The Association of Psychological Empowerment and Job Burnout in Operational Staff of Tehran Emergency Center

Aram Ghaniyoun, Khosro Shakeri, Mohammad Heidari
Department of Management, College of Human Science, Saveh Branch, Islamic Azad University, Saveh, 1Health Management and Economics Research Center, Iran University of Medical Sciences, Tehran, 2Department of Medical and Surgical, School of Nursing and Midwifery, Shahrekord University of Medical Sciences, Shahrekord, Iran

Abstract

Background: Workers in social service professions are the first candidates for job burnout. The researchers believe this is due to daily exposure to stressful situations and lack of positive conditions in the workplace. It seems that psychological empowerment of staff can affect their job burnout. This study aimed to investigate the relationship between psychological empowerment and job burnout in operational staff of emergency center. Methods: This was a descriptive correlational study. A total of 1100 operational staff of emergency center were evaluated, and of which, 285 persons were selected by simple random sampling method. Data were collected using Spritzer’s psychological empowerment and Maslach Burnout Inventory questionnaires. SPSS software, version 18, was used for data analysis along with descriptive analytical tests. Results: The findings of this study revealed that the majority of units (46%) were in intermediate level in terms of empowerment. Similarly, the majority of cases had intermediate level (77.5%), and a minor percentage (8.4%) had low levels of job burnout. Based on Pearson’s correlation test, there was a significant inverse correlation between psychological empowerment and job burnout. This inverse and significant relationship was also observed between the four components of psychological empowerment (competence, self-determination, impact, and meaning) and job burnout. Conclusions: According to the results of the study, policy makers and health planners can take some measures in enhancing psychological empowerment to prevent problems associated with job burnout, by identifying stressors and strategies to deal with them.

Keywords: Emergency staff, job burnout, psychological empowerment

Introduction

Nowadays, human resources, as the most valuable asset of organization, is facing numerous problems. Today, employees face with a steady rise in occupational duties. Followed by, the more time that the employees spend on working, imposes too much pressure on them. The prehospital-care workers should deal with stressful environments, such as places full of wounded and ill patients, and working in these circumstances is very difficult. These workers are often the first staff who appear in emergency situations, including heavy accidents, natural disasters, minor injuries, and diseases. Therefore, there will be more stress in human-centered occupations. Constant feeling of pressure has traumatic impacts which is often referred to as job burnout. It is observed that social service centers’ personnel that spend considerable time and effort to help others, experience job burnout easily. In other words, job burnout is one of the consequences of occupational stress which has negative impacts on patient care, physical-mental health of personnel, and medical expenses. Reducing quality of life, increasing dissatisfaction with the job, and causing adverse effects on family and individual life are among other consequences of job burnout. Therefore, it can be noted that occupational workout in medical personnel leads to reduced efficiency, psychophysical damage, and dissatisfaction with the services, and psychological empowerment of the employees can increase their job satisfaction and reduce their stress. Empowerment, is a constant process that in addition to strengthening people and giving freedom of action...
to them, enhances their performance to a desirable level. In fact, it converts physical labor to intellectual labor that if properly understood can yield in exploitation of intellectual resources.[11] Psychological empowerment is defined as a motivational concept which consisted of four dimensions of competence, self-determination (right to choose), impact, and meaning. These dimensions represent a personal orientation to the role of employees in organization.[12] Empowerment of health-care personnel, on a psychological dimension, changes their attitude and preconception regarding various individual and organizational issues and leads to different outcomes for them. In other words, psychologically, empowerment is a sort of motivation that improves their performance capability.[13] Besides, it can reduce the tensions in this stratum of society and effectively promote the quality and efficiency of their individual and organizational performances. On the other hand, by improving psychological empowerment, motivation, satisfaction, and work engagement can be observed in employees.[14] Based on the literature, social services’ personnel including health-care staff are among the first candidates for job burnout. Due to the impacts of psychological empowerment on job burnout, the present study aimed to investigate the relationship between psychological empowerment and job burnout in operational staff of emergency center.

**METHODS**

**Setting**

In this cross-sectional study, the sample size of 285 people was estimated with a confidence interval of 95% and sampling error of 5%. The study population included 1100 operational staff of emergency center that were selected and included in the study by simple random sampling method.

**Emergency medical service management in Iran**

The emergency medical service (EMS) in Iran, which is mainly based on a Basic Life Support system, is centralized under the Ministry of Health. Provincial centers are affiliated to the Medical Sciences and Health Services University in each province.[15] Access to EMS is possible through emergency number “115.”

