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Investigating the Relationship between the Intensity of Depression, Anxiety, and Stress with the State of Job Burnout in Emergency Department Employees of Medical Education Centers in Urmia

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Abstract

Background: *Depression, anxiety, and stress are factors affecting people's quality of life. Quality of life also affects people's social status (occupation), and this study aimed to investigate the relationship between the severity of depression, anxiety, and stress with job burnout in emergency department employees of Urmia medical education centers.*

Methods: *This descriptive-analytical study was conducted on the personnel of the emergency department of four medical educational hospitals in Urmia using available sampling method. The data was collected using a demographic information questionnaire, a depression, anxiety and stress questionnaire, and a job burnout questionnaire. After collecting the data, it was entered into SPSS 18 and analyzed with descriptive and analytical statistics.*

Results: *In this study, the results showed that out of 100 participants in the study, 48% were men and the average age of the participants was 29.72±6.22 years. In job burnout, the highest score related to emotional burnout was 28±9 and the lowest score was 14±6 for depersonalization, and in anxiety, depression, and stress, the highest score was 14.1±9 for stress and the lowest score was 7±5 for anxiety. There was no correlation between job burnout and depression, anxiety, and stress.*

Conclusions: *Emergency personnel are exposed to burnout, depression, anxiety, and stress. Therefore, it is necessary to know the sources, and on the other hand, it is recommended to create favorable and suitable conditions for personnel by holding appropriate educational-therapeutic courses.*

Keywords: Depression, Stress, Anxiety, Burnout, Emergency.
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Introduction

Job burnout or dysfunction can be defined in terms of the breakdown of mental powers that is sometimes associated with depression and usually comes from trying to help patients or people under pressure. Job burnout is a symptom of emotional exhaustion after being in a difficult work position for a long time. This syndrome is a state in which the power and ability of people are low and their desire and desire to do work and activities decreases. Job burnout is a consequence of constant and frequent pressure. In this way, a person feels pressure in his work environment due to internal and external factors, and this pressure is continuous and several times and finally turns into a feeling of exhaustion. Job burnout is defined as a lack of energy and vitality, and a person suffering from job burnout shows a dull feeling toward performing work behavior.[1]

In the meantime, a person's job can play a more colorful role in causing stress, anxiety, and depression than the other mentioned cases, according to the work environment, and the type of activity. The medical staff, especially the active group in the emergency departments of hospitals and medical centers due to the prevailing conditions in the work environment and communication with critically ill patients, are exposed to various stresses such as insomnia, depression, anxiety, and stress caused by losing patients or communicating with their companions.[2] A sign of stress and anxiety is an unpleasant feeling that people sometimes experience. This feeling is actually a reaction, which is created in a person in relation to the events and frightening conditions of life. Therefore, this feeling has both a perceptual aspect and a physiological reaction to it.[3]

Anxiety and stress are the major problems in the daily life of hospital emergency personnel. Experiencing these stress-causing factors and the resulting complications can cause a decrease in the quality of work and the desire not to continue the service and even make other dangerous decisions for the person. Job burnout has a great impact on mental factors such as depression, anxiety, and stress. Jobs with high stress also have more burnout. All these factors will affect the job performance as well as the personal life of employees.[4,5]

Today, emotional and mental disorders have gained more prevalence and attention than in the past. Because being in a difficult work environment and accompanying the high speed of science and technology daily puts a lot of stress on humans.[6] Job burnout and fatigue are factors affecting human mental states. Also, mental disorders such as depression, stress, and anxiety affect individual and social performance, including people's jobs.[7] Besides, depression is a common and serious disease that negatively affects a person's feelings, and way of thinking and functioning, and can cause feelings of discomfort,

anxiety, emptiness, hopelessness, helplessness, worthlessness, shame, or restlessness.[8]

Anxiety things such as people's worry about work, rapid advances in science and technology, and worry about information becoming obsolete, cause tensions, emotions, and everyday worries that create states of nervous and mental pressure called stress in people.[9] Some jobs have more physical and mental involvement, which leads to an increase in the amount of stress in people. If the symptoms of stress and anxiety are long, it causes disruption in a person's life. Among the factors that cause and intensify stress and anxiety, we can refer to various things such as hereditary and genetic factors, children's accidents, biological and physical factors, and environmental and social factors.[10] Today, stress and job satisfaction in the workplace are important topics of ergonomics. This issue is more apparent in jobs such as health workers who deal with human lives.[11]

According to a similar study that was conducted in Iran in 2013 to evaluate burnout in three dimensions based on the Maslach questionnaire among residents and emergency room doctors, the average burnout scores was 22.94 (moderate) for emotional exhaustion, 9.3 for depersonalization (moderate to high), and 37.47 for personal success (moderate to high). In general, the level of burnout in emergency department employees in Iran is significantly high.[12] As mentioned, the impact of culture and race and the lack of a suitable criterion for evaluating job burnout and mental states of emergency department employees in Urmia hospitals are needed so that this study can be carried out in different places.

