doi:10.22100/ijhs.v3i4.298
Original Article

IJHS 2017;3(4):25-29
ijhs.shmu.ac.ir
IJHS
International Journal of Health Studies

Burnout in Primary Health Care Providers in Mazandaran Province

Ahmad Khosravi[1], Mansour Ranjbar[2], Ali Erfan[3], Zakieh Sadeghi[4], Leyla khojasteh[5], Mohammad Amiri[6*]
[1] Center for Health Related Social and Behavioral Sciences Research, Shahroud University of Medical Sciences, Shahroud, Iran.
[2] Educational Development Center, Mazandaran University of Medical Sciences, Sari, Iran.
[3]General Practitioner,Mazandaran University of Medical Sciences, Sari, Iran.
[4] Analytical Chemistry, Shahroud, Iran.
[5] Dept. of Medical Sciences, Shahroud Branch, Islamic Azad University, Shahroud, Iran.
[6] Dept. of Public Health, School of Public Health, Shahroud University of Medical Sciences, Shahroud, Iran.

Received: 17 August 2017
Accepted: 14 October 2017

Abstract

Background: *Burnout describes negative changes in attitude, mood and behavior in people under work-related stress. This study determines the degree of job burnout inprimary health care providers in Sari, Mazandaran Province, Iran.*
Methods: *This cross-sectional research was conducted on 208 primary health care providersworking in Sari in 2015 using the Maslach Burnout Inventory. The self-administered questionnaire was completed by the participants anddata were analyzed usingthe Chi-square test.The mean scores of the four dimensions of burnout were calculated using the frequency and intensity scores.*
Results: *A total of 62.9% of the participants were female and a majority was married (91%). Approximately 21% of the participants were completely satisfied with their essential workplace facilities. The mean scores of the intensity and frequency of emotional exhaustion were 17.19±14.65 and 15.84±12.27. The mean scores of the intensity and frequency of the lack of personal accomplishment were 36.8±12.17 and 30.34±9.72. As for depersonalization, the mean scores of intensity and frequency were 4.22±5.36 and 3.95±4.53. The mean scores of the intensity and frequency of conflict were 6.67±5.12 and 6.18±4.26. The mean scores of the intensity and frequency of overall burnoutwere also 64.89±22.95 and 56.31±19.87. Therewere significant relationships between the intensity and frequency of overall burnout and dissatisfaction with work experience, income, interest in the job and workplace facilities (P<0.05).*
Conclusions: *Given the relationship between job burnout and variables including income and essential workplace facilities, it is imperative to improve health care providers'payment and salary and provide them with any essential facilities at their workplace and enable career advancement so as to help reduce burnout in different dimensions.*

Keywords: Burnout, Emotional exhaustion, Depersonalization, Primary health care providers, Conflict, Personal accomplishment.
***Corresponding to:** M Amiri**, Email:** m_amiri_71@yahoo.com
Please cite this paper as: Khosravi A, Ranjbar M, Erfan A, Sadeghi Z, Khojasteh L, Amiri M. Burnout in primary health care providers in Mazandaran province. Int J Health Stud 2017;3(4):25-29.

Introduction

Organizations are the main pillars of societies and play a decisive role in meeting their expectations.[1] Efficient human resources are the most valuable resource of anyorganization.[2] Much of a person's life is spent at work. Working is an important activity that improves self-esteem and creates the independence to grow.[3] Having a job and an adequate income are directly related to a person's physical and mental health and facilitate the fulfillment of many of his spiritual needs.[4] In other words, a person's job is part of his social identity, a source for providing his needs in life and a factor that helps form social relationships; however, it can also be an important source of stress.[5] Burnout can take different forms, including emotional exhaustion (a type of depression and a feeling of helplessness and inefficiency in one's occupation), depersonalization (cynicism toward others, mistrust, complaining of others and suspicion toward the honesty and integrity of others) and the loss of motivation and poor performance.[6-15]

