doctors was significantly higher than other employees (p $\leq 0.05$ )

In health centers, the mean intensity and frequency of personal accomplishment score was significantly higher in people with PhD education.  $39.42\pm2.62$  versus  $44\pm4.79$ . (p $\leq 0.001$ )

In health centers, the intensity of involvement in married people  $(17.07\pm3.578)$  was significantly higher than in single people  $(15.18\pm4.76)$ . (p=0.044). In VCT, the intensity of involvement in employees  $(17.6\pm3.5)$  was significantly higher than in doctors  $(15.8\pm4.12)$  (p = 0.044).

Table 3. The level of burnout in the staff of HC and VCT

variables by each center are as follows:

<b>Burnout level</b>	VCT (%)	HC (%)	Total (%)	Statistic	P-value
Very low	0 (0)	0 (0)	0 (0)		
Low	2 (2.1)	4 (3.88)	6 (3.04)		
Intermediate	34 (36.2)	31 (30.09)	65 (32.99)	0.877 <sup>b</sup>	0.656
High	58 (61.7)	68 (66.01)	126 (63.95)		
Sum	94	103	197		

b=Fisher's exact test

Table4 Status	of the studies area	separately for each center
Table4. Status	or the studies area.	. Separatery for each center

Area	Domain	HC	VCT	$\mathbf{X}^2$	P-value
	0-16	9 (8.73)	5 (5.3)		
Emotional exhaustion	17-27	7 (6.79)	6 (6.4)	0.91	0.63
_	28-54	87 (84.46)	83 (88.3)		
	1-32	34 (33)	30 (31.9)		
Personal accomplishment	33-39	42 (40.77)	38 (40.4)	0.06	0.97
	40-48	27 (26.21)	26 (27.7)		
Danamanalination	7-12	2 (1.94)	0 (0)	0.02	0.34
Depersonalization -	13-30	101 (99.05)	94 (100)	0.93	
Involvement	1-6	6 (5.82)	5 (5.3)		
	7-9	8 (7.76)	1 (1.1)	5.13	0.08
	10-18	89 (86.4)	88 (93.6)		

The results of the correlation between burnout score and demographic factors separately in each center were obtained as follows:

There was a significant negative correlation between age and emotional exhaustion in health centers (r: -0.2, p = 0.04). A positive and significant correlation was seen between the number of children and the frequency of involvement in health centers (r: 0.2, p = 0.047). There was a positive and significant correlation between the number of children and the severity of involvement in health centers (r: 0.21, p = 0.034). There was a significant positive correlation between the duration of work and the frequency of personal accomplishment in VCT (r: 0.25, p = 0.017). There was a significant negative correlation between age, the frequency of involvement (r: -0.27, p = 0.01), and the severity of involvement (r: -0.27, p = 0.01) in VCT. In examining the correlation between burnout scores and burnout dimensions in different provinces separately in each of the HC and VCT, the results were obtained as follows:

In health centers, the highest score of emotional exhaustion was significantly related to Shiraz (52.04  $\pm$  11.33), and the lowest score was related to Bushehr (22.25±23.8) (p = 0.011) .In health centers, the highest Depersonalization score was related to Birjand (35  $\pm$ 1), and the lowest was related to Bushehr (23.5  $\pm$  12.66), (p = 0.045). In comparing the mean severity and frequency score in the burnout questionnaire between four different areas, separately in each of the health centers and VCTs, no significant differences were observed in any of the dimensions.

# Discussion

This study was performed to determine and compare burnout in two treatment units, public clinics, and behavioral disease counseling centers in 9 provinces of Iran.

In the field of burnout, it was found that 66% of the HC group and 64% of the VCT group had high levels of burnout. In general, 64% of the staff in these two groups had burnout. This finding contradicts the findings of Alidosti and Aria Pouran [10, 11] who estimated the burnout rate of Iranian nurses below 40%. It should be

noted that this finding had no relation with the Corona pandemic because this study was prepared before the coronavirus outbreak in Iran. Due to the lack of a significant relationship between demographic items and the average score of burnout, it can be said that burnout in Iranian employees depends more than anything on their psychological status. This finding was also contrary to Rezaei (2015) who considered the environment and working relationships the main burnout factors [9].

