Preventive Care in Nursing and Midwifery Journal
2017; 7(2): 58-64

The study of burnout frequency and its association with job performance among healthcare staff

Bakhshi E[1*], Kalantari R[2], Solimani A[3], Salimi N[4]

[*1]MSc of Ergonomics, Islamabad-e-Gharb Health Care Network, Kermanshah University of Medical Science, Kermanshah, Iran
[2]PhD student, Dept. of Ergonomics, School of Occupational Health, Shiraz University of Medical Sciences, Shiraz, Iran
[3]MSc of epidemiology, Dept. of Public Health, Province healthcare center, Kermanshah University of Medical Science, Kermanshah, Iran
[4]PhD Student of Educational Health, Dept. of Educational Health, Hamadan University of Medical Sciences, Hamadan, Iran

Corresponding Author: MSc of Ergonomics, Islamabad-e-Gharb Health Care Network, Kermanshah University of Medical Science, Kermanshah, Iran

Email: ehsanbakhshi63@gmail.com

Received: 10 Oct 2017 **Accepted**: 3 March 2018

Abstract

Background: Occurs as a result of long-term exposure to stress, job burnout threatens the health of personnel.
Objectives: Considering the important role of healthcare personnel in maintaining and promoting people's health, the current study investigated the job burnout frequency and its association with job performance among healthcare personnel.
Methods: This correlational and cross-sectional study was conducted among all healthcare personnel of urban/rural healthcare centers in Health Office of Islam Abad-e-Gharb, Iran. A total of 136 personnel participated in this study. Data were collected using Maslach Burnout Inventory (MBI) and Hersey and Goldsmith's job performance scale. Descriptive statistics and Mann-Whitney, Kruskal-Wallis, and Spearman correlation coefficient tests were used to analyze the data ($p \leq 0.05$).
***Results*:** The mean (SD) frequencies of job burnout and job performance were found to be 45.96±17.77 and 52.5±9, respectively. There was a significant inverse correlation between job burnout and job performance ($p=0.000$, $r=-0.249$). However, there was no significant association between job burnout and age, gender, marital status, education, and smoking factors ($p \geq 0.05$).
Conclusion: The findings showed that most of the personnel experienced moderate to low levels of job burnout. Besides, job burnout was found to be a factor affecting job performance. Hence, this study calls for useful interventions to reduce job burnout and increase job performance consequently.

Key words: job burnout, job performance, health centers

Introduction

In recent years, job burnout has been recognized as an influential factor in reducing the capability and capacity of work force in industrialized and developing countries. More than 25% of the working population experience symptoms of job burnout, 2% of which have severe symptoms [1]. This phenomenon occurs due to long-term exposure to stress. Currently, neural and psychological pressures exist in various degrees in many organizations [2] and is considered as an essential issue in the 21st century.

The psychological symptoms of job burnout appear more frequently than its physical symptoms including disability, compassion fatigue, isolation, irritability, frustration, sense of involvement, failure, pessimism, and disinterest [3]. Job burnout is a common problem among the staff and healthcare personnel who are exposed to this problem more than usual [4]. It brings about unfavorable consequences in families as well as social, organizational, and personal lives of people. The most important organizational consequences of job burnout include absence

from work, leaving the job, successive delays, reduced performance, different psychiatric complaints, conflict, carrier change, interpersonal conflicts with colleagues, negative attitude toward job, absence of sense of communication with clients while on duty, poor job satisfaction, weakened morale, and reduced accountability [5].

Meslock and Jackson stated that job burnout generally occurs due to exposure to job stress; therefore, it is a syndrome that involves compassion fatigue, depersonalization, and reduced personal achievement and is observed in carriers dealing with people [6]. Job burnout is currently a common problem in health systems, as one out of seven employed people suffer from this disorder, based on the resources [7]. Job burnout is associated with mental health and staff productivity; hence, identification of designing and implementing methods to effectively cope with psychological tensions and overcome job burnout can help to promote mental health and increase the efficacy and productivity of manpower. Nowadays, the health sector, owing to direct relationship with human health, is one of the most important domains of sustainable development among human societies. In this sector, job burnout has attracted the attention of many researchers [8].

