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The Relationship between Workplace Stress and General Health of Bijar's Imam Hossein Hospital Personnel (2014)

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Abstract:

Introduction: This paper aims to assess the relationship between workplace stress and general health of diagnostic and therapeutic personnel of Imam Hossein Hospital of Bijar County.

Methodology: In this cross- sectional study, all of the diagnostic and therapeutic personnel (101 individuals) of Imam Hossein hospital of Bijar county in the second half of the year 2014, have been studied. In order to gather the data, Goldberg general health survey and Harris workplace stress questionnaire which include 28 and 35 questions, respectively, have been used. In order to analyze the data, Spearman's rank-order correlation and SPSS software (version 17) were used.

Findings: The findings of the study reveal that although the level of sleeping disorder, anxiety, and also depression in the studied personnel was not that high, the analysis related to Spearman's rank-order correlation shows a significant relationship between workplace

stress with each of the aspects of health including physical health symptoms, social functions, sleeping disorders, anxiety and depression.

Conclusion: It is recommended that the managers of health organizations should reduce the level of workplace stress and enhance the level of general health of employees through holding educational courses intended to control stress and also the appropriate ways of selecting qualified job applicants for stressful jobs.

Key words: workplace stress, General Health, Hospital

Introduction

The industrialization of societies has led to the fact that employed individuals often spend a half of their day time in working places. This situation, with the current complexities in the working environments, leads to forming stress. Workplace stress has several physical, mental and behavioral consequences (1). The individual results of severe stress reveal in the form of physical, mental and behavioral disorders. As far as physical facet is taken into consideration, it can lead to dizziness, back ache and severe tiredness which finally results in wackiness and distraction. Psychologically, stress can lead to reducing self esteem and job hatred. Behaviorally, it results in indecisiveness, negligence and concentration disorders (2).

Nowadays, work stress which is common across ordinary people, health and educational experts and other people with welfare responsibilities including therapeutic personnel has become a common phenomenon (3). A lot of researches have shown the existence of workplace stress, physical and psychological analysis in therapeutic personnel which leads to disorder in health, impotence in doing the tasks, vulnerability in professional interactions, reduction of caring quality and finally dissatisfaction and leaving the job (4). Even some

researchers believe that therapeutic personnel are one of the groups which tolerate the most degree of workplace stress (5).

In medical centers, shift work has been detected as one of the effective factors in revealing stress in hospital personnel, so that night shift work can accelerate the manifestation of depression amongst those personnel (6). In addition to this, physical and mental disorders may lead to negative behavior and self-attitude and at the same time to job dissatisfaction (7). In other words, workplace stress has several negative results for personnel, organization and patients (8). Annually, large amounts of wealth, due to lack of physical and mental health in personnel, loss. Stress and the side effects of this phenomenon lead to wasting hundreds of working hour. Yearly, about one million individuals are absent in their offices due to suffering from disorders and illnesses which are the result of stress.

So because of the inevitable existence of stressful factors in health and medical jobs and the necessity of preventing the mental and behavioral effects of stress, doing some actions and proceedings in order to improve the quality of working life and educate the ways to cope with the situation is one of the tasks of managers in health organizations (10).

Considering that health is one of the basic necessities of humankind playing an important role in the consistent development and knowing that health is a key part in employed personnel for giving high quality caring services to patients, this research was done with the aim of specifying the relationship between workplace stress and general health of diagnostic and therapeutic personnel of Imam Hossein hospital of Bijar. It seems that the results of this study helps the managers to increase the level of health and better management in shouldering their responsibilities.

Methodology

a) Statistical Population and Sampling

This study has been done during September to February of the year 2014 and the participants include the total number of diagnostic and therapeutic personnel(101 individuals) of Imam hossein hospital of Bijar affiliated with the Kurdistan University of Medical Sciences. After gaining a written authority from the university, we visited the hospital. Before delivering the questionnaire to the participants, there were informed of the goals of the study and an oral satisfaction was also taken from each participant.

b) The Tool of Data Collection

1. The Survey of workplace stress belonging to Harris: this survey is structured in two parts: the first part includes some questions relevant to demographic features including organizational unit, sex, age, marital status, military serving background, educational background, employment status and organizational status. The next part includes 35 questions which are related to workplace stress and stresses which are formed due to role ambiguity (5 questions), role conflict (6 questions), role overloading (6 question), role low loading (5 questions), work melody (4 questions), work repetition (4 questions) and job conflict (5 questions). The reliability of the survey has been reported 89% by Hasani through internal coordination and calculating Korenbax Alpha (11).

The questions were organized through Likert scale and participants answered them by choosing: I totally agree through I totally disagree. In the following, we give a brief definition of each of the aspects of workplace stress:

Role ambiguity: job status in which there is fake information regarding the fulfilling the tasks.