Among these, the highest burnout in HCs was related to the southern provinces, Fars and Bushehr, and the lowest was related to the eastern provinces, Kerman, Yazd, and South Khorasan. In VCTs, the highest burnout was related to the west of the country, i.e., Kermanshah and Kurdistan, and the lowest was related to the southern and eastern provinces. In other words, the working conditions of the southern regions of the country are more unfavorable for HCs and the western regions' VCTs. In contrast, the health conditions of the eastern HCs and the southern and eastern VCTs have been favorable. This finding is consistent with the findings of Alidosti ,Arya Pouran, and Moghaddasi, who collected their samples from nurses in Behbahan and Fars, and Arya Pouran from nurses of Malayer and Moghaddasi hospitals in Shahrekord [10, 11, 14].

For example, Bushehr had the highest burnout score among HC centers but the lowest in Emotional Exhaustion and Depersonalization. Also, Table 4 showed no significant differences in the studied scales and participants' responses. This finding shows that, in general, the effect of burnout in each province can be discussed, but in detail, it is impossible to suggest an accurate and formulated framework.

The qualitative analysis of demographic information and dimensions of burnout found that Personal Accomplishment problems are more seen in higher education degrees and PhDs than in other educational groups. Our result showed people with the highest levels of education in the health care system feel less mentally enriched and more successful at their jobs. Other research does not support this finding. For example, Divaris et al. examined burnout status in PhD

students and other medical students and reported a much lower level of this score [17].

Aquino et al. also concluded that EE in PhD students is higher. He was a DNP but was not found to have a higher PA. However, in this article, the level of dissatisfaction of physicians with their job position is not clearly defined [18].

The findings also showed that in HCs, involvement in married people with PhD degrees is higher than in single and other educated people. In contrast, in VCTs, involvement among employees is higher. In other words, in HCs, educated and married people feel more involved in work than less educated single people, While in VCTs, this feeling is more seen in employees. On the other hand, in the analysis of quantitative demographic information and exhaustion items, it was found that age has a negative and significant relationship with Emotional Exhaustion. As the age of people increases, the ability of employees to respond emotionally to their clients decreases (Table 2). This finding has been more or less confirmed in other research. For example, it is in the findings of Noelle and Watts

The results showed that in VCT centers, there is the same relationship between age and involvement. In other words, increasing age reduces involvement and improves their psychological condition. Contrary to this finding in the family environment, the more involvement of clinic employees, the more job involvement is, because the number of employees' children had a positive and significant relationship with their involvement (Table 2). The findings of Céline and Sarah Le confirm this finding [19].

Finally, in VCT centers, working hours had a positive and significant relationship with Depersonalization. This finding means that with the increase in working hours and overtime working of VCT employees, the score of depersonalization and alienation increases. The complications of this issue can be found in these people's interpersonal relationships and marital satisfaction.

Certainly, the small number of samples is one of the limitations of this research. Of course, the number of people in the sample and control group may not be exactly the same. Also, it was not possible to directly question all subjects by the researcher, however, the instructions sent to the representatives of each province contained the exact dimensions of scientific research.

It is suggested that this article be repeated in other treatment fields, including psychotherapists in neuropsychiatric hospitals so that the differences found in this article can be examined more carefully.

# Conclusion

The present study showed that burnout among employees of HC and VCT centers is equally high. This

issue is greater in some provinces with more referrals and heterogeneous clients. Although Tehran and Isfahan are two very important medical centers in the country, they were neither among the best nor the worst in any of the research items. This situation can be the result of their management style. Paying attention to working hours, economic situation, and workload of staff are important factors that can reduce their burnout level in these centers.

#### Acknowledgement

The authors wish to thank Kerman, Kermanshah, Kurdistan, Southern Khorasan, Tehran, Esfahan, Bushehr, and Yazd Universities of Medical Science and the Ministry of Health and Medical Education for coordination. Also, Health Centers and VCTs cooperated with us in implementing this study.