So the officials can make correct and logical decisions for the way the employees of their region work with a better perspective and provide suggested solutions to improve the conditions. This study aimed to investigate the relationship between the severity of depression, anxiety, and stress with the state of job burnout in emergency department employees of Urmia medical training centers.

Materials and Methods

This cross-sectional study was conducted on 100 emergency department personnel of Urmia medical training centers in 2022, and the sample size was obtained according to similar studies.[13] To collect data, a series of entry and exit criteria were placed at the beginning of the work. The inclusion criteria were employed in the emergency department for at least 6 months, no history of psychiatric disorders, and the use of psychoactive drugs. The exclusion criteria were informed consent to participate in the study. Three questionnaires were used to collect data. The first questionnaire included demographic information (age, gender, literacy level, employment history, and marital status). The second questionnaire was the job burnout questionnaire of Maslach et al. This questionnaire includes three sections of emotional burnout (9 questions), depersonalization (5 questions), and a sense of personal success (8 questions), which includes 22 questions in general. The questions are designed in the form of a 5-point Likert scale (very little to very much) from one to five points. The overall score of the questionnaire is 22 to130, and a higher score indicates a more severe state of exhaustion.[14] This questionnaire was previously translated into Farsi and in this study, its translated version was used.[15] The validity and reliability of the translated version of this questionnaire have also been measured and confirmed in previous studies. Cronbach's alpha coefficient of 0.84 for emotional exhaustion, 0.75 for depersonalization, and 0.74 for the feeling of personal success were calculated and confirmed.[16] The third questionnaire was the measurement of depression, anxiety, and stress DASS-21, which is a tool for measurement by Loyband (1995) whose validity and reliability have already been tested in Iran. Cronbach's alpha coefficient was acceptable for anxiety (0.79), stress (0.91), and depression (0.93). Test-retest reliability has been reported acceptable for DASS-21 and its three dimensions.[17] DASS-21 questionnaire is designed with 21 items and three subscales (7 items for each subscale). This tool measures the prevalence of signs and symptoms of depression, anxiety, and stress over the past few weeks, the items of this scale are rated based on a four-point Likert scale, where the score of each item ranges from 0 (does not apply to me at all) to 3 (applies to me most of the time). The scores of the subscales were calculated by summing the scores of each item, and the maximum total for each subscale is 21. Higher scores indicate higher psychological distress. After collecting the data, it was entered into SPSS 18 and analyzed with descriptive (mean and standard deviation) and analytical (independent t-test, ANOVA, and chi-square) statistics.

Results

The results showed that 52 of the 100 personnel participating in the study (52%) were women, and 57 (57%) were between 26-30 years old, and the average age of the participants was 29.72±6.22 years. Most of the participants (51%) had a bachelor's degree, 57 were single (57%), and 71% had a work experience of less than 5 years. Also, burnout has a significant relationship with all demographic variables, except age. Also, anxiety, depression, and stress had a significant relationship with the variables of age, education level, and work experience, and had no significant relationship with the rest of the variables (Table 1).

In the burnout questionnaire, the highest score related to the emotional exhaustion section was 28±9, and the lowest score was 14±6 for depersonalization. In the stress, depression, and anxiety questionnaire, the highest score in the stress section was 14.1±9, and the lowest score in the anxiety section was 7±5. (Table 2).

Finally, the results showed that there is no significant relationship between job burnout and stress, and also between anxiety and depression (Pvalue=0.94, r=-0.007). (Figure 1).

Table 1. Demographic characteristics of people participating in the study

Variable	Subgroup	Frequency	Percentage	Maslach	DASS-21
Gender	Man	48	48	<0.001	0.64
	Female	52	52		
Age	20-25	13	13	0.34	<0.001
	26-30	57	57		
	31-35	16	16		
	Above 35	14	14		
Marital status	Married	43	43	<0.001	0.260
	Single	57	57		
Level of education	Ph.D.	35	35	<0.001	<0.001
	Bachelor	51	51		
	Master	8	8		
	Associate degree	4	4		
	Diploma	2	2		
Work experience (years)	Below 5	71	71	<0.001	<0.001
	10-5	17	17		
	11-15	9	9		
	Above 15	3	3		

Table 2. The overall score of the two questionnaires in the participants

Variable	Subgroup	Mean±standard deviation	Minimum	Maximum
Maslach	Emotional exhaustion	9±28	5	47
	Depersonalization	6±14	0	29
	A sense of personal accomplishment	9±21	0	46
DASS-21	Depression	8±8.08	0	40
	Anxiety	7±5	0	36
	Stress	9±14.1	0	40
	Total	21±27	0	116

