Original Article

Nursing Section

Psychological Empowerment and its Associated Factors among Operational Staff of Tehran Emergency Center

ARAM GHANIYOUN[1], MOHAMMAD HEIDARI[2], KHOSRO SHAKERI[3]

ABSTRACT

Introduction: Emergency medical personnel often face chronic stress which, in many situations causes psychological problems. In this regard, psychological empowerment can reduce psychological tensions in health care environment through increasing efficiency and motivation.

Aim: To investigate psychological empowerment and its related factors in operational staff of Tehran Emergency Center (TEC).

Materials and Methods: In this analytical study, a total of 285 people were selected by simple sampling method from 1100 operational staff of TEC. Data was collected using demographic information and Spritzer's psychological empowerment questionnaire. SPSS/19 software and descriptive analytical tests were used for data analysis.

Results: The findings suggested that most of the participants (46%) were in intermediate level in terms of psychological empowerment, and the mean score of psychological empowerment in participants was 46.43. A significant correlation was found between the dimension of self-determination of psychological empowerment and work experience ($p<0.05$).

Conclusion: Owing to the critical duties of medical emergency centers in maintaining and improving public health, and based on the findings of this study, it is recommended that the authorities should pay more attention to the capabilities of the staff while giving responsibilities to them and to conduct effective planning in this regard.

Keywords: Emergency medical services, Public health, Psychological stresses

INTRODUCTION

Psychological empowerment is a process of enhancing intrinsic occupational motivation that includes four cognitive fields-feeling of effectiveness, meaningfulness, competency and the right of choice [1], and it is interpreted as an intrinsic psychological and motivational state. The employees have a sense of control over their work and this feeling, arising from intrinsic motivation, makes them an active member of the organization. In other words, as they improve their self-esteem, they dominate their sense of frustration and weakness and do their activities with more responsibility and freedom [2,3]. Empowerment is an organizational strategy that grants greater responsibility to employees for decision-making and enhance their contribution in managing organizational processes [4]. Empowered employees, individually and collectively, are responsible about their work and its results, and have more job satisfaction compared to non-empowered employees [5]. Psychological empowerment approach focuses on employees' perception of empowerment and elaborates how empowerment is perceived by staff and their subordinates. Empowerment can lead to attitudinal (job satisfaction and reducing stress) and behavioral outcomes for people regarding their occupation [6]. Accidents are one of the major problems of public health around the world.

Several organizations have been found to protect public health by performing their duties, each of them fulfils their crucial responsibilities. In this regard, medical emergency management center can be mentioned which provides health care for patients in emergency situations [7]. Medical emergency staff often faces chronic stress, such as exposure to injury, lack of consciousness or even death of the patient. Many of these situations, often are a source of stress for emergency staff [8,9]. In other words, working environment is associated with environmental excitement accompanied by negative stress for emergency staff who should attend the accident site, and if the service location be in a remote area, it will become an anxiety factor which is often associated with mental and physical excitement for the employees [10-12]. However, it seems that psychological empowerment in mental dimension can cause a change in the attitudes and prejudices of the health personnel and lead to different consequences. In other words, psychological empowerment, as a motivator factor, increase their performance capacity [13]. Empowerment of emergency care personnel helps them to use their maximum capacity in reaching the goals of health centers [14]. Therefore, considering the importance of evaluating psychological empowerment in operational staff of emergency center, as the pivotal parts of health services, and with respect to limited studies in this regard, this study was conducted to assess psychological empowerment and its related factors in operational staff of TEC.

MATERIALS AND METHODS

This analytical study was conducted to determine psychological empowerment and its associated factors in operational staff of TEC. The sample size was estimated as 285, with a confidence interval of 95% and a sampling error of 5%. The study population was 1100 operational staff of TEC in November 2014 to July 2015. The participants were selected and included in the study from this population by simple random sampling method.

The inclusion criteria were as follows: at least one year of working experience in pre-hospital emergency; a warrant of formal, by contract, by proposal, or corporative employment; and working in operational field as emergency medical technician with degrees from diploma to professional doctorate. After selecting the eligible subjects, and introduction of the researcher, the aim of the study was elucidated by the investigator. The questionnaire was given to the participants after providing the written informed consent,

and reassuring them that their information will remain confidential. Data was collected using two-part questionnaire of demographic information and Spreitzer's psychological empowerment. Psychological empowerment questionnaire is developed by Spreitzer [15]. This questionnaire consists of 12 questions (3 questions in each dimension) in a Likert scale of 4 degrees (from 1 to 4) that the lowest level of capability is demonstrated with score of 1 and highest level of capability is represented with a score of 4. The score is a number between 1 to 4, while the fifth choice refers to "I had no exposure" [16]. The questionnaire 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 [17] . In the present study, the questionnaire's (Persian version) reliability by alpha Cronbach's method, after giving the questionnaire to 30 participants, 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. Analysis of raw data was conducted by SPSS/19 software, and descriptive and inferential tests.

RESULTS

The mean psychological empowerment score of participants was 46.43. The distribution of psychological empowerment amongst operational staff of TEC demonstrated that the majority of them (46%) were in medium level in terms of empowerment [Table/Fig-1]. Besides, the Frequency of the dimensions (Sense of competence, Self-determination and Occupation impact) is shown in [Table/Fig-2].

Since only male employees work in operational domain of TEC, all the participants in this study were male. The majority of the participants (44.5%) aged 31-40 years and had less than 5 years of work experience (34%). Other demographic data are presented in [Table/Fig-3].