Various environmental, individual and institutional factors contribute to burnout,[1] including the type of job, role conflict, role confusions, the lack of social support, management style, dry and inflexible work conditions, the lack of job security and few opportunities for promotion, low income, high pressure, heavy workloads, poor work control, low remuneration, the lack of social connection, discrimination and conflict between the personnel and organizational values and changes in the organization.These factors can all be a source of stress. Long-term stresses reduce job satisfaction and increase burnout.[1,3,15-17] Burnout also has undesirable individual, organizational and social consequences. Increased absenteeism, turnover, willingness to transfer, successive delays and reduced quality of performance, different psychological complaints, conflict, career changes and interpersonal conflict with co-workers, negative attitude toward the job and the lack of enthusiasm for the clients, lower levels of job satisfaction, low spirits, low accountability, low innovativeness and ultimately low productivity and job performance are among the consequences of burnout.[1,5,16,18] Various studies have shown that primary health care providers are at a risk of burnout.[3,16,19,23] Burnout reduces the quality of services provided to clients and consequently leads to dissatisfaction with the services of the health care system. The identification and prevention of burnout in health care providers can have a significant role in improving their quality of health services.[24] Primary health care providers working at health houses perform numerous tasks and endure a lot of pressure at their work. Factors such as low promotion opportunities and monotonous work conditions paired with the impossibility of transfer and relocation and the need to constantly communicate with people from all age groups in rural places make primary health care providers particularly prone to burnout. Given the importance of preventing burnout in the target population and the lack of evidence in this area, this study assesses the level of burnout and determines some of its contributing factors in primary health care providers in Sari, Mazandaran Province and north of Iran.

Materials and Methods

This cross-sectional study was conducted in 2015 on 208 primary health care providers working in health houses affiliated to Mazandaran University of Medical Sciences using the Maslach Burnout Inventory.[9] The participants were selected using total enumeration, in which all the primary health care workers (Behvarz) working in Sari at the time were selected for inclusion in the study. The response rate was 94.5%.

The questionnaire used consisted of three parts. Part A was composed of items on the socio-economic characteristics of the study samples, including age, work experience, gender, education level, place of residence, second job status, ethnicity, income, spouse's job, spouse's education, number of children, interest in the job and housing and economic status. Part B consisted of items on work environment and workplace facilities, including workplace lighting, noise, ventilation, wall paint, heating system, cooling system, building condition and essential amenities, including supplies, equipment and comfort facilities.[20] Part C was related to job burnout and included 25 items in four areas, including emotional exhaustion (items 1-9), reduced personal accomplishment (items10-17), depersonalization (items 18-21) and conflict (items 22-25). Each item was rated in terms of both frequency and intensity. On the frequency scale, the responses to the items ranged from 'never' (0), 'a few times per year' (1), 'once per month' (2), 'a few times per month' (3), 'once a week' (4), 'a few times perweek' (5) and 'everyday' (6). On the intensity scale, the responses totheitems were measured based on a scale from 'barely noticeable' (0), 'very low' (1) and 'low' (2) to 'noticeable' (3), 'moderate' (4), 'moderately strong' (5), 'strong' (6) and 'very strong' (7). The total score was calculated for all the dimensions and finally categorized as low, moderate orhigh. Emotional exhaustion scores below 19 were taken as low, 19 to26 as moderate and over 26 as high. Depersonalization scores were categorized as low ifless than 6, moderate if from 6 to 9 and high if over 9. Personal accomplishment scores from 34 to 39 indicated average accomplishment and values over 39 and lower 34 indicated high and low accomplishment. Conflict scoresless than 6 indicated a low level of conflict, from6 to 12 indicated moderate and over 12 indicated high levels of conflict [25]. The validity of the developed questionnaire was confirmed by a group of scholars, experts and faculty members[26] and its reliability with Cronbach's alpha was reported as 0.86 in the study by Sahebzadeh et al.,[25] 0.82 in the study by Pardakhtchi et al. and 0.85 in the study by Amiri.[2] The questionnaire was distributed among primary healthcare providers who had taken part in monthly refreshment courses. After explaining the study objectives to them and obtaining their verbal consent, the questionnaire was administered anonymously to the participants by trained interviewers. The Ethical Review Board and Research Committee of Islamic Azad University, Shahroud Branch, reviewed and approved the proposal and methods of this research.

The collected data were entered into SPSS-16 and analyzed using the Chi-Square test at the significance level of .05.

