

# Burnout among the Nurses of Kashan Beheshti Hospital During 2014

Manijeh Kadkhodaei<sup>1</sup>, Gholam Abbass Moosavi<sup>2</sup>, Roya Seyyedi<sup>3</sup>

<sup>1</sup>Anatomical Science Research Center, Kashan University of Medical Sciences, <sup>2</sup>Department of Statistics and Epidemiology, Health School, Kashan University of Medical Sciences, <sup>3</sup>Master Expert Center, Kashan University of Medical Sciences, Kashan, Iran

ORCID:

Manijeh Kadkhodaei: [https:// orcid.org/0000-0002-2721-1823](https://orcid.org/0000-0002-2721-1823)

## Abstract

**Aims:** Research suggests that burnout levels have always been higher in the health-care populations and the nurses were at high risk too. It can increase staff turnover and reduce the quality of care. Hence, this study was performed with the purpose of evaluating the rate of professional burnout in the nurses of Beheshti hospital's staff. **Materials and Methods:** The study population comprised 230 nurses of the Beheshti hospital of Medical Sciences using sampling in 2014. Maslach Burnout Inventory and staff demographic characteristics questionnaire were used in this study. Data were analyzed using the SPSS software, Pearson's independent, Fisher's exact test, ANOVA, and Chi-square test. **Results:** Most of the participants were in mild-to-moderate levels of exhaustion. they had mild level until severe in depersonalization, and mild in reduced personal accomplishment. however, burnout was higher in women. Health-care staff nurses had a higher level of job burnout than that of administrative staffs ( $P < 0.001$ ). **Conclusions:** The findings suggest the research focused could yield important advances in understanding burnout in this group and yield potential interventions to buffer burnout and its consequences.

**Keywords:** Burnout, the nurses, the staffs of Kashan medical university

## INTRODUCTION

The most influential model of professional burnout that was developed by Christina Maslach and Jackson is defined as a three-dimensional construct, including exhaustion, cynicism or depersonalization (DE), and inefficacy or reduced personal accomplishment (PA).<sup>[1,2]</sup> More precisely, exhaustion involves feelings of strain and chronic fatigue. Cynicism consists of an indifferent or distant attitude toward work, losing interest in one's work, or not seeing work as meaningful. Cynicism refers to detachment arising as a means to gain emotional distance from work, while ineffectiveness refers to feelings of incompetence or the inability to fulfill the job responsibilities.<sup>[3]</sup> Moreover, the lack of professional efficacy refers to reduced feelings of competence, achievement, and accomplishment.<sup>[4]</sup>

Job burnout occurs due to the long-term exposure of a person to psychological stress associated with work and people, and it has been recognized as a major problem

worldwide.<sup>[5,6]</sup> It among staff can lead to decreased work performance and increased absenteeism.<sup>[7]</sup> Work-related stress occurs when there is a gap between workplace demands and requests and an individual's abilities.<sup>[8]</sup> Stress occurs and develops by increasing workplace demands and requests. Research has shown that there is a close relationship between stress and job burnout. It affects the physical and mental health of the people, and consequently, impairs their performance such.<sup>[9]</sup> Burnout consists of three aspects as follows: emotional exhaustion (EE), DE, and reduced personal efficiency. Exhaustion refers to the long-term experience of physical, cognitive, or emotional stress because of some specific occupational demands.<sup>[8]</sup> Occupational DE refers to an individual's emotional job avoidance and

**Address for correspondence:** Mrs. Manijeh Kadkhodaei, Beheshti Hospital, 5<sup>th</sup> of Qotb-e Ravandi Boulevard, 87159-73446 Kashan, Iran.

