Comparison of relationship between sensation seeking with job stress in emergency medicine workers and non emergency medicine workers

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Abstract: Background: Job environment is a strong stimulus for created of emotions and there are several stressful situations which could causes dissatisfaction, low work performance, quit or job-changing .The purpose of this study is to determine the relationship between sensation seeking with job stress among emergency medicine workers and non emergency medicine workers. **Methods:** In this cross-sectional study, 60 emergency medicine workers chosen the census method and 60 non emergency medicine workers chosen the convenience sampling method(in general 120 cases) , in border cities of Kermanshah University of Medical Sciences ,were selected for study. Data were collected by demographic questionnaire and valid and reliable questionnaires of job stress and sensation seeking. Data were analyzed using descriptive and analytical (Pearson correlation test) statistics. **Results:** The most rate of job stress among emergency medicine workers was in the level of moderate(46.6 percent) and in the non emergency medicine workers was the low level(56/4 percent) and the most rate of sensation seeking among emergency medicine workers was in the level of lower the moderate(35 percent) and in the non emergency medicine workers was lower the moderate level(40 percent) . The scores of to be thrilled, to be experienced, to be diversity, to be blues and to be scope of inhibition were 0.443,0.463,0. 444, 0.710, 0.701 in the emergency medicine workers and in the non emergency medicine workers were 0.428,0.439,0.418,0.728,0.742 .In two groups, there were indirect relationship between job stress with to be thrilled, to be experienced and to be diversity of the variable of sensation seeking and there was a direct relationship between to be blues and to be scope of inhibition of the variable of sensation seeking. **Conclusion:** Results can be regarded managers to decrease of losses due to job stress and increase productivity, especially in emergency medicine workers across the country.
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1. Introduction

Sensation seeking is characterized by a tendency to search for new fresh, complex and serious sensations and experiences. And describe willingness to take physical and social risks for the experience. Sensation seeking is one of the basic needs of human life and can affect all stages of human life (1). Vital service for professionals such as firefighters or emergency medical personnel that the incident appeared to be in place caused environmental emotions and negative stress. If the service location is in a remote area, for it causes mutability along with psychological and physical excitement for staff (2, 3, 4). Enjezab and cooperative found a significant positive association between Job stress and related psychological and behavioral responses in obstetrics group (5). Research has shown a constant encounter with a patient and a health risk to humans, clinical processes for patient and dealing with dying patients, lack of adequate equipment or flaws in their work, dealing with emergency and unpredictable situations, excessive noise in the workplace and shifts in the circulation are among the professional stressors characters that can reduce the quality of health care, reduce sound and timely decisions, skills, ability and commitment of the staff and also provide dissatisfaction, feelings of inadequacy, depression, loss of job, dislike, Fatigue, work absenteeism, sick leave late from work and consequently, all these factors can threaten the lives of aid-seekers and the quality of services provided(6,7,8,9). Job stress and the frequency of events with the same job duties can also be effective in increasing employee's stress. Researchers have found that if the job is attractive to employees, despite of the fact that the relevant job defined as stressful people are less affected by stress

(10). The relationship between job stress and our country's nurses mental, have been reported occupational stress in nurses were respectively 1.7%, 46.7%, and 50.7%, at high, medium and low levels (11). Stress occurs when the body is in constant change, to remain viable. Such changes leaves in physical and emotional effects and can create positive or negative feelings, if stress is positive; the person is forced to act. In addition, social and environmental conditions are the main factors causing stress or tension, which endanger the mental health (12). In a study to examine the relationship between job stress and occupational incidents, it was found that the lowest mean score of job stress is related to relationships with colleagues and in this study 88% of people had a high stress and only 2% had a low stress (13). Job Stress occurs when our expectations of one's are more than powers and abilities. The job stress poses problems for the individual, also has undesirable consequences for the offices and organization. In California, the stress is the leading cause of disability and annual economic losses of several billion dollars (14).

Given the importance of the services provided by emergency medical personnel That require high levels of mental health and moderate levels of sensation and proper exposure to a variety of occupational stress, this study was conducted to determine the relationship between job stress, sensation seeking emergency medical personnel hospitals and other emergency personnel were on the border cities of Kermanshah.

2. Materials and Method

In this study, 120 cases were evaluated. 60 of those working in emergency medicine and other 60 cases were selected from medical centers of the border city of Kermanshah (Pave, Javanrood, Qasreshirin, Sarpolzahab and Gilangharb). The sample in this study was all nurses and technicians working in these centers. Emergency medical personnel through census and other medical staff were selected by random sampling method.