Prehospital trauma care is provided by the local EMS center that is directly governed by the National EMS Center in Ministry of Health. The EMS center receives emergency calls each day. The operators, who answer the calls in the EMS central dispatch, are usually trained nurses. For each incoming call, the operator determines whether the situation needs the dispatch of an ambulance or not. Once the decision to dispatch an ambulance is made, the operator informs the ambulance dispatch site closest to the crash scene to help the victim. Moreover, there are a number of general physicians in the central dispatch who provide medical consultation for people who call EMS and also give medical advice to the technicians who treat victims at the crash scene or on the way to the hospital.[16]

**Inclusion criteria**

Persons who had at least 1 year of labor in prehospital emergency; a warrant of formal, by contract, by proposal, or corporative employment; and working in operational field as an emergency medical technician with degrees of diploma to professional doctorate were included in this study.

**Ethical statement**

After selecting research units that met the inclusion criteria, the researcher introduced himself and the aim of study to them. Then, written informed consents were provided; the participants were reassured that the information will remain confidential, and the questionnaire was given to them.

**Study design and data collection**

Data were collected using three-section questionnaire of demographic information, Spreitzer’s psychological empowerment, and Maslach Burnout Inventory. Psychological empowerment questionnaire has been designed in 1995 by Spreitzer.[17] This questionnaire consisted of 12 questions (3 questions in each dimension) in a Likert scale of 4 degrees (from 1 to 4) that the lowest and highest capability levels are shown with scores of 1 and 4, respectively. The score is a number between 1 and 4 and the fifth option is related to no impact.[18] Abdollahi and Naveh ebrahim utilized three dimensions of the tool (except self-determination) after determining its validity and reliability ($r = 0.81$) in Iran.[19] The tool was first used in Iran by Eskandari et al. after that the permission was granted by the creator and the tool was translated to Persian. They reported tool’s validity and reliability indices as 0.92 and 0.73, respectively.[20] In the present study, after giving the questionnaire to 30 research units, the questionnaire’s reliability, using Cronbach’s alpha was reported as follows: 0.83 for empowerment, 0.83 for sense of competence, 0.83 for independence, 0.83 for job impact, and 0.84 for job meaning. Maslach burnout questionnaire contains 22 questions that is divided into three dimensions of emotional exhaustion, depersonalization, and personal competence. In this questionnaire, 9 questions are related to emotional exhaustion, 5 questions to depersonalization, and 8 questions to sense of personal competence. The questionnaire has a seven-option rating scale, and the frequency of these feelings is measured by zero (never), 1 (several times a year), 2 (once a month), 3 (a few times a month), 4 (once a week), 5 (several times a week), and 6 (every day). High score in emotional exhaustion and depersonalization along with low score in personal competence demonstrates high levels of job burnout.[21] Maslach and Jackson calculated the reliability for each subscale as 0.9 for emotional exhaustion, 0.79 for depersonalization, and 0.71 for personal competence. Scores in emotional exhaustion dimension of 16 or less indicate low emotional exhaustion, scores of 17–26 suggest intermediate emotional exhaustion, and scores of 27 and above indicate high emotional exhaustion. In depersonalization dimension, scores of 6 or less specify
low level, score of 7–12 indicate intermediate level, and scores over 12 suggest high levels of depersonalization. In personal competence dimension, lower than 31 scores, scores of 32–38, and scores above 39 indicate low, intermediate, and high levels of personal competence, respectively.[22] Najafi and Forouzbakhsh calculated the reliability of the test as 0.86 using Cronbach’s alpha factor.[23] The formal and content validity of the tool were approved by ten professors in management, psychology, nursing, and emergency medicine. The reliability coefficient was calculated through Cronbach’s alpha. As a result, 0.8 was calculated for emotional exhaustion, 0.81 for depersonalization, 0.84 for personal competence, 0.88 for occupational involvement, and 0.83 for the entire questionnaire which suggest the reliability of the questionnaire and its dimensions.

Data analysis
Analysis of raw data was performed by SPSS package 18.0 for Windows (SPSS, Chicago, Illinois, USA), and through mean, standard deviation, independent t-test, and one-way analysis of variance.

Results
Since only male employees work in operational domain of emergency center, 100% of the research units in this study were male. The majority (44.5%) of the participants aged 31–40 years and had <5 years of work experience (34%). Other demographic data are presented in Table 1.

Based on the findings of this study, the average score of psychological empowerment of respondents was 46.43. The distribution of psychological empowerment among operational staff of emergency center revealed that most of them (46%) were in intermediate level in terms of empowerment [Table 2].