E-mail: [manijeh.kadkhodaei@gmail.com](mailto:manijeh.kadkhodaei@gmail.com)

Received: 11-Mar-2019 Accepted: 19-Mar-2019

### Access this article online

Quick Response Code:



Website:  
<http://iahs.kaums.ac.ir>

DOI:  
10.4103/iahs.iahs\_11\_19

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**For reprints contact:** [reprints@medknow.com](mailto:reprints@medknow.com)

**How to cite this article:** Kadkhodaei M, Moosavi GA, Seyyedi R. Burnout among the Nurses of Kashan Beheshti Hospital During 2014. *Int Arch Health Sci* 2019;6:84-8.

inability to control the reduced sense of personal efficiency. It reduces the sense of competence and increases negative self-appraisal.<sup>[10]</sup>

Job burnout is not only related to an individual's mental health but it also related to his/her productivity.<sup>[11,12]</sup> In this regard, increasing knowledge about effective coping strategies (to overcome stress and job burnout) can help improve mental health and increase the effectiveness and productivity of human resources. Moreover, some scholars believe that some degrees of job burnout occur among individuals who work with people regardless of the type of their occupation.<sup>[13]</sup>

Therefore, understanding the causes and preventing the occurrence of job burnout is necessary for all those involved in planning for staff and managers. The results will help those active in the educational system and medical organizations and centers to work effectively to reduce job burnout rates and to increase the quantity and quality of their employees' activities.

## MATERIALS AND METHODS

The study sample was done from the nurses employed at the Beheshti hospital. Most respondents were employees. Printed copies of the survey were distributed to the different health-care groups. All responses were collected anonymously. A total of 260 health care and administrative nurses commenced the survey. However, only 230 nurses completed the key.

In this study two questionnaires were used that distributed among the staffs after training. In the first questionnaire, demographic properties of individuals such as age, sex, experience, and marital status studies, major and working hours had mentioned. The second questionnaire was the Maslach Burnout Inventory (MBI) General Survey, a widely self-report measure assessing burnout job was measured using the MBI-General Survey (MBI-GS).<sup>[12,13]</sup> Najafi calculated the stability of this test 0.86 using Cronbach's alpha test. This coefficient has been reported 0.89, 0.70, and 0.83, respectively, for partial tests.<sup>[14]</sup> The rate of questionnaire credit in terms of frequency and intensity using Cronbach's alpha in this rest for Maslach was 0.78 and 0.78, respectively.

The MBI-GS consists of 22 items to measure the three domains of burnout: EE, DE, and reduced PA.

Items included: EE (nine items); DE (five items) and reduced PA (eight items).<sup>[15,16]</sup>

Using a 7-point Likert scale, the MBI-GS was used and work-related special feeling frequencies ranged (0–30) for DE (0–30) for exhaustion and (0–36) for reduced PA. The reduced PA subscale is reverse scored with lower scores indicative of burnout. There were significant direct relationships between stress and anxiety with job burnout.<sup>[17-19]</sup>

The study was conducted according to the declaration of Helsinki, and participants signed an informed consent form approved by the Ethics Committee of the Faculty of Medicine. Information entered in the application SPSS version 19 and was

performed using the Pearson's independent, least significant difference (LSD), ANOVA, and Chi-square test.

## RESULTS

This study was carried out among the nurses of the Beheshti hospital. In this study, 41.30% were male and 58.69% were female. Almost 13.04% were  $\leq 25$  years old in the first group, 46.95% in 26–35 years and 40.01% in the age group of 36–60 years. The average age of the staff was 36.4 years old. Nearly 64.37% of people were married, 27.39% single, and 8.24% divorced. Almost 26.08% of nurses were in the morning shift, 16.95% in the afternoon shift, and 56.97% in the cycle shift. Almost 71.73% of participants were in medical centers and 28.27% in the administrative field. Hence, most people in this research were chosen from the medical field [Table 1].

The relationship between age and mean burnout in frequency in three groups of staffs was observed meaningful ( $P = 0.03$ ). The two-way comparisons (LSD test) between the two age groups (first and second) showed no statistically significant difference ( $P = 0.39$ ), however, between the two age groups (first and third) with ( $P = 0.025$ ) and (second and third) with ( $P = 0.037$ ) was observed meaningful. The relationship between age and mean burnout in intensity in the three groups of staffs was observed meaningful ( $P = 0.038$ ). The two-way comparisons between the two age groups (first and second) showed no statistically significant difference ( $P = 0.42$ ), however between the two age groups (first and third) with ( $P = 0.03$ ) and (second and third) with ( $P = 0.04$ ) was observed meaningful [Table 2].