Job performance is defined as the values and behavioral practices organizations expect from of individuals during a defined period [9]. In fact, job performance is the most important variable that has been taken into account in organizational contexts [10]. Performance is regarded as one of the basic concepts in management, based on which many managerial responsibilities are established [11].

Promotion and efficiency of any organization depend on the capabilities and physical-psychological health of its staff. Attention to the job performance of the personnel is a significant factor affecting organizational success and, simultaneously, using efficient manpower is a major concern of managers and authorities in organization [12].

Nowadays, the healthcare systems need a powerful managerial support in terms of job performance assessment. Performance assessment is one of the most significant strategic processes that, in addition to promoting accountability, defines the extent to which the goals and plans of each organization are accomplished [13]. Based on the conservation of resources theory, the staff that is burned out experience an energy loss, which, in turn, leads to reduced and poor job performance consequently. Chau stated that the burned out staff used techniques such as job performance reduction to restore their energy and power [14]. The findings of this study showed that workload affected emotional burnout, followed by smoking in the individuals [6].

Studies have shown that the personnel who are occupationally burned out display inappropriate job performance and may encounter serious health problems over time [15]. Dashti et al. reported that 55.7% of healthcare personnel suffered from job burnout (8). Since this syndrome results in severe loss of quality in healthcare services through inducing negative attitude toward the job and a sense of lack of communication with the clients while providing care, identification of the involving factors would be helpful in enhancing the quality of services provided, leading to a better job performance in the health domain. Therefore, the current study aimed to investigate the frequency of job burnout and its association with job performance in a healthcare system of Islam Abad-e-Gharb, Iran.

Methods

This correlational, cross-sectional study investigated the personnel of urban/rural healthcare centers, rural healthcare centers and health office of Islam Abad-e-Gharb, Iran. At the first stage of study, two standard questionnaires were developed: 1. Maslach Burnout Inventory: this scale is the most common tool for measuring job burnout. It consists of 22 items on three dimensions of job burnout including emotional exhaustion (9 items), depersonalization (5 items), and personal accomplishment (8 items), all of which measure job burnout frequency and severity. In this study, the main focus was to examine job burnout frequency. In this measure, emotions of any individual are scored using the scales of zero (never), 1 (several times a year), 2 (once a month), 3 (several times a month), 4 (once a week), 5 (several times a week), and 6 (every

day). The obtained scores are classified into three categories of low, moderate, and high. The total score range for total job burnout varies between 0 and 132, in which the scores below 44 (≤44) represents low job burnout, 45-89 shows moderate job burnout, and higher than 99 (≥90) indicate high job burnout. The reliability and validity of this scale were first confirmed in Iran by Filian who reported a test-retest reliability index of 0.78 [16]. In the current study, the Cronbach's alpha reliability was obtained to be 0.76. 2. Hersey and Goldsmith's job performance scale: this scale is based on ACHIVE model, representing ability, clarity, help, incentive, evaluation, validity, and environment and containing 16 items. The items are rated using scores 1 (completely disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (completely agree). Participants with scores of 16-37 are classified in low job performance, 37-58 in moderate job performance, and 59-80 in high job performance. The reliability and validity of this questionnaire were confirmed by Ardestani et al. Its reliability was measured to be 0.86 using Cronbach's alpha [17]. The Cronbach's alpha reliability of this scale was calculated to be 0.75 in the present study.

The second stage of the study included taking written permission of the concerned authorizes. The total number of the personnel was calculated to be 160. The researcher referred to the workplace of the personnel and explained the objectives of the study to them. They were also assured that their data would be quite confidential. The inclusion criteria consisted of absence of disease or problems in the family and a minimum of three years of work experience. Finally, the questionnaires were distributed among the participants and were collected at the due time. A total of 136 questionnaires were fully completed. The obtained data were analyzed through SPSS (version 19) software using Kruskal-Wallis, Mann-Whitney, and Spearman correlation coefficient tests.