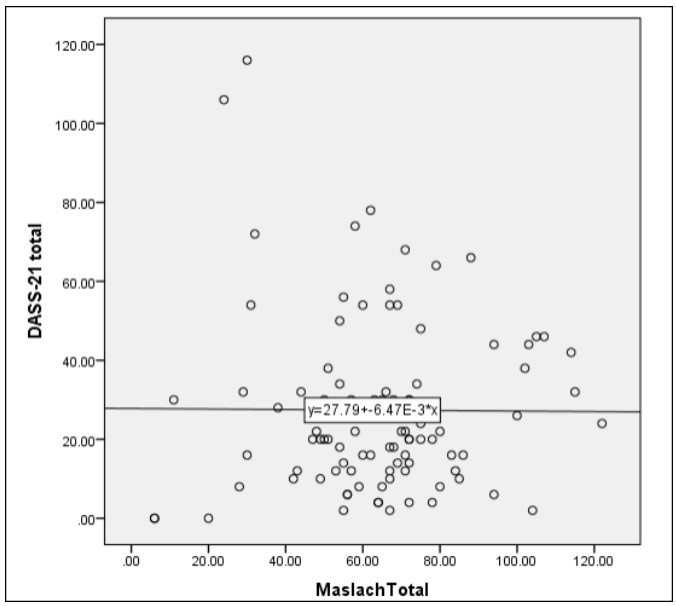

Figure 1. Correlation of the total score of two Maslach questionnaires and DASS-21

Discussion

100 emergency department staff participated in this study. 52 were women and their average age was 29.72±6.22 years. Most of the participants were in the age group of 26-30 years. On the other hand, 71% of the participants in the project had a work experience of less than 5 years, which shows that most of the emergency department employees are composed of young and newly graduated workers. In the study of Tarcan et al. in Turkey,[18] which was conducted with the statistical population of emergency department employees, the average age of the participants was 35 years and 70% were men, which is somewhat consistent with our studies.

In the present study, the emotional exhaustion level was more than average, which is consistent with most other studies. It seems that the problem of adapting to the stressful conditions of the work environment can have a negative effect on the mental health of emergency personnel and make them face the feeling of helplessness and depression. It is necessary to pay attention to the mental health of emergency personnel, because hospitals need happy and motivated staff to achieve their goals, and in this regard, strengthening morale and paying attention to solutions to create vitality, happiness and motivation in them will be very important. From other results of the study, most of the emergency personnel had average personal competence, which is consistent with most studies of its kind.[19-21]

It seems that most of the emergency personnel have not been able to show their skills in an excellent way in the work environment. They are not satisfied enough with their job and have a relatively negative attitude towards their profession. Since the satisfaction and efficiency of emergency personnel affect the success of the organization, it is very important to pay attention to the increase in job satisfaction among emergency personnel.

The present study showed that most of the emergency personnel had a moderate personality disorder. Depersonalization is a negative and callous response to people who are usually recipients of services from the person.[22] People with personality disorders are suspicious of others and do not treat others well and treat them like an object. When a person is not properly encouraged in their work area, they do not understand their duties well, and the rules and policies are not explained. New and diverse approaches are not seen and the work environment is not pleasant. He loses his human views in the matter of taking care of patients and suffers from personality disorder.[23]

The results of our study showed that the average nursing stress was at a high level, which is consistent with most studies.[24-26] It seems that the working environment of emergency personnel is accompanied by various stresses that can negatively affect the body, mind, performance of the individual and the productivity of the organization. Therefore, reducing it requires attention and interventions such as classes to deal with stress, job support for employees, etc. On the other hand, coping strategies to reduce and control occupational stressors include allocating a percentage of the welfare budget to emergency personnel. Increasing the efficiency of personnel, creating sports clubs and healthy recreation, providing human resources, spiritual support of managers for emergency personnel, increasing salaries and benefits, in-service training and holding discussion meetings between managers and employees are mandatory.

In the correlation analysis conducted between the results of the burnout questionnaire and our mental state, no significant correlation has been shown between the level of job burnout and the level of stress, anxiety, and depression which is not consistent with the studies of Daghimi et al.[27] and Mushtaq et al.[28], which is probably due to the difference in the type of population studied. But in general, the long stress related to the job gradually makes people depressed, tired, inattentive to colleagues and patients, and reduces the desire to care, job interest, and professional competencies. Knowing the sources of stress and ways to deal with it can help reduce burnout in emergency personnel.

One of the strengths of this study is the absence of such a study at the province level, and it is also on the important issue of job burnout, stress, and anxiety, which most likely affects people's performance. The limitations of this study were the small size of the sample, the non-response of some personnel to the distributed questionnaires, and the use of only medical education centers in Urmia, which reduces the generalization of the results. It is suggested to carry out research with a larger sample size and a larger geographical area and conduct studies on the impact of occupational stress and burnout on the quality of patient care. Also, studies should be conducted to investigate the individual differences of emergency personnel in creating job burnout and stress, and finally, more studies are necessary to comprehensively evaluate the factors related to job burnout.

Due to the lack of relationship between these two variables, a firm step should be taken to identify sources of stress and, on the other hand, sources of job burnout, and train personnel on how to deal with them.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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