Role conflict: It happens when accepting a collection of job obligations is in conflict with some others.

Role overloading: If a person cannot do a task which is a part of his job, he will get stressed.

Role low loading: In this situation, some of the persons' skills are left useless.

Work melody: The speed of doing the tasks in a certain role.

Work repetition: The number of repetition the units of a given task.

2. The standard questionnaire of general health belonging to Goldberg (GHQ): this questionnaire which was used to measure the general health of personnel includes 28 questions which are structured in 4 modules containing physical symptoms, anxiety and sleeping disorder, disorder in social functions and depression. Marry and Williams (1988) reported the correlation coefficient 90% for the reliability with the help of clinical interview symptoms list. There has been a good validity reported in Iran, too. Taghavi (2001) reported the reliability of the questionnaire through three retest methods, bisection task and Korenbax Alpha, 70%, 93% and 90%, respectively (12).

The questions of the survey were organized through Likert measure and participants choose from being totally agreed to totally disagreed. The score of each question was amongst (0-1-2-3) and the most score was total 84. The more the score, the less healthy the participant will be.

c. Statistical Methods

In order to calculate frequency, mean and standard deviation relevant to the aspects of workplace stress, descriptive statistics and in order to measure the relationship between workplace stress and aspects of general health Spearman's correlation

coefficient were used. To do the statistics operations, SPSS statistical software (version 17) was used.

Findings

As it can be seen in the tables, half of the participants are under 30 and this fact shows that the majority of the diagnostic and therapeutic personnel are young. More than 75% of the personnel were females and the same percentage has less than 10 years of work experience. Regarding the employment status, the frequency of the personnel were almost alike and more than 80% of them held a B.S degree and more than 70% were married.

As it can be observed in table (2), 55/4% of the personnel are in a low level of physical health. 9/9% of them are suffering from sleeping disorders and a high level of anxiety. The level of social functioning was low in 51/5% of them and 9/8% were suffering from a high level of depression.

Taking table 3 into account, we realize that the correlation coefficient between workplace stress and physical symptoms variable is 0/890 with the significance level of 0/001, that is to say, the relationship between workplace stress and physical symptoms variable is a statistically significant one. This relation is negative, namely, with the increase of stress, the physical health level decreases. The correlation coefficient between workplace stress and sleeping disorders & anxiety was 0/891 with the significance level equal to 0/001, namely, there is a significant relationship between workplace stress and sleeping & anxiety variable. This means that with the increase of workplace stress, the level of sleeping disorders will also increase. The correlation coefficient between workplace stress and social functioning is equal to 0/665 with the 0/001 level of significance, that is, there is a significant relation between workplace stress and social functions variable, though, this is a

negative relation, because with the increase of stress, the level of social functions will decrease. The correlation coefficient between workplace stress and depression was 0/753 with the 0/001 level of significance. So there is a significant relation between workplace stress and depression variable. With an increase in the workplace stress, the level of depression will also increase.

Discussion

Workplace stress is one of the effective factors as far as function and health of employed personnel are taken into consideration (13). Therapeutic personnel, due to needing to obtain certain skills and concentration in doing the tasks, tolerate a tiring teamwork and a permanent stress of caring patients. This means that in such working places, job factors are more influential than demographic factors in making a stressful condition for personnel (14).

In this paper, the effect of stress on the four aspects of health including physical symptoms, sleeping disorders &anxiety, social functions and depression were assessed. The findings relevant to frequency of each of the aspects of health (table 2) reveal that the level of physical health and social functions of personnel is rather low. At the same time, the level of depression and sleeping disorders & anxiety in personnel is not that high and this finding does not support previous researches. Many of the researches done in Iran or outside have shown a high level of stress and depression (SeyedJavadi, et al (15), Halks et al (16), Shakerinia, et al (17), Molaie, et al (18), HashemiNejad, et al (19), Hosseini, et al (20). This difference is due to several factors. One of these reasons is because, this research has not considered the level of health and workplace stress based on a differentiation amongst the therapeutic personnel. The employed persons in diagnostic parts rarely face

with medical emergencies and patients with peculiar diseases. It seems that they have a low level of stress in comparison with therapeutic personnel including obstetricians, nurses and doctors. It seems that if one calculates the level of health and stress for every diagnostic and therapeutic personnel independently, the result will be to some extent different. Another reason that why the level of stress and depression among personnel is not that high is due to those specialized hospitals in the adjacent provinces. Indeed, most of the citizens prefer more specialized hospitals with more facilities and man power which are placed in other provinces (Zanjan, Hamedan, Tehran) and in conclusion the amount of acute cases or illnesses needing particular and emergent curing will decrease. Clearly, curing simple diseases will not result in a high level of stress in personnel. The next reason is related to the level of education in diagnostic and therapeutic personnel (table 1), that is, more than 70% of the personnel held a B.S degree graduated from Universities of medical sciences of Iran. Undoubtedly, studying at university, observing and curing patients with various illnesses increase the level of awareness and confidence in personnel and consequently result in a better servicing and decrease the level of workplace stress.