**Conflict of interest:** None declared.

## References

- Leiter MP, Maslach C, Frame K. Burnout. In: Cautin RL, Lilienfeld SO, eds. The Encyclopedia of Clinical Psychology. Hoboken, New Jersey, United States: Wiley; 2015.
- 2. Adriaenssens J, De Gucht V, Maes S. Determinants and prevalence of burnout in emergency nurses: a systematic review of 25 years of research. Int j nurs stud. 2015;52(2):649-61.
- Maslach C, Leiter MP. Burnout. Fink G, ed. Stress: Concepts, cognition, emotion, and behavior (Handbook of Stress Series, Vol 1). Cambridge, Massachusetts, United States: Academic Press; 2016. P 351-7
- 4. O'Connor K, Muller Neff D, Pitman S. Burnout in mental health professionals: A systematic review and meta-analysis of prevalence and determinants. Eur Psychiatry. 2018;53:74-99.
- 5. Friganović A, Selič P, Ilić B, Sedić B. Stress and burnout syndrome and their associations with coping and job satisfaction in critical care nurses: a literature review. Psychiatr Danub. 2019;31(Suppl 1):21-31.
- 6. Mohammad Reza H, Kakateh Sadati A, Bagheri Lankarani K, Imanieh MH, Baghi H, Lolia MJ. The Evaluation of Urban Community Health Centers in Relation to Family Physician and Primary Health Care in Southern Iran. Iran J Public Health. 2017;46(12):1726-36.
- Guo YF, Luo YH, Lam L, Cross W, Plummer V, Zhang JP. Burnout and its association with resilience in nurses: A cross-sectional study. J Clin Nurs. 2018;27(1-2):441-9.
- 8. Khamisa N, Peltzer K, Oldenburg B. Burnout in relation to specific contributing factors and health outcomes among nurses: a systematic review. Int J Environ Res Public Health. 2013;10(6):2214-40.
- 9. Rezaei S, Karami Matin B, Hajizadeh M, Soroush A, Nouri B. Prevalence of burnout among nurses in

- Iran: a systematic review and meta-analysis. Int Nurs Rev. 2018;65(3):361-9.
- Alidosti M, Delaram M, Dehgani L, Maleki Moghadam M. Relationship Between Self-Efficacy and Burnout Among Nurses in Behbahan City, Iran. Womens Health Bull. 2016;3(4):1-5.
- 11. Ariapooran S. Compassion fatigue and burnout in Iranian nurses: The role of perceived social support. Iran J Nurs Midwifery Res. 2014;19(3):279-84.
- 12. Assadi T, Sadeghi F, Noyani A, SeidAbadi AM, Yekesadat SM. Occupational Burnout and Its Related Factors Among Iranian Nurses: A Cross-Sectional Study in Shahroud, Northeast of Iran. Open Access Maced J Med Sci. 2019;7(17):2902-7.
- Deldar K, Froutan R, Dalvand S, Gheshlagh RG, Mazloum SR. The Relationship between Resiliency and Burnout in Iranian Nurses: A Systematic Review and Meta-Analysis. Open Access Maced J Med Sci. 2018;6(11):2250-6.
- 14. Moghaddasi J, Mehralian H, Aslani Y, Masoodi R, Amiri M. Burnout among nurses working in medical and educational centers in Shahrekord, Iran. Iran J

- Nurs Midwifery Res. 2013;18(4):294-7.
- Kleijweg JH, Verbraak MJ, Van Dijk MK. The clinical utility of the Maslach Burnout Inventory in a clinical population. Psychol Assess. 2013;25(2):435-41
- 16. Akbari R, Ghafar Samar R, Kiany GR, Eghtesadi AR. Factorial Validity and Psychometric Properties of Maslach Burnout Inventory –The Persian Version. Knowl Health. 2011;6(3):1-8.
- 17. Divaris K, Polychronopoulou A, Taoufik K, Katsaros C, Eliades T. Stress and burnout in postgraduate dental education. Eur J Dent Educ. 2012;16(1):35-42.
- 18. Aquino E, Lee YM, Spawn N, Bishop-Royse J. The impact of burnout on doctorate nursing faculty's intent to leave their academic position: A descriptive survey research design. Nurse Educ Today. 2018;69:35-40.
- 19. Vigouroux SL, Scola C. Differences in Parental Burnout: Influence of Demographic Factors and Personality of Parents and Children. Front Psychol. 2018;9:887.