Results

A total of 136 participants participated in this study. The mean values (SD) for age and work experience of the participants were found to be 36.4 (8.1) 13.83 (8.86), respectively. Besides, 19.85% of the participants were single and the rest married. The demographic and background characteristics of participants are presented in Table 1.

Table 1: Demographic and background characteristics of participants

Variables		N	%
Marital status	Single	27	19.85
	Married	109	80.15
Education level	Less than diploma	15	11
	Diploma	39	28.7
	Associates degree	27	19.85
	Bachelor degree	55	40.44
Type of employment	Contractual	26	19.11
	Employment contract	28	20.58
	Permanent	82	60.29
Sex	Male	66	48.52
	Female	70	51.48
Smoking	Yes	10	7.4
	No	126	92.6

The mean scores of total job burnout and job performance were 45.95±17.77 and 52.5±9, respectively. The mean scores for individual dimensions of job burnout and job performance are shown in Table 2.

Table 2: Mean and standard deviation of job burnout, job performance, and their dimensions

Components	Mean	Standard deviation	Score range
Compassion fatigue	21.2	11.93	0-54
Depersonalization	4.62	4.22	0-30
Personal Accomplishment	30.17	8.26	0-48
Total job burnout	45.95	17.77	0-132
Ability	10.9	2.3	3-15
Clarity	7.8	1.3	2-10
Help	5.9	2	2-10
Incentive	8.9	2.4	3-15
Evaluation	5.6	2	2-10
Validity	6.6	1.9	2-10
Environment	6.8	1.9	2-10
Job performance	55.2	9	16-80

The results of Spearman correlation coefficient showed a significant inverse correlation between job burnout and job performance (p=0.000, r=-0.249). Furthermore, there was a significant correlation between job burnout and all dimensions of job performance (p≤0.05) (Table 3).

Table 3: Correlation of job burnout and its dimensions with job performance (Spearman correlation coefficient)

	Emotional Exhaustion	Depersonalization	Personal Accomplishment	Total job burnout
Ability	-0.251	-0.159	-0.008	-0.216
Clarity	-0.181	-0.192	0.099	-0.204
Help	0.344	-0.085	0.077	-0.215
Incentive	-0.249	-0.077	-0.099	-0.212
Feedback	-0.249	-0.112	0.049	-0.167
Validity	-0.288	-0.048	0.096	-0.240
Environment	0.323	0.255	0.193	0.347
Job performance	-0.297	-0.114	0.057	-0.242

The findings of Spearman correlation coefficient indicated no significant correlation between job burnout frequency and age (r=-0.018) and work experience (r=-.034) (p>0.05). Moreover, the results of Mann-Whitney revealed no significant association between job burnout and gender (p=0.18), marital status (p=0.34), and smoking (p=0.21). additionally, the results of Kruskal-Wallis test indicated no significant relationship between job burnout and education (p=0.61) and type of employment (p=0.61). In this study, 52.2% of the participants were found to have moderate job burnout and 73.5% had moderate job performance (Table 4).

Table 4: Distribution of degrees of severity of job burnout and job performance

Variable	Rating	Frequency	Percentage	Variable	Rating	Frequency	Percentage
Job burnout	Low	65	47.8	Job performance	Low	8	6
	Moderate	71	52.2		Moderate	100	73.5
	High	0	0		High	28	20.5

Discussion

The results of this study showed that most of the personnel had moderate to low job burnout, and there was a significantly inverse correlation between job burnout and job performance. On the other hand, most of the personnel had a moderate job burnout. The mean score of job burnout, in agreement with the study of Chern, was less than average level [18]. Similarly, Kabir [5] and Jafari [13] reported a moderate to low level for the job burnout of first-level healthcare providers, i.e. the majority of the personnel showed moderate to low job burnout, which is in line with the results of the present study. However, job burnout was lower in the present study compared to the study of Hooper [19]. Moreover, a study of job burnout frequency among the healthcare personnel of a teaching hospital in Italy indicated that compassion fatigue and depersonalization were at average level and working in emergency department was followed by lower levels of personal achievement.