From total men based on the frequency, 89.5% had mild signs of emotional exhaustion and 10.5% were moderate. From total women, 94.8% had mild signs of emotional exhaustion and 5.2% were moderate, and 64.4% did not observe any signs of severe sign exhaustion. The meaningful difference was not observed as statistically significant ( $P = 0.12$ ).

From total men based on frequency, 5.3% had mild signs DE, 33.7% were moderate, and 61.6% were severe. From total women, 10.4% had mild signs DE and 39.3% were moderate and 50.4% were severe. The meaningful difference was not observed as statistically significant ( $P = 0.18$ ). From total men based on intensity, 93.7% had mild signs of emotional exhaustion and 6.3% were moderate. From total women, 94.8% had mild signs of emotional exhaustion and 5.2% were moderate, 64.4% did not observe any signs of severe sign exhaustion. The meaningful difference was not observed as statistically significant ( $P = 0.71$ ).

From total men based on intensity, 3.2% had mild signs DE, 67.4% were moderate, and 29.5% were severe. From total women, 7.4% had mild signs DE and 63% were moderate and 29.6% were severe. The meaningful difference was not observed as statistically significant ( $P = 0.27$ ). From total men and women based on the frequency and intensity in reduced PA were mild. The standard deviation was in emotional exhaustion

6.4%, in DE was 3.2%, and in reduced PA was 3.04%. The frequency rate between job and among people participated in the two groups of medical staff and the nonmedical staff was meaningful ( $P = 0.001$ ) and declared that the burnout among medical staff was more than nonmedical staff. The average score of burnout was 31.4, and the standard deviation was 11.1 [Table 3]. This study suggests that the health-care personnel experience high levels of stress and job burnout in developing and advanced countries.

## DISCUSSION

This study was done to investigate occupational burnout that had important implications for the nurses. However, an alarmingly high percentage of the sample also reported high levels of occupational mild and moderate burnout.

In a study performed by Garcia *et al.* (2014), a similar pattern of high professional efficacy (88% moderate-high) occurring alongside high exhaustion (50%) and cynicism (47%).

| Characteristic         | <i>n</i>    |
|------------------------|-------------|
| Sex                    |             |
| Female                 | 135 (58.69) |
| Male                   | 95 (41.30)  |
| Age (years)            |             |
| ≤25                    | 30 (13.04)  |
| 26-35                  | 108 (46.95) |
| 36-60                  | 92 (40.01)  |
| Marital status         |             |
| Married                | 148 (64.37) |
| Never married          | 63 (27.39)  |
| Separated              | 19 (8.24)   |
| Job experience (years) |             |
| ≤10                    | 88 (38.26)  |
| 11-20                  | 111 (48.27) |
| 21-30                  | 31 (13.45)  |
| Shift                  |             |
| Morning                | 60 (26.08)  |
| Evening                | 39 (16.95)  |
| Cyclical               | 131 (56.97) |
| Doing the job          |             |
| Medical centers        | 165 (71.73) |
| Administration center  | 65 (28.27)  |

| Dimension             | >25 years |      | 26-35 years |      | 36-60 years |      | <i>P</i> |
|-----------------------|-----------|------|-------------|------|-------------|------|----------|
|                       | Mean      | SD   | Mean        | SD   | Mean        | SD   |          |
| Burn out in frequency | 35.1      | 9.07 | 37.1        | 10.3 | 40.5        | 13.2 | 0.03     |
| Burn out in intensity | 35.5      | 9.01 | 37.4        | 10.7 | 40.8        | 12.7 | 0.038    |

SD: Standard deviation

It was found this study examining burnout among nonprescribing the Veterans Health Administration (VA) mental health clinicians. It concerns that psychiatrists in the current sample reported high exhaustion and cynicism much more frequently than nonprescribing clinicians in the prior work.<sup>[20]</sup> This is compatible with this study.