Based on the findings of this study, the mean psychological empowerment score of participants was 46.43. In evaluation of the association of psychological empowerment and demographic parameters in operational staff of TEC, the findings indicated that the age (p=0.35), marital status (p=0.42), and education level (p=0.52) of participants have no significant relationship with their score of empowerment perception in dimensions of meaning, competence, independence, and overall psychological empowerment. Besides, no significant relationship was noted between work experience and score of psychological empowerment in dimensions of meaning, competence, and psychological empowerment overall. However, in independence dimension, by increasing work experience of staff to more than 10 years, the empowerment perception score increased (p=<0.001) [Table/Fig-4].

Index Level	N	%	Valid percentage	Cumulative percentage
Low (12-28)	100	35.1	35.1	35.1
Moderate (29-44)	131	46	46	81.1
High (45-60)	54	18.9	18.9	100
Total	285	100	100	-

[Table/Fig-1]: Frequency of psychological empowerment.

Dimensions	Level	F	%	Mean
Sense of competence	Low	12	4.2	13.8
	Moderate	273	95.8	
	Total	285	100	
Self-determination	Low	152	53.3	10.87
	Moderate	133	46.7	
	Total	285	100	
Occupation impact	Low	21	7.4	9.86
	Moderate	172	60.4	
	High	92	32.3	
	Total	285	100	

[Table/Fig-2]: Frequency of sense of competence, self-determination and occupation impact in operational staff of TEC.

Variables		Frequency N %
Marital status	Single	82(28.8)
	Married	203(71.2)
Age (years)	20-30	94(33)
	31-40	127(44.5)
	41-54	64(22.5)
Level of Education	Diploma	51(17.9)
	Associate	143(50.2)
	Bachelor	87(30.5)
	Master	4(1.4)
Work experience (years)	5>	97(34)
	5-10	90(31.6)
	10-15	69(24.2)
	15<	29(10.2)

[Table/Fig-3]: Sample characteristics (n=285).

Variable	Mean	SD	p-value
Age	1.43	0.535	0.35
Education level	1.35	0.682	0.52
Work experience	1.27	0.713	<0.001
Marital status	1.32	0.615	0.42

[Table/Fig-4]: The relationship between psychological empowerment scores with demographic characteristics.
* One-way ANOVA test was used to calculate the p-value

DISCUSSION

In the present study, the majority of the employees (46%) had medium levels of empowerment indices. Knol and Van Linge believe that empowering employees improves their job satisfaction, organizational commitment, innovation, and performance [18]. Flesner et al., in their research results, stated that in clinical settings care is of higher importance, the caregiver should feel more empowered due to the conditions [19]. In line with this study, Abedsaeedi et al., reported empowerment environment to be in intermediate level, in their study that was conducted in emergency medical centers [20]. The results of previous studies on the influence of psychological empowerment is consistent with present study [21]. However, Nasiripour AA et al., in their study on psychological conditions in hospitals in Qom province, stated that in terms of empowerment components, hospitals' staff were in good condition with a mean of 3.89 [22].

There was no significant correlation between age, marital status, and education level with scores of psychological empowerment's perception in dimensions of meaning, competence, independence, impact, and overall empowerment. Similar to our findings, no significant relationship was noted between psychological empowerment and individual variables in Spence Laschinger et al., study [23]. Laschinger et al., also found the relationship between psychological empowerment and years of service to be significant. They declare that experience factor plays an important role in empowering people with the passage of time [23,24]. Based on Spreitzer's point of view, work experience can be considered a main factor that affects employees' empowerment. The employees with more working experience, can better adjust themselves to different working conditions, since they benefit from

past experience [25]. Considering the independence dimension of psychological empowerment, it may be noted that the years of service in emergency medicine can improve the empowerment level in independence dimension. Emergency medicine staff, can acquire the required independence in the workplace, since they face different conditions and gain work experience in this regard [17]. In the present study, the sense of competence dimension had more mean (13.8%) compared to other dimensions. In other words, medical emergency staff have robust sense of competence along with skills and abilities to perform their duties, which is in line with Spence Laschinger et al., and Eskandari et al., studies [17,23]. However, this study was conducted only in a special place in Iran which can be regarded as a limitation. It is recommended that qualitative research be conducted in order to further evaluate the dimensions of empowerment in Iran. Besides, personality characteristics, mental, social, cultural and individual backgrounds, individual disparities and psychological states while answering the questionnaire were amongst unmanageable variables in this study. On the other hand, since data was collected by self-report method, it may not reflect the relationship between variables in a realistic fashion.

CONCLUSION

The critical roles of medical emergency centers in maintaining and improving public health along with rapid changes in healthcare needs of society, necessitates that emergency service providers update their abilities on a regular basis. Thus, it is recommended that the authorities pay more attention towards the employees' abilities while assigning responsibilities to them, and increase their efforts along with proper planning to create a favourable atmosphere of empowerment.

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PARTICULARS OF CONTRIBUTORS:
1. PhD Student in Governmental Management, Department of Management, College of Human Science, Saveh Branch, Islamic Azad University, Saveh, Iran.
2. Lecturer, Department of Medical and Surgical School of Nursing and Midwifery, Shahrekord University of Medical Sciences, Shahrekord, Iran.
3. PhD Candidate in Health in Emergency and Disaster, Health Management and Economics Research Center, Iran University of Medical Sciences, Tehran, Iran.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Mohammad Heidari,
Ayatollah Kashani Blvd, Shahrekord University of Medical Sciences, Shahrekord, Iran.
E-mail: mo.heydari@yahoo.com; heidari@skums.ac.ir

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