In general, it can be argued that the different results of the above-mentioned studies vary partly due to the predisposing factors of job burnout such as stress, different workloads, salary and reward system, and management style, which are different depending on the geographical location and work environment. A high percentage of the staff reported a moderate job burnout. Reduced job satisfaction, high rate of leaving the work place, and absence due to dissatisfaction with work environment in case of the healthcare staff can be the main reasons for job burnout [20].

The significant relationship of job burnout with job performance is in agreement with the results of Chern [18]. Besides, the relationship between job performance and emotional burnout and depersonalization is in line with the study of Abdullah. On the other hand, the association between personal adequacy and job performance disagrees with the study of Abdullah [21]. Regarding compassion fatigue and job performance, the results agree with those of Demerouti [22].

In this study, the relationship between job burnout and age and sex is in contrast with the results of Chern [18]. With regard to the effect of demographic variables on job burnout and its dimensions, different results have been reported by various studies. For instance, the study by Dashti et al. on the first-level healthcare providers showed no significant relationship between job burnout and age, gender, marital status, education, work experience, and employment status, which is in agreement with the results of the current study [8]. The results of Jafari's study indicated a significant association between job burnout and work experience, marital status, and type of employment, while no significant relationship was obtained in the present research [13] .

In the current study, in line with the study of Najafi et al [23], there was no significant association between job burnout and sex, age group, marital status, and work place. The study of Goldberg et al. on emergency doctors and that of Sharma et al. on surgeons showed no significant relationship between job burnout and age, confirming the results of the present research [24] .Based on the results of the current study and the studies mentioned above, it seems that demographic and background factors have insignificant effect on job burnout. As previous studies have shown, job burnout negatively affects job performance [25] .Therefore, it seems necessary to proceed to carry out more investigations and identify the factors involved in job burnout in order to reduce it in health care centers.

This study had several limitations. First, the evaluation tool was a self-report scale and the personnel may have not been honest in their responses. However, an attempt was made to prevent this problem by explaining the research objectives and encouraging anonymous completion of the questionnaires. Second, various organizational factors including job stress and satisfaction were not investigated in the present study. To consider the factors causing job burnout, other organizational factors such as working hours, high workload, and reward system are suggested to be investigated by future researchers.

It can be argued that a high percentage of participants experienced moderate to low job burnout. If managerial strategies are not adopted to reduce job burnout, this amount may increase and influence job burnout more than ever and reduce the organization's progress toward

achieving its goals. Thus, appropriate interventions are recommended to be conducted to prevent job burnout and promote job performance consequently

Acknowledgments
According to official letter form vice chancellor for research of Kermanshah University of Medical Sciences with no: 23447 date 6 sep 2014 the researchers received permission to do this reserch.

Conflict of interest: The authors declare that there is no conflict of interest regarding the publication of this article.

Funding:
There was no funding for this study.