In a study of Yang *et al.* in Singapore observed that the experience of high levels of stress by health-care professionals had been associated with decreased work efficiency and high rates of staff turnover. This study had compatibility with this study.<sup>[21,22]</sup>

In a study of Rossi *et al.*, Grau-Alberola *et al.* (2010), and Gupta *et al.* (2012), evidence revealed the high levels of stress and burnout among health-care professionals in both developing and developed countries.<sup>[23]</sup> Acker in her survey of 460 mental health workers in New York state reported that 56% of the workers experienced moderate-to-high levels of emotional exhaustion and 73% experienced moderate-to-high levels of role stress. In this study, the burnout was moderate and mild. In this respect, it was somewhat consistent with this study.<sup>[24]</sup> Several studies have also highlighted the association between demographic characteristics and burnout<sup>[24]</sup> (Paulsen *et al.*, 2014; Chiang and Chang, 2012), for example, Poulsen *et al.* reported that having <10 years of working experience was associated with burnout among Australian occupational therapists.<sup>[25]</sup> In a study performed by Garcia *et al.* (2014), a similar pattern of high professional efficacy (88% moderate-high) occurring alongside high exhaustion (50%) and cynicism (47%) was found in a study examining burnout among nonprescribing VA mental health clinicians. It is concerning that psychiatrists in the current sample reported high exhaustion and cynicism much more frequently than nonprescribing clinicians in the prior work.<sup>[20]</sup> This is compatible with this study. In a study of Yang *et al.* in Singapore observed that the experience of high levels of stress by health-care professionals had been associated with decreased work efficiency and high rates of staff turnover. This study had compatibility with this study.<sup>[21]</sup>

In a study of Rossi *et al.*, Grau-Alberola *et al.* (2010), Gupta *et al.* (2012), evidence revealed the high levels of stress and burnout among health-care professionals in both developing and developed countries.<sup>[23]</sup> Acker, in her survey of 460 mental health workers in New York State, reported that 56% of the workers experienced moderate-to-high levels of emotional exhaustion and 73% experienced moderate-to high-levels of role stress. In this study, the burnout was moderate and mild. In this respect, it was somewhat consistent with this study.<sup>[24]</sup> Several studies have also highlighted the association between demographic characteristics and burnout (Paulsen *et al.*, 2014; Chiang and Chang, 2012), for example, Poulsen *et al.* reported that having less than 10 years of working experience was associated with less burnout.<sup>[25,26]</sup>

In Singapore, Chan and Huak (2004) conducted a survey of 491 doctors and nurses in a general hospital setting to understand the impact of the work environment on their emotional health.



**Table 3: Statistical indexes of burnout based on frequency and intensity in nurses of Beheshti hospital**

| Statistical indexes                                    | Mild       | Moderate   | Severe     | $\chi^2$ | SD  |
|--|------------|------------|------------|----------|-----|
| Emotional exhaustion based on the frequency            | 213 (92.6) | 17 (7.4)   | -          | 16.2     | 5.2 |
| Depersonalization based on the frequency               | 19 (8.3)   | 85 (37)    | 126 (54.7) | 12.02    | 3.8 |
| Reduced personal accomplishment based on the frequency | 230 (100)  | -          | -          | 10.02    | 4.4 |
| Emotional exhaustion based on intensity                | 217 (94.3) | 13 (5.7)   | -          | 16.14    | 5.3 |
| Depersonalization based on intensity                   | 13 (5.7)   | 149 (64.8) | 68 (29.5)  | 12.3     | 3.8 |
| Reduced personal accomplishment based on intensity     | 230 (100)  | -          | -          | 10.06    | 4.4 |

SD: Standard deviation

The participants in this study reported high levels of job-related stress, and the prevalence of psychiatric disorders such as depression and anxiety among the doctors and nurses was 35% and 28%, respectively.<sup>[27,28]</sup> This result is not consistent with this study. However, nothing is known about the extent of stress and burnout among mental health professionals in Singapore. Patient characteristics also predicted cynicism specifically working with patients suspected of malingering showed a positive trend with cynicism ( $P = 0.05$ ).

In the study of Deary *et al.* (2009) it was shown that healthcare employees had greater burnout than others.