Two questionnaires were used to collect data. A questionnaire to determine of the demographic variables was used. Another questionnaire was with 28 questions to assess the level of job stress in the form of low, medium and high and sensation Seeking Scale of Zuckerman Rayform V. Using test-retest reliability of the questionnaire of Aletmayer stress is obtained 86% in Iran (11). In this study, the reliability of this questionnaire was 82%. Sensation scale was used in this study are summarized in the fourth form Zuckerman Sensation Seeking Scale (1978). A 40-point questionnaire with two options, with total score and 4 points for subscales, each subscale has 10 articles.

Overall 40-point scale in the fifth form, have good internal reliability in the range of 84% to 87%. And for the subscale of it, the trust built includes: Adventure (80%), sensation seeking (87%), experience seeking (80%), prevent deforestation (85%) and sensitivity to the monotony and boredom were 88% (1). Also, the reliability of the questionnaire using the Koder Richardson formula is calculated 85% (15). In the present study, using Cronbach's alpha was set to 86%. Finally data were analyzed by Pearson correlation test and Z- score in SPSS software version 15 cases. Ethical considerations were observed in this study. Including obtaining the written consent of all participants, ensuring their right to withdraw from the study at any stage of the investigation and all information will be kept confidential at all stages of the research and ethical considerations were observed.

3. Result

Data analysis showed that all subjects in both groups were men**.** Most of the staff in both emergency medicine and the medical staff involved in the age group of 25-35 years, , 33.3% and 31.7% respectively**.** Age difference between the two groups statistically was not significant. The 73.3% of employees of emergency medicine and 70% of employee medical staff were married. Highest frequency in the range of 11-20 years of experience in emergency medicine staff (33.3%) and in medical staff highest frequency was in less than one year of experience (31.6%).Differences between two groups in the number of children and experience of work was significant**.** The majority of medical staff and emergency medical personnel were bachelor (table1).

Table 1- Demographic characteristics of emergency medical personnel in border cities and employees of Kermanshah University of Medical Sciences

variables	mergency medical personnel	Non-emergency employees	P value
Age			P = 0.25
Less than25	17(28.3%)	16(26.7%)	
25-35	20(33.3%)	19(31.7%)	
36-46	19(31.7%)	17(21.3%)	
More than47	4(6.7%)	4(6.7%)	
Marital status			P = 0.175
Married	16(26.7%)	18(30%)	

single	44(73.3%)	42(70%)	
Number of Children			P = 0.001
Non	18(40%)	16(38%)	
1	12(25%)	18(42.8%)	
2	9(23.3%)	5(12%)	
3&more	5(11.7%)	3(7.2%)	
Work experience			P = 0.024
Less than1	15(25%)	19(31.6%)	
1-10	18(30%)	14(23.4%)	
11-20	20(33.3%)	18(30%)	
21-30	7(11.7%)	9(15%)	
Education			P = 0.315
Under diploma	9(15%)	11(18.4%)	
Diploma	6(10%)	10(16.7%)	
Associate degree	14(23.3%)	12(20%)	
Bachelor	28(46.7%)	20(33.3%)	
Masters and Above	3(%)	7(11.6%)	

Analysis of the data showed that the maximum of emergency medical personnel stress level (46.6%) were in the moderate group and the majority of medical staff stress levels (56.4%) were in the low range. The difference was significant at all levels (table 2). Most of sensation in the emergency medicine staff was 35% at below moderate level and in the medical staff was 40% at low level. The difference was significant in the low and moderate levels And the rest were not significant (table3).

Table 2- Job stress of emergency medical personnel in border cities and employees of Kermanshah University of Medical Sciences

personnel / Stress	emergency medical personnel Frequency (%)	Non-emergency employees Frequency (%)	P value
Low	12(20%)	34(56.4%)	P = 0.002
Moderate	28(46.6%)	18(30%)	P = 0.012
High	20(33.4%)	8(13.6%)	P = 0.00

Table 3- Sensation seeking of emergency medical personnel in border cities and employees of Kermanshah University of Medical Sciences

personnel / Sensation seeking	emergency medical personnel Frequency (%)	Non-emergency employees Frequency (%)	P value
Low	10(16.7%)	24(40%)	P = 0.002
Lower than moderate	21(35%)	19(31.7%)	P = 0.165
Moderate	17(28.3%)	11(18.3%)	P = 0.00
Higher than moderate	10(16.7%)	6(10%)	P = 0.281
High	2(3.3%)	0(0%)	P = 0.152

Analysis of the data showed that Scores in five dimensions thrill seeking, experience seeking, boredom susceptibility, variety seeking and Escape from inhibition have a little different in the two groups(table 4). Correlation coefficient between the two groups was similar in the five dimensions. Correlation between the original variables, sensation seeking and job stress in emergency 0.165 and the medical staff in 0.184, respectively (table 5).