Finally, the analysis of findings relevant to workplace stress with respect to four aspects of general health (table 3) revealed that there is a relation between workplace stress and all of the aspects of health including physical symptoms, sleeping disorders & anxiety, social functions and depression. This relationship was negative as far as health symptoms of social functions were considered, that is, the increase of workplace stress leads to reduction of health and social functions. The findings of this part support the claims made by Barzideh, et al, as they also found out that the score mean regarding all of the aspects of workplace stress has a significant relation with the total status of health and in most of the

studied nurses the level of stress has been high and most of them were in a suspicious condition respecting the general health (21). Hosseini, et al noticed that there is a positive and significant relation among participants' workplace stress, the amount of VMA (the main metabolite of epinephrine and norepinephrine)and the number of diseases which they have suffered from in the 2 recent years. This supports our findings showing there is a relation between general health status and the level of workplace stress (20). Chang also shows that there is a significant relation between stress and physical & mental health of nursing personnel (22). Additionally, stress leads to increasing the production of cortisol and adrenaline which are both diabetes increasing hormones (23). In some cases the relation between workplace stress and heart & digestive diseases has been reported (24).

On the other hand, the findings of this research show that there is a positive relation among workplace stress, sleeping disorders, anxiety & depression, that is to say, the increase of stress is in accompany with increase of sleeping disorders and depression. This finding is supporting other researches too. For examples, Lam. D, et al concludes that the stress triggering factors in working places and the high level of monitoring can be dangerous for the mental health of nurses (25). Ghasemi- Pirbalouti, et al noticed that workplace stress can threaten the psychological health of studied nurses, while organizational culture is helpful regarding their psychological health status (26). Hashemi Nejad, et al noticed that workplace stress results in psychological disorders in obstetricians and employed obstetricians in governmental hospitals who are exposed to a high degree of workplace stress in comparison to those employed in non- governmental hospitals (19). Chang also shows that there is a significant relation between stress and physical and psychological health of nursing personnel (22).

In order to do this research, we faced with some limitations such as limit in the number of employees in hospital which obliged us to consider all of the diagnostic and therapeutic personnel without any differentiation. Hence, the results might not be generalized to all of the hospitals or medical centers. In addition, the different result of sleeping disorder, anxiety and also depression is not supporting previous researches as the level was moderate and it is recommended to repeat the same test in future researches with the help of other valid tests to evaluate the level of health and stress in personnel of this hospital.

Conclusion

Based on the findings of the study, there is a significant relation between workplace stress and each of the aspects of health and this shows that the improvement of relaxation in personnel through training basic stress controlling skills, overcoming stress and managing correct caring is vital. Undoubtedly, decrease the level of stress in employees and the improvement of health lead to enhancing the level of function and finally giving better services.

Thanking and Admiring

I would like to thank all of the managers and employees of Imam Hossein hospital and those personnel who helped us in doing this research.

Table 1. Demographic information of studied diagnostic and therapeutic personnel

Variable	Group	Number	Percentage
51/5	52	20-30	Age (year) Mean(standard deviation): (26) 3/7
35/7	36	31-40	
10/2	13	41-50	
75/2	76	Female	Sex
24/8	25	Male	

75/2	76	Less than 10	Working experience (year) Mean (standard deviation): (6)1/2
18/8	19	Between 11 and 20	
6	6	20 and more	
26/7	26	Official	Employment status
29/7	30	Contractual	
21/8	22	Projective	
19/8	20	Conventional	
15/8	16	Upper Diploma and lower	Educational background
83/2	84	B.S.	
1	1	M.S.and upper	
28/7	29	Single	Marital status
71/3	72	Married	

Table 2. Frequency and distribution of health status based on each aspect of general health in the diagnostic and therapeutic personnel

Aspects of physical Health	Level	Frequency (person)	Percentage
Physical Symptoms	Low	56	55/4
	Moderate	27	26/7
	High	11	10/9
Sleeping disorders and anxiety	Low	51	50/5
	Moderate	32	31/7
	High	10	9/9
Social functions	Low	52	51/5
	Moderate	39	38/6
	High	2	2
Depression	Low	47	46/8
	Moderate	35	34/9
	High	10	9/8

Table 3. The correlation between workplace stress and each aspect of health in the studied diagnostic and therapeutic personnel

		Physical symptoms	Sleeping disorder and anxiety	Social functions	Depression
workplace stress	Correlation coefficient	-0/890	0/891	-0/665	0/753
	level of Significance	0/001	0/001	0/001	0/001

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