Medical staff has been found to have higher levels of burnout compared to other employee higher levels of emotional exhaustion and severe depression than other physicians in Scotland higher levels of work-related exhaustion than nurses in Sweden (Thomsen, 1999) and less job satisfaction and higher emotional distress than other (Heponiemi, Aalto, Puttonen, Vänskä, and Elovainio, 2014). This study had compatibility with this study. Based on the work among health care and human resource employees, burnout is often a concern among mental health providers. Burnout concerns an emotional state of exhaustion, cynicism, and DE engendered by exposure to a high level of chronic stress.<sup>[29,30]</sup>

Ang and Huan in their study carried out in Singapore with 1108 adolescents (596 boys and 508 girls) aged from 12 to 18 with mean age 14.33 (standard deviation = 0.93) defined academic stress as chronic stress feelings among students with high academic self-expectations or high academic expectations from others such as parents and teachers. Multiple regression analysis in four steps showed that depression was partial mediator between academic stress and suicidal ideations among adolescents. Indeed, by including a depressed mood in the model, a previously established significant relationship between academic stress and suicidal ideations was significantly reduced.<sup>[31,32]</sup> This had no compatibility with this study.

## CONCLUSIONS

Various studies have highlighted the lack of social support and stress as two factors contributing to job burnout. In addition, studies emphasize that a good relationship between colleagues and adequate communication with authorities will protect personnel against job burnout and will bring lower levels.

The methods should be applied for declining mental stress in the environment such as education in duty for staff's tension

control workshop and training the skills of the problem-solving support for the staffs. Because in the long run, job burnout can lead to mental disability and can reduce staff performance; therefore, relevant authorities must pay more attention to this issue.

## Acknowledgments

This study was financially supported by Kashan University of Medical Sciences. The efforts of all the honorable officials at this center are hereby appreciated and acknowledged.

## Financial support and sponsorship

This work presents part of the findings of the research project no in Kashan University of Medical Sciences.

## Conflicts of interest

There are no conflicts of interest.

## REFERENCES

- Bassett H, Lloyd C. Occupational therapy in mental health: Managing stress and burnout. *Br J Occup Ther* 2001;64:406-11.
- Brown GT, Pranger T. Predictors of burnout for psychiatric occupational therapy personnel. *Can J Occup Ther* 1992;59:258-67.
- Dalton JH. Environmental Work Factors and Psychotherapists Perceived Stress Level. Ann Arbor, MI: Regent University; 2012. p. 13-4.
- Demerouti E, Halbesleben JR. The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg burnout inventory. *Work Stress* 2005;19:208-20.
- Demerouti E, Mostert K, Bakker AB. Burnout and work engagement: A thorough investigation of the interdependency of both constructs. *J Occup Health Psychol* 2010;15:209-22.
- Bakker AB, Schaufeli WB, Sixma HJ, Bosveld W, Van Dierenonck D. Patient demands, lack of reciprocity, and burnout: A five-year longitudinal study among general practitioners. *J Organ Behav* 2000;21:425-41.
- Institute of Medicine. Treatment for Posttraumatic Stress disorder in Military and Veteran Populations: Initial Assessment. Vol. 59. Washington, DC: The National Academies Press; 2012. p. 99-101.
- Van Droogenbroeck F, Spruyt B, Vanroelen C. Burnout among senior teachers: Investigating the role of workload and interpersonal relationships at work. *Teach Teach Educ* 2014;43:99-109.
- Wang F, Xu Y. Job burnout among elementary and high school teachers: Characteristics and relationship with social support. *Acta Psychol Sin* 2014;5:24-6.
- Wong CS, Law KS. The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *Leadersh Q* 2009;13:203-14.
- Xanthopoulou D, Bakker AB, Demerouti E, Schaufeli WB. Work engagement and financial returns: A diary study on the role of job and personal resources. *J Occup Organ Psychol* 2009;82:243-74.
- Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu Rev Psychol* 2001;52:397-423.
- Maslach C, Leiter MP. Early predictors of job burnout and engagement.