Results

Female primary healthcare providers (69.2%, N=144) formed the majority of the workforce employed inthe examined health houses. A total of 89.9% (N=187) of the participants had high school diploma and lower levels of education, 6.7% (N=14) had associate degrees and 3.4% (N=7) had bachelor's degrees. A total of 91.8% (N=191) were married and the rest were single. In terms of ethnicity, 91.3% (N=190) were Fars, 0.5% were Azeri and others were Kurdish, Turkmen and Balochi. A total of 9.6% (N=20) had a second job. Moreover, 14.9% (N=31) of the primary health care providers were totally satisfied with their income, 60.1% (N=125) were partially satisfied and 25% (N=52) were not satisfied with their income. Overall, 21.2% (N=44) of the participants were satisfied with the essential amenities and comfort facilities provided in their workplace. Finally, 75.5% (N=157) of them were interested in their job. Table 1 presents the mean scores of the intensity and frequency of job burnout and its dimensions.

Table 1. The mean score of the frequency and intensity of job burnout inthe primary health care providers studied

Variable	Mean±SD	
	Severity	Frequency
Emotional Exhaustion	17.20±14.66	15.84±12.27
Reduced Personal Accomplishment	36.81±12.17	30.34±9.73
Depersonalization	4.22±5.37	3.95±4.54
Conflict	6.67±5.13	6.18±4.26
Job Burnout	64.90±22.95	56.32±19.87

The 'reduced personal accomplishment' dimension showed higher levels of intensity and frequency compared to the others and was followed by emotional exhaustion (table 2).

Table 2. The frequency and intensity of the dimensions of job burnout in the primary health care providers studied

Variable		Frequency		Severity	
		N	Percentage	N	Percentage
Emotional exhaustion	Low	131	63	171	82.2
	Moderate	51	24.5	15	7.2
	High	26	12.5	22	10.6
Reduced personal accomplishment	Low	37	17.8	82	39.4
	Moderate	41	19.7	41	19.7
	High	130	62.5	85	40.9
Depersonalization	Low	149	71.6	152	73.1
	Moderate	43	20.7	40	19.2
	High	16	7.7	16	7.7
Conflict	Low	100	48.1	112	53.8
	Moderate	86	41.3	82	39.4
	High	22	10.6	14	6.7
Job burnout	Low	159	76.4	162	80.3
	Moderate	28	13.5	25	12.0
	High	21	10.1	16	7.7

The Chi-square test did not show any significant relationships between the frequency of job burnout and age, essential facilities, gender and physical environment ($P \geq 0.05$). Nonetheless, a significant relationship was observed between the frequency of burnout and interest in the job (P=0.001), and the frequency of moderate to severe job burnout was higher among the participants who were less interested in their job. Moreover, the relationship between the overall job burnout and work experience was significant (0.039), and the frequency of severe burnout among those with a work experience over 10 years was higher compared to the other groups. A significant relationship was also observed between the frequency of

burnout and satisfaction with income (0.016), as the participants who were not satisfied with their income showed higher levels of burnout. (Table 3)

Table 3. The relationship between the frequency of job burnout and some of the variables

Variable		Frequency (N%)			P.V
		Low	Moderate	High	
Age	Less than 30	33(78.6)	8(19)	1(2.4)	0.23
	30-50	121(76.6)	18(11.4)	19(12)	
	Over 50	5(62.5)	2(25)	1(12.5)	
Gender	Male	49(76.6)	10(15.6)	5(7.8)	0.67
	Female	110(76.4)	18(12.5)	16(11.1)	
Satisfaction with income	Satisfied	30(96.8)	0	1(3.2)	0.02
	Partially satisfied	96(76.8)	17(13.6)	12(9.6)	
	Dissatisfied	8(15.4)	11(21.2)	8(15.4)	
Satisfaction with facilities	Satisfied	34(77.3)	6(13.6)	4(9.1)	0.38
	Partially satisfied	121(76.6)	22(13.9)	15(9.5)	
	Dissatisfied	4(66.7)	0	2(33.3)	
Interest in the job	Very little	6(46.2)	4(30.8)	3(23.1)	0.00
	Little	19(50)	10(26.3)	9(23.7)	
	Much	80(84.2)	9(9.5)	6(6.3)	
	Very much	54(87.1)	5(8.1)	3(4.8)	
Experience (year)	Less than 10	43(81.1)	9(17)	1(1.9)	0.04
	10-20	78(78)	8(8)	14(14)	
	Over 20	38(69.1)	11(20)	6(10.9)	
Workplace conditions	Non-adequate	4(66.7)	0	2(33.3)	0.19
	Moderate	78(72.9)	17(15.9)	12(11.2)	
	Adequate	77(81.1)	11(11.6)	7(7.4)	