Besides, sense of competence dimension had higher mean (13.8%) than other dimensions. About 95.80% of participants reported their sense of competence as high. However, 53.30% of participants reported their self-determination (independence in activities) as intermediate and 46.70% of them reported high levels of self-determination. Similarly, 32.30% of the participants reported their impact as high and 58.90% of them reported their sense of competence as high. However, 53.30% of the participants reported their impact as high and 58.90% of them reported their sense of competence as high. The finding of this study demonstrated that most of the participants (77.5%) were in intermediate level, 14% in high level, and 8.4% in low levels of job burnout [Table 3].

The mean ± standard deviation of overall job burnout score was 20.76 ± 10.9 (intermediate) in emotional exhaustion, 20.29 ± 7.19 in depersonalization (intermediate), and 22.44 ± 5.35 (intermediate) in personal accomplishment dimensions. Similarly, in terms of intensity, the values were reported as 21.65 ± 7.36 (intermediate) in emotional exhaustion, 20.48 ± 7.36 (intermediate) in depersonalization, and 22.92 ± 5.42 (intermediate) in personal accomplishment. To assess the relationship between empowerment and job burnout, Pearson’s correlation coefficient test was used. The results showed a significant negative correlation between the aforementioned variables \( r = -0.850, P = 0.001 \). Similarly, significant negative correlations were found between occupational workload and the sense of competence \( r = -0.871 \), self-determination \( r = -0.766 \), impact \( r = -0.767 \), and meaning \( r = -0.631 \).

Discussion
The findings of this study about the distribution of psychological empowerment showed that the majority of operational staff (46%) in emergency center were in intermediate level in terms of empowerment. Knol and van Linge believe that empowering employees improve their job satisfaction, organizational commitment, innovation, and performance.[24]
In line with this study, Mohammadi and Roshanzadeh, in their study on association of psychological empowerment and mental tensions in nurses, reported psychological empowerment scores of research units as intermediate to high.\cite{25} Along with the results of this research, Abdesaiedi et al. reported in their study, that was conducted in centers for disaster management and medical emergencies, the intermediate levels of empowerment in these centers.\cite{26} Zhang and Bartol study on psychological empowerment is in line with the current research.\cite{27} On the other hand, the obtained results from this study suggest that most of operational staff of emergency center, in terms of frequency and intensity, suffer from intermediate levels of emotional exhaustion, personal accomplishment, depersonalization, and job involvement. Mosthaghe Esgh et al. found in their study on the correlation between job stress and job burnout in prehospital emergency staff that in overall level and job burnout dimensions, most of the research units were in intermediate levels.\cite{28} In line with the present study, two studies by Avazpour et al. reported job burnout as intermediate, in terms of intensity and frequency.\cite{29} Similarly, studies by Cicchitti et al. and Frana et al. suggested high rates of job burnout in prehospital personnel.\cite{30,31} Heidari et al. in their study on the relationship between job burnout and mental health in health staff reported the job burnout of the personnel in the dimension of lack of personal competence.\cite{32} The findings based on Pearson’s correlation coefficient showed that there was a significant negative relationship between psychological empowerment and job burnout. In this regard, O’Brien demonstrated that empowering employees is associated with increasing job satisfaction and reducing stress. Therefore, when the employees are satisfied with their jobs, they are less likely to experience occupational stress and job burnout.\cite{33} The results showed that there is an inverse significant correlation between psychological empowerment and job burnout, based on Pearson’s correlation coefficient. Mirkamali and Nastizaii found in their research that psychological empowerment indices are predictive in job satisfaction and organizational commitment. In other words, the more empowered the employees are, the more satisfied and committed they will be to their jobs. Therefore, it can be construed that people who are satisfied and committed to their jobs will not suffer from job burnout.\cite{34} Consistent with the present study, Ozruyt et al.’s study suggested that by increasing job satisfaction, job burnout can be prevented.\cite{35} The sense of competence with the job goes back to personality-job congruence. Experts believe that employees’ job congruence is effective on their job satisfaction and burnout.\cite{36} According to this study, there is an inverse correlation between independence and job burnout among employees. Independence means having the sense of authority and determination in works and the intrinsic tendency to change one’s own behavior.\cite{37} The studies by Jowett et al. and Havilyuk et al. revealed that by increasing autonomy (independence in affairs), job burnout decreases.\cite{38,39} The impact means that the individual has considerable influence on the strategic, administrative, or operational outcome of the organization in his/her work. Accomplished people have a sense of personal control over the results of their work. They believe that they can bring change by influencing the environment or work outcomes. This issue is consistent with our findings.\cite{40} Thomas and Velthouze suggested that high levels of meaningfulness increase job satisfaction by developing interest in people regarding their jobs. Since the results of this study indicated that there is a relationship between impact and meaning of the job with job burnout, it can be noted that the aforementioned studies are in congruence with the present study.\cite{41} Therefore, it can be said that the mentioned studies are consistent with the results of the present study.\cite{42} However, this study had some limitations. Personality traits, including psychological, social, and cultural backgrounds, individual differences, and psychological states while responding to the questionnaire are among uncontrollable variables in this study. On the other hand, data were collected by self-report; therefore, it may not reflect the correlations realistically.