References

1. Sokka L, Huotilainen M, Leinikka M et al. Alterations in attention capture to auditory emotional stimuli in job burnout: an event-related potential study. International Journal of Psychophysiology. 2014; 94(3): 427-36.
2. Saberi HR, Moravveji SA, Sadaf MA. Evaluation of occupational burnout and related factors in industry managers. Iran Occupational Health. 2008; 5(3): 60-6. [In Persian]
3. Circenis K, Millere I. Compassion fatigue, burnout and contributory factors among nurses in Latvia. Procedia-Social and Behavioral Sciences. 2011; 30: 2042-6.
4. Anisi J, Khabbazi Ravandi MR. Preparing and compiling a job burnout twenty-item questionnaire based on Geldard Burnout Inventory. Iran Occupational Health. 2015; 12(4): 47-55.
5. Kabir M, Heidari A, Gashti A, et al. Job burnout among health workers in golestan province, 2012. J Mazandaran Univ Med Sci. 2014; 24: 169-73. [In Persian]
6. Ellahi A, Mushtaq R. Doctors at risk of job burnout, diminishing performance and smoking habits. Journal of the BSA MedSoc Group. 2012; 6(3): 36-47.
7. Arab M, Rahimi A, Vali L, Ravangard . Study of the relationship between nurses' work environment indices and their burnout aspects in TUMS teaching hospitals. Iran Occupational Health. 2012; 9(3): 39-51.
8. Dashti S, Faradmal J, Soheili Zad M, Shahrabadi R, Salehiniya H. Survey of factors associated with burnout among health care staffs in Hamadan County in year 2012. Pajouhan Scientific Journal. 2014. 13(1): 1-8. [In Persian]
9. Motowidlo SJ. Job performance. Handbook of psychology. 2003.
10.Naseri Mohammad Abadi A, Nouri A, Askari A, Sadegh R. Mediating role of individial-organization and individial-job proporationin correlation with publich service motivation and job performance among nurses of goverenmental hospital Isfahan, Iran. Health Information management. 2013: 9(5):733-43. [In Persian]
11.Vosoughi NA, Rohollahi A, Mohamad HH. The effect of job stress on general health and job performance on air trafic controllers. Iranian Occupational health Journal. 2016: 13(1): 47-57.
12.Hagbaghery MA, Salsali M, Ahmadi F. A qualitative study of Iranian nurses' understanding and experiences of professional power. Human Resources for Health. 2004. 2(1): 9.
13.Jafari M, Maleki MR, Eyvazi M, Khodayari R, Ahadi B. The study of relationship between job burnout and performance in East Azerbaijan's health house workers. J Health Syst Res. 2013; 9(11): 1375-84.
14.Chau SL. Examining the Emotional Labor Process: A Moderated Model of Emotional Labor and Its Effects on Job Performance. 2007;182.
15.Bakker AB, Demerouti E, Sanz-Vergel AI. Burnout and work engagement: The JD–R approach. Annu. Rev. Organ. Psychol. Organ. Behav. 2014. 1(1): 389-411.
16.Philian E. Evaluation of burnout and its relation to coping methods used by nurses in Tehran hospitals [Nursing MSc Thesis]. Tehran: Tehran University of Medical sciences. 1992.
17.Ardestani, SS, Momeni M, Marjani AB. Investigation of factors affecting the performance of the staff (Case study: National Bank branches West of Tehran)]. 2012 [cited 2017.
18.Chern JC, Hsu CH, Ho TK. A Study into the Impact of Occupational Burnout on the Job Performance of Enterprises' Employees. The Journal of Global Business Management. 2016. 12(2): 173-85.

19.H Hooper C, Craig J, Janvrin DR, Wetsel MA, Reimels E. Compassion satisfaction, burnout, and compassion fatigue among emergency nurses compared with nurses in other selected inpatient specialties. Journal of emergency nursing. 2010; 36(5): 420-7.
20.Portoghese I, Galletta M, Coppola RC, Finco G, Campagna M. Burnout and workload among health care workers: the moderating role of job control. Safety and health at work. 2014; 5(3): 152-7.
21.Abdullah DN, Yuen FC. The impact of job burnout towards job performance among nurses. in Business, Engineering and Industrial Applications (ISBEIA), 2011 IEEE Symposium on. 2011;351-56.
22.Demerouti E, Bakker AB, Leiter M. Burnout and job performance: The moderating role of selection, optimization, and compensation strategies. Journal of occupational health psychology. 2014; 19(1): 96-107.
23.Nagafi M, Solati SK, Forouzbakhsh F. The relationship between staff burnout and mental health in research center and production of nuclear fuel of Isfahan. J Shahrekord Univ Medi Sci. 2000; 2(2): 34-41.
24.Goldberg R, Boss RW, Chan L, et al. Burnout and its correlates in emergency physicians: four years' experience with a wellness booth. Academic Emergency Medicine. 1996; 3(12): 1156-64.
25.Halbesleben JR, Buckley MR. Burnout in organizational life. Journal of management. 2004; 30(6): 859-79.