Table 4. The relationship between the intensity of job burnout and some of the variables

Variable		Intensity (N %)			P.V
		Low	Moderate	High	
Age	Less than 30	33(78.6)	9(21.4)	0	0.07
	30-50	127(80.4)	16(10.1)	15(9.5)	
	Over 50	7(87.5)	0	1(12.5)	
Gender	Male	53(82.8)	8(12.5)	3(4.7)	0.55
	Female	114(79.2)	17(11.8)	13(9)	
Satisfaction with income	Satisfied	29(93.5)	1(3.2)	1(3.2)	0.02
	Partially satisfied	104(83.2)	13(10.4)	8(6.4)	
	Dissatisfied	34(65.4)	11(21.2)	7(13.5)	
Satisfaction with facilities	Satisfied	36(81.8)	6(13.6)	2(4.5)	0.15
	Partially satisfied	127(80.4)	19(12)	12(7.6)	
	Dissatisfied	4(66.7)	0	2(33.3)	
Interest in the job	Very little	7(53.8)	4(30.8)	2(15.4)	0.00
	Little	23(60.5)	9(23.7)	6(15.8)	
	Much	83(87.4)	6(6.3)	6(6.3)	
	Very much	54(87.1)	6(9.7)	2(3.2)	
Experience (year)	Less than 10	0	10(18.9)	43(81.1)	0.04
	10-20	9(0.9)	12(12)	79(79)	
	Over 20	7(12.7)	3(5.5)	45(81.8)	
Workplace conditions	Non-adequate	4(66.7)	0	2(33.3)	0.04
	Moderate	81(75.7)	17(15.9)	9(8.4)	
	Adequate	82(86.3)	8(8.4)	5(5.3)	

The Chi-square test showed no significant relationships between the intensity of burnout and age, essential facilities and gender (P≥0.05). Nonetheless, the relationship between interest in the job and the intensity of burnout was significant (P=0.002), and the intensity of job burnout was higher in the participants who were less interested in their job. Moreover, the relationship between experience and the intensity of burnout was significant (P=0.037), and the participants with over 20 years of work experience showed a higher intensity of burnout. The relationship between workplace conditions and the intensity of burnout was also significant, and those who had poorer workplace conditions showed a higher intensity of burnout (0.043). A significant relationship was also observed between satisfaction with income and burnout intensity, and the participants who were dissatisfied with their income showed a higher intensity of burnout (0.022; table 4).

Discussion

In this study, a significant relationship was observed between the frequency and intensity of job burnout and variables including satisfaction with income, place of residence, interest in the job and work experience. Although the intensity of emotional exhaustion was higher in the over-50 age group compared to the other groups, the Chi-square test showed no significant relationships between the intensity of burnout and age. This finding is in line with the results reported by Rafiee et al.[28] and Mirab-Zadeh et al.,[29] but inconsistent with the results reported by Sotoudeh,[21] Talaei et al.,[30] Kaviani et al.[31] and Aziznezhad,[32] which showed a relationship between burnout and age. Emotional exhaustion is experienced as the first stage of burnout, and one of the main reasons for this form of burnout in primary health care providers may be the monotonous work conditions, the lack of career advancement, the heavy work pressure in rural areas and other pressures that are specific to rural life. This issue needs to be further emphasized by health planning authorities.

The mean age of the participants was 36.72±7.34 in this study, which is consistent with the results reported by Toubaei et al.,[33] Arefi et al.[19] and Amiri et al.,[2] but less than the mean age reported in the study by Hosseini et al.[4] and higher than the figures reported by Rahmani et al.[5] The mean age of the participants in the present study suggests that they have had a long period of exposure to the risk factors of job burnout.