**Conclusions**

Since the components of psychological empowerment are correlated with job burnout among operational staff of emergency center, it is recommended that health officials and stakeholders, such as the Ministry of Health and Medical Education, hold workshops on the sense of competence, self-determination, impact, and meaning for jobs to increase the capabilities of workers. Besides, by identifying stress sources and strategies to deal with them along with the development of educational plans, some measures should be taken regarding psychological empowerment to prevent the problems associated with job burnout.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**References**

1. Cicchitti C, Cannizzaro G, Rosi F, Maccaroni R, Menditto VG. Burnout syndrome in pre-hospital and hospital emergency. Cognitive study in two cohorts of nurses. Recent Prog Med 2014;105:275-80.
2. Lerner EB, Cone DC, Weinstein ES, Schwartz RB, Coule PL, Cronin M, et al. Mass casualty triage: An evaluation of the science and refinement of a national guideline. Disaster Med Public Health Prep 2011;5:129-37.
3. Essex B, Scott LB, Emergency Medical Services Personnel. Chronic stress and associated coping strategies among volunteer EMS personnel. Prehosp Emerg Care 2008;12:69-75.
4. Heidari M, Shalbazi S. Effect of training problem-solving skill on decision-making and critical thinking of personnel at medical emergencies. Int J Crit Illn Inj Sci 2016;6:182-7.
5. Heidari M, Ebrahim P. Examining the relationship between critical-thinking skills and decision-making ability of emergency medicine students. Indian J Crit Care Med 2016;20:581-6.
6. Heidari M, Hassan P, Ghodusi M. Investigation the correlation of burnout with mental health in medical staff of the Valyasr hospital in Borujen. J Hosp 2015;14:137-44.
7. Xie Z, Wang A, Chen B. Nurse burnout and its association with occupational stress in a cross-sectional study in Shanghai. J Adv Nurs 2011;67:1537-46.
8. Van Bogaert P, Kowalski C, Weeks SM, Van Heusden D, Clarke SP. The relationship between nurse practice environment, nurse work characteristics, burnout and job outcome and quality of nursing care: A cross-sectional survey. Int J Nurs Stud 2013;50:1667-77.
9. da Silva RM, Goulart CT, Lopes LFD, Serrano PM, Costa ALS, de Azevedo Guido L, et al. Hardy personality and burnout syndrome among nursing students in three brazilian universities—an analytic study. BMC Nurs 2014;13:9.
10. França SP, De Martino MM. Current correlations of stress and burnout in the work of pre-hospital nursing. J Nurs UFPE Online 2014;8:4221-9.
11. Wasihun M. Internal Service Climate and Psychological Empowerment Effect on Employees’ Job Satisfaction, The Case Study of Ethiopian Electric Power Corporation: Addis Ababa University; 2011.
12. Browning AM. A Quantitative Inquiry Into Moral Distress and Psychological Empowerment in Critical Care Nurses Caring for Adults During End of Life: University of San Diego; 2011.
13. Ebrahim H, Hosseinzadeh R, Zaghari Tefreshi M, Hosseinzadeh S, Asghari Jafarabadi M. Clinical competency and psychological empowerment of nurses and their correlation with demographic characteristics. J Health Promot Manage 2013;2:30-8.
14. Wagner JJ, Cummings G, Smith DL, Olson J, Anderson L, Warren S, et al. The relationship between structural and psychological empowerment for nurses: A systematic review. J Nurs Manag 2010;18:448-62.
15. Roudsari BS, Nathens AB, Arreola‑Risa C, Cameron P, Civil I, Ebrahimi H, Hosseinzadeh R, Zaghari Tefreshi M, Hosseinzadeh S, Asghari Jafarabadi M. Clinical competency and psychological empowerment of nurses and their correlation with demographic characteristics. J Health Promot Manage 2013;2:30-8.
16. Haghparast‑Bidgoli H, Hasselberg M, Khankeh H, Khorasani‑Zavareh D, Johansson E. Barriers and facilitators to provide effective pre-hospital trauma care for road traffic injury victims in Iran: A grounded theory approach. BMC Emerg Med 2010;10:20.
17. Spreitzer GM. Psychological empowerment in the workplace. Am J Community Psychol 1995;23:601‑29.
18. Spreitzer GM. An empirical test of a comprehensive model of intrapersonal empowerment in the workplace. Am J Community Psychol 1995;23:601‑29.
19. Spreitzer GM. Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. Acad Manage Rev 1990;15:666-81.