Table 4- correlation between sensation seeking components and job stress in emergency personnel of Kermanshah University of Medical Sciences

component	Escape from inhibition	Seeking Diversity	Boredom susceptibility	Seeking experienced	sensation seeking
The correlation coefficient	0.051	- 0.049	0.101	- 0.097	- 0.101
score	0.701	0.710	0.444	0.463	0.443

Table 5- Correlation between sensation seeking components and job stress in non-emergency personnel of Kermanshah University of Medical Sciences

component	Escape from inhibition	Seeking Diversity	Boredom susceptibility	Seeking experienced	sensation seeking
The correlation coefficient	0.051	- 0.049	0.101	- 0.097	- 0.101
score	0.742	0.728	0.418	0.439	0.428

4. Discussion

The findings of the present study indicate various degrees of stress among emergency medical workers and employed at other medical centers.

The results showed that the majority of people in the emergency department have experienced the average level of stress and group care workers at least. In the study that conducted by Enjezab and colleagues, most cases (73.1%) had experienced moderate stress (5). In a study of ICU nurses in hospitals of Tehran University of Medical Sciences, the physical environment was reported the main source of stress (3/81 percent) (16). One of the most effective programs in reducing job stress is employee participation in decision-making that creates a two-way relationship between supervisors and it's Subaltern. Structures that give employees more decision-making power, creating less stress, and foster a sense of autonomy, responsibility, reliability and sense of control in the employees'. Follow the directions of emergency medicine at the predetermined, the area of decision-making power will be less than the creativity. In the study of job stress and its related factors among nurses, major source of stress in their workload and responsibilities have been noted (17). The number of Appropriate and inappropriate telephone calls provides for employees of the emergency medical facility a range of stress and excitement (intentionally or unintentionally). One study showed that average of job stress score in nurses' was175.2 (Moderate) (18). Stress as an important component of health care systems has much effect on the quality of clinical care. For this reason emergency medical attention to psychological issues is the most important tasks of senior medical staff, (19).

One of the factors affecting the performance of people in organizations is stress of untrained individuals in the organization that has put many people's health at risk**.** Emotion depends on situation and workplace (20). In attention to the appropriate level of education and emergency medical center' annual exams in the province, this problem was not so suffering.

In this study, the highest level of sensation was reported in the emergency department staff at below moderate and the medical staff was low. There was inversely relationship between job stress and emotional seeking components, experience and seeking diversity. There was a direct relationship between job stress and boredom susceptibility, and escape from inhibition. A significant relationship between job stress and sensation seeking in this study, suggests that the increasing stress in workplace and its effects on various components of sensation seeking can lead to reduction of job performance of personnel in emergency medicine and other emergency medical centers. Results of other studies, has been shown a significant relationship between mental health and job stress among nurses (11). Other researchers in investigating relationship between job stress and burnout among nurses had shown between job stress and burnout there was a positive relationship (21). Research conducted showed for the presence of high physical and psychological stress in nurses has led to severe clashes between employees and health problems of their inability to perform duties, vulnerabilities in professional communications, frustration and ultimately the quality of care provided and they will leave the profession (22). Results of a study showed that people with high levels of sensation seeking, and risky and exciting features consider the repetitive environments boring and try to find a stimulant and newer excitement with unclear results (23). In fact, due to the various activities to be repeated several times, for the thrill of it, does not make the previous trigger level, this people are looking for new opportunities to experience (24). Other reviews have shown a significant positive correlation between extroversion the characteristics of sensation seeking, Type A behavior pattern. The people are vibrant and are a unique adventure, prefer to experiment excitement in adventurous environment. However, differences in the levels of sensation seeking and career for someone who is able to adapt itself with monotonous tasks, creates problems (25 and 26).

This study showed that job stress has increased with increasing number of children in the emergency department staff. It seems that this is due to having more responsibilities and pressures of work. Significant relationship was observed between place of work and job stress in the emergency department.

5. Conclusion

The results of this study showed that emergency medical personnel have had some degree of stress. It

requires more attention and planning to reduce environmental stress to prevent burnout**.** The results could be of interest to those involved in the reduction of losses due to job stress and increasing labor productivity, especially in emergency medicine throughout the country. Understanding of workplace stressors and implementing measures to improve the working environment training and stress management techniques' including ways to prevent health professional who can help this group of workers.

Therefore, managers of emergency medicine and other medical centers should examine more closely causes through structured research, effects of stress symptoms and the various components that interact sensation seeking, in this group of employees. Considering the known role of demographic characteristics on job stress, more comprehensive research in this area is recommended. During literature review had shown that, no study investigated on the relationship between job stress and sensation seeking emergency medical personnel. This is a limitation in this study in literature review. It is recommended that in the future studies be used to employee participation in emergency medicine and other emergency workers in health centers in other border provinces.

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