There was a significant relationship between work experience and the frequency of burnout, and the frequency of overall burnout was higher in the participants who had more work experience. This finding corresponds with the results reported in some studies.[2,30,34,35] In Sotoudeh's study, however, an inverse relationship was reported between these two variables, which is inconsistent with the presentfindings.[21] The relationship between work experience and the intensity of factors including the lack of personal accomplishment, depersonalization and overall burnout was not significant, which is consistent with the results of some studies,[2,16] but inconsistent with the findings obtained by Khaghanizadeh et al. and Talaei et al.[30,34] In one study, Rafiee et al. reported a significant relationship between the intensity of the lack of personal accomplishment and work experience, which is in line with part of the present findings.[28] Given their professional status and the impossibility of career advancement, the heavy workloads and the stresses of rural life and the education challenges it brings for their children, when primary health care providers have more work experience, they also become more

emotionally exhausted. The significant relationship observed between work experience and job burnout is not consistent with the results of some studies, [2,16,19,36] but is in line with the results that reported a significant relationship between burnout and work experience.[30-32,34]

The results of the present study also showed no significant relationships between gender and the intensity of the overall job burnout. Some studies have confirmed such a relationship,[2, 23, 29-31, 33, 36] and the present findings are consistent with the results reported by Rashedi.[16] The present study also showed a significant relationship between gender and the frequency of depersonalization, which is consistent with the results obtained by Saberi et al.[15] No significant relationships were observed between gender and the frequency and intensity of emotional exhaustion, which is not in line with some studies, such as those by Khodabakhsh et al.,[23] Soltaniyan et al.[17]and Rafiee et al.,[28] which reported a relationship between emotional exhaustion and gender.

Another finding of this study is that marital status is not significantly related to the intensity of overall burnout, emotional exhaustion, lack of personal accomplishment and depersonalization, which is consistent with the results reported in some studies,[2, 19, 29, 36] but different from the findings obtained by Rashedi and Talaei et al. on the relationship between burnout and marital status,[16, 30] who found a significant relationship between marital status and the frequency of the lack of personal accomplishment. This finding could mean that, because of their family's high expectations, the majority of married people do not consider themselves successful.

There was no significant relationship between education and the frequency and intensity of emotional exhaustion, the lack of personal accomplishment, depersonalization and overall burnout, which is consistent with the findings reported by Rashedi et al. and Rafiee et al.,[16, 28] but not in line with the results reported by Talaei et al.[30] Since all primary health care providers have almost the same level of education, education seems to have no effect on their career advancement and job promotion and therefore plays no significant role in their burnout.

No significant relationships were observed between having a second job and the overall burnout. The relationship between having a second job and the frequency and intensity of conflict was significant, which is consistent with the results reported by Massoudi et al.[37]

There was also a significant relationship between workplace conditions and emotional exhaustion, which does not correspond with the results of some studies.[2, 16, 30]The relationship between workplace conditions and the intensity of overall burnout was not significant, which is not consistent with the results reported by Talaei et al. and Amiri et al.[30, 2]It seems that permanent residence in rural areas and workplace conditions have increased emotional exhaustion in primary health care providers.

There was a significant relationship between interest in the job and the frequency and intensity of emotional exhaustion, the lack of personal accomplishment and depersonalization and also the frequency of overall burnout. This finding is consistent with the results reported by Amiri et al.[2] Other studies did not examine the relationship between burnout and interest in the job. An intense interest in the job seems to be one of the reasons for which primary health care providers tolerate hardships and yet high burnout is not prevalent among them.

In general, the intensity and frequency of burnout was moderate among primary health care providers, but some studies have reported lower levels.[2, 19, 29]In line with the present findings, Sahebzamani et al. and Sherman et al. reported moderate levels of burnout,[24, 38]but inconsistent findings have also been reported by some researchers who found high levels of burnout in this group.[1, 32, 34, 39]

There was a significant relationship between the intensity and frequency of overall burnout and emotional exhaustion and income, which is consistent with the findings reported by Massoudi et al. and Amir et al. [2, 37] and inconsistent with the results reported by Mirab-Zadeh et al.[29] It seems that a low salary is one of the factors that can induce and exacerbate emotional exhaustion and burnout among primary health care providers.