- J Appl Psychol 2008;93:498-512.
14. Najafi MH, Aminian AH, Ghomizadea A, Noorani FA. A study on psychological health of first year university students in Iran. *Iran J Psychiatry Behav Sci* 2009;3:47-51.
  15. Kumar S, Hatcher S, Dutu G, Fischer J, Ma'u G. Stresses experienced by psychiatrists and their role in burnout: a national follow up study. *Int J Soc Psychiatry* 2011;11:57-166.
  16. Stafford-Brown J, Pakenham KI. The effectiveness of an ACT informed intervention for managing stress and improving therapist qualities in clinical psychology trainees. *J Clin Psychol* 2012;68:592-13.
  17. Bressi C, Porcellana M, Gambini O, Madaia L, Muffatti R, Peirone A, *et al.* Burnout among psychiatrists in Milan: A multicenter survey. *Psychiatr Serv* 2009;60:985-8.
  18. Scanlan JN, Meredith P, Poulsen AA. Enhancing retention of occupational therapists working in mental health: relationships between wellbeing at work and turnover intention. *Aust Occup Ther* 2013;1:60-395.
  19. Scanlan JN, Still M. Job satisfaction, burnout and turnover intention in occupational therapists working in mental health. *Aust Occup Ther J* 2013;60:310-8.
  20. Garcia HA, McGeary CA, McGeary DD, Finley EP, Peterson AL. Burnout in Veterans health administration mental health providers in posttraumatic stress clinics. *Psychol Serv* 2014;11:50-9.
  21. Yang S, Meredith P, Khan A. Stress and burnout among healthcare professionals working in a mental health setting in Singapore. *Asian J Psychiatr* 2015;15:15-20.
  22. Ballenger-Browning KK, Schmitz KJ, Rothacker JA, Hammer PS, Webb-Murphy JA, Johnson DC, *et al.* Predictors of burnout among military mental health providers. *Mil Med* 2011;176:253-60.
  23. Rossi A, Cetrano G, Pertile R, Rabbi L, Donisi V, Grigoletti L, *et al.* Burnout, compassion fatigue, and compassion satisfaction among staff in community-based mental health services. *Psychiatry Res* 2012;200:933-8.
  24. Acker GM. Burnout among mental health care providers. *J Soc Work* 2012;12:475-90.
  25. Poulsen AA, Meredith P, Khan A, Henderson J, Castriso V, Khan R. Burnout and work engagement in occupational therapists. *Br J Occup Ther* 2014;77:56.
  26. Chan EY, Morrison P. Factors influencing the retention and turnover intentions of registered nurses in a Singapore hospital. *Nurs Health Sci* 2000;2:113-21.
  27. Chan AO, Kee JP, Chan YH. Awareness and utilization of peer support programs in Singapore public general hospitals. *Int J Emerg Ment Health* 2012;14:217-23.
  28. Hegney DG, Craigie M, Hemsworth D, Osseiran-Moisson R, Aoun S, Francis K, *et al.* Compassion satisfaction, compassion fatigue, anxiety, depression and stress in registered nurses in Australia: Study 1 results. *J Nurs Manag* 2014;22:506-18.
  29. Deary IJ, Agius RM, Sadler A. Personality and stress in consultant psychiatrists. *Int J Soc Psychiatry* 1996;42:112-23.
  30. U.S. Department of Veterans Affairs. VA All Employee Survey Results, Veterans Health Administration. Vol. 39. Cincinnati, OH: Veterans Health Administration, National Center for Organization Development; 2013. p. 151-210.
  31. Ang RP, Huan VS. Relationship between academic stress and suicidal ideation: Testing for depression as a mediator using multiple regression. *Child Psychiatry Hum Dev* 2006;37:133-43.
  32. Straits Times, MOH Reviewing Pay of Health-Care Staff. The Straits Times, Available from: [https://www.nhg.com.sg/newsflashes/MOH-reviewingpayofhealth-carestaff\\_Feb27,2012;pdf](https://www.nhg.com.sg/newsflashes/MOH-reviewingpayofhealth-carestaff_Feb27,2012;pdf). [Last accessed 2014 Jul 06].