In general, the frequency and intensity of burnout was moderate among primary health care providers. The results showed that, in primary health workers with a work experience over ten years, the intensity and frequency of burnout is high in terms of the lack of personal accomplishment and emotional exhaustion. These dimensions therefore require more attention by health care employers. Regarding the relationship between burnout and variables including income and essential workplace facilities, increasing primary health care providers' payment and salary and ensuring the provision of essential facilities in their workplace and enabling career advancement for them can help reduce job burnout in this group.

Acknowledgement

We thank all students for their participations.

Conflict of Interest

The authors declared that they have no conflict of interest.

References

1.Zamini S, Hosseini Nasab D, Zarei P. The relationship between organizational culture and job satisfaction and job burnout among the employees in Tabriz University. Iran Occupational Health Journal. 2011;8(1):30-40.

2. Amiri M, Chaman R, Arabi M, Ahmadinasab A, Hejazi A, Khosravi A. Factors influencing the intensity of burnout among rural health workers (Behvarz) in Northeastern Provinces of Iran. RJMS. 2016;22(141):116-25.

3. Hoseini MH, Sharifzadeh GH, Khazaie T. Occupational burnoutin Birjand dentists. J Dental Medicine(jdm). 2011;24(2):113-20.

4. Safari S, Goudarzi H. A study of the Relationship between Personality Characteristics and Job Burnout among faculty members and staffs in Islamic Azad University, Azadshahr Branch. Journal of Educational Leadership & Administration. 2009;3(3):85-101.

5. Rahmani F, Behshid M, Zamanzadeh V, Rahmani F. Relationship between general health, occupational stress and burnout in critical care nurses of Tabriz teaching hospitals. IJN. 2010;23(66):54-63.

6. Gil-Monte PR. Factorial validity of the Spanish adaptation of the Maslach Burnout Inventory-General Survey. Salud Publica Mex. 2002;44(1):33-40.

7. Bakker AB, Costa PL. Chronic job burnout and daily functioning: A theoretical analysis. Burnout Research. 2014;1(3):112-9.

8. Zalaquett CP, Wood RJ. Evaluating stress.3rded. The Scarecrow Press, Inc. Lanham, Md & London;1997.

9. Maslach C, Jackson SE, Leiter M. Maslach burnout inventory. Evaluating stress: A book of resources. 1997;3:191-218.

10. Portoghese I, Galletta M, Coppola RC, Finco G, Campagna M. Burnout andworkload among health care workers: the moderating role of job control. Saf Health Work. 2014;5(3):152-7.

11. Adwan JZ. Pediatric nurses' grief experience, burnout and job satisfaction. J Pediatr Nurs. 2014;29(4):329-36.doi:10.1016/j.pedn.2014.01.011

12. 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.

13. Miller JF. Burnout and its impact on good work in nursing. J Radiol Nurs. 2011;30(4):146-9.doi:10.1016/j.jradnu.2011.07.004

14. Li A, Early SF, Mahrer NE, Klaristenfeld JL, Gold JI. Group cohesion and organizational commitment: protective factors for nurse residents' job satisfaction, compassion fatigue, compassion satisfaction, and burnout. J Prof Nurs. 2014;30(1):89-99.doi:10.1016/j.profnurs.2013.04.004

15. Saberi HR, Moravveji SA, Sadaf M. Evaluation of occupational burnout and related factors in industry managers. Iran Occupational Health Journal. 2008;5(3 And 4):60-6.

16. Rashedi V, Foroughan M, Hosseini MA. Burnout and related demographic variables among Tehran Welfare Organization staffs. J Kermanshah Univ Med Sci. 2012;16(1):28-36.

17. Soltaniyan M, Aminbeidokhti A. The role of sport on job burnout of employees. Koomesh. 2009;10(4):281-6.

18. Rasoulian M, Elahi F, Afkham Ebrahimi A. The relationship between job burnout and personality traits in nurses. Iranian Journal of Psychiatry and Clinical Psychology. 2004;9(4):18-24. [Persian].

19. Arefi M, Ghahramani M, Taheri M. Levels of burn out and its relationship with certain demographic factors among faculty members of shahid beheshti university. Journal of Applied Psychology. 2010;4(14):72-86.

20. Rouhi GH, Molaei E, Mahmoudi GH.Management approach to nurse administrators and its relationship with occupational burnout among nurse staff of Golestan university hospitals.Pars J Medical Science. 2008;6(2):38-55.

21. Sotodeh Asl N, Bakhtiari AH. Occupational exhaustion and its related factors in nurses and midwives of Semnan University of Medical Sciences. Scientific Journal of Kurdistan University of Medical Sciences. 2006;11(1):77-83.

22. Khajeddin N, Hakim Shoushtari M, Hajebi A. The impact of perception of locus of control on burnout syndrome among nurses in a psychiatric hospital. Iranian Journal of Psychiatry and Clinical Psychology. 2006;12(1):43-8.

23. Khodabakhsh MR, Mansuri P. Analysis and comparison between frequency and depth of job-burnout aspects among male and female nurses. Zahedan Journal of Researchin Medical Sciences. 2011;13(4):40-2.

24. Sherman DW. Nurses' Stress & Burnout: How to care for yourself when caring for patients and their families experiencing life-threatening illness. Am J Nurs. 2004;104(5):48-56.

25. Amiri M, Khosravi A, Eghtesadi AR, Sadeghi Z, Abedi G, Ranjbar M, et al. Burnout and its influencing factors among primary health care providers in the north east of Iran. PLoS One. 2016;11(12):e0167648. doi:10.1371/journal.pone.0167648.

26. Sahebzadeh M, Karimi S, Hosseini SM, Akhtar Danesh G, Hosseini S. Job burnout of nursing administrators and chief executive officers in university hospitals and its relation to their demographic features.Health Information Management. 2011;7:637-48.

27. Pardakhtchi M, Ahmadi GH, Arezoumand F. The qualityof work life and burnout among teachers and principals in Takestan Schools. J Educational Leadership & Administration. 2009;3(3):25-50.

28. Rafiee F, Oskouie F, Nikravesh M. Key factors in nurses' reaction to Burnout: A qualitative study. Razi Journal of Medical Sciences. 2007;13(53):83-94.

29. Mirab-Zadeh A, Irani S, Sami'ei M, Feiz-Zadeh G. Burnout and it's effective factors among the personnel of Razi psychiatric hospital. JRehabilitation. 2007;8:64-70.

30. Talaei A, Mokhber N, Mohammad–Nejad M, Samari A. Burnout and its related factors in staffs of university hospitals in Mashhad in 2006. Koomesh. 2008;9(3):237-46.

31. Kaviani H, Abdimasooleh F, Khaghanizade M, Momeni Araghi A. The relationship between burnout and mental health among nurses. Tehran Univ Med J. 2007;65(6):65-75.

32. Aziznezhad P, Hosseini J. Occupational burnout and its causes among practicing nurses in hospitals affiliated to Babol University of Medical Sciences (2004). Journal of Babol University of Medical Sciences (JBUMS). 2006;8(2):56-62.

33. Toubaei SH, Daghighafkar M, Haghshenas H. The relation of dentists job burnout with their general health, demographic and personality characteristics. Journal of Dentistry, Shiraz University of Medical Sciences. 2010;10(4):348-55.

34. Khaghanizadeh M, Sirati M, Abdi F, Kaviani H. Determination of the amount burnout in nursing staff. J Behav Sci.2008;2(1):51-9. [Persian].

35. Linzer M, Visser MR, Oort FJ, Smets EM, McMurray JE, de Haes HC, et al. Predicting and preventing physician burnout: results from the United States and the Netherlands. Am J Med. 2001;111(2):170-5.

36. Taee M, Safizadeh H, Divsalar K. Frequency of burnout among general practitioners of kerman city, 2008. Journal of Kerman University of Medical Sciences. 2010;17:268-76.

37. Massoudi R, Aetemadifar S, Afzali SM, Khayri F, Hassanpour Dehkordi A. The influential factors on burnout among nurses working in private hospitals in Tehran. IJNR. 2008;3(9 And 8-9):47-58.

38. Sahebazzamani M, Safavi M, Farahani H. Burnout of nurses employed at Tehranpsychiatric hospitals and its relation with social supports. Medical Sciences. 2009;19(3):206-11.

39. Momeni H, Salehi A, Seraji A. The comparison of burnout in nurses working in clinical and educational sections of Arak University of Medical Sciences in 2008. Arak Medical University Journal. 2010;12(4):113-23.