

## JOB STRESS IN NURSES OF TEACHING HOSPITAL OF IMAM REZA KERMANSHAH, 2015

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### ABSTRACT

**Introduction:** This study was conducted aimed to investigate the job stress in nurses of Imam Reza Hospital, Kermanshah, 2015.

**Methods:** This cross-sectional study was conducted with participation of 216 nurses employed in Imam Reza subspecialty hospital. Data gathering tool was Expanded Nursing Stress Scale (ENSS) to measure nurses job related stressors. Data were analyzed using the software AMOS22.

**Results:** There was a significant relationship between job stress and its dimensions. Fitting indexes values including AIC, BCC, ECVI, and MECVI in proposed model were 286.950, 288.054, 0.747, and 0.750 respectively. Among the Efficiency indexes, CFI and IFI with the amount of 0.941 were more than the rest of the indexes.

**Conclusion:** Given the significance of the relationship between job stress and its dimensions, it seems that there's a lot of stress among nurses. The patient's suffering and death, and uncertainty concerning treatment were the most important factors for job stress.

**Key words:** job stress, nurses, Kermanshah, problems relating to peers, lack of support, inadequate preparation.

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### Introduction

Stress is the body's reaction to the events that cause fear, excitement, feeling threatened, or anger<sup>(1)</sup>. Stress is a common disease of the 21st century which affects individual in different situations as well as one of the key factors in reducing the productivity of organizations and cause of physical and psychological complications in the employees. Practitioners in the medical professions because of responsibility for providing health and treatment of patients are affected by stressors<sup>(2)</sup>. Stress is a part of everyday life; in this regard it is important to consider the difference between the normal and excessive of it, because it is impossible to reduce stress to zero<sup>(3)</sup>. Stress level is different in various jobs; some jobs are more stressful than others.

Nurses are often faced with a variety of stress at work and several studies have shown that job stress among nurses is common<sup>(4, 7)</sup>. Work stress is the condition in which some factors or combination of factors interferes with the worker to disrupt his or her physical, psychological, or social homeostasis<sup>(8)</sup>. Barzideh et al showed that the mean score of all aspects of job stress had significant relationship with general health status<sup>(9)</sup>.

Mortaghi-Ghasemi et al showed that various occupational conditions has lead to tensions, and was perceived as high level (57.4%), moderate (40%) and low stress (2.6 %) by nurses<sup>(10)</sup>. LotfiZadeh et al declared that prevalence of stress in a sample of Iranian nurses was 53%<sup>(11)</sup>. Donyavi et al reported stress in nurses' as follow: 18% with minimum stress, 33% with moderate stress, 39% with high stress and 10%with very high stress<sup>(2)</sup>.

Job stress in nursing can lead to diseases and disorders that seriously endanger the health of nurses<sup>(12)</sup>. Based on Karasek demand-control model<sup>(13)</sup>, occupation that has high occupational stress and low control, cause psychological and physical distress. Such workplace ultimately discharges emotional and psychological resources of nurses and it may be the beginning of burnout syndrome<sup>(14)</sup>. Therefore the present study was conducted to determine the occupational stress in nurses of Imam Reza Hospital in Kermanshah.

**Method**

This cross-sectional study was conducted with participation of 216 nurses employed in Imam Reza subspecialty Hospital in Kermanshah city, located in the west part of Iran. We excluded matrons and supervisors from the study because their work nature is different from staff nurses. A convenience sampling method was applied to reach the sample participants. We used Expanded Nursing Stress Scale (ENSS) to measure nurses job related stressors. This scale contained 57 question which ranged by 5 point Likert scale, include: doesn't apply (0), 1; never stressful (1), occasionally stressful (2), frequently stressful (3), and extremely stressful (4). Internal consistency reliability of this scale have been measured using Cronbach's coefficient alpha  $\alpha = .96$ <sup>(15)</sup>. We used the translated version of questionnaire that localized for Persian speakers, and its reliability has been confirmed by Cronbach's coefficient alpha ( $\alpha = .92$ )<sup>(16)</sup>. Before collecting data, we met the ethical issues such as obtain Formal approvals from hospital officials to conduct the Study, explicate to individual about freedom and choice to participate in the study, explain vague points of study for participants, and ensuring people about the confidentiality of information. Data were analyzed using the software AMOS22.

**Results**

According to of demographic data, 58.6% of the participants were female and 41.4% male. When the educational distribution of the participants was examined, 17.1% (n=37) were Master of Science, 46.1% (n=100) were bachelor, 25.1% (n=54) had associate degree, and 11.7% (n=25) were diploma.

63.2% of participants were married, and 36.8% single. Distribution of participants in different age groups was as follow:50.1% between the ages of 25-30 years, 19.7% between 31-35 years, 12.5between 36-40 years, 10.4% between 41-45 years, and 7.3% more than 45 years.

According to Table 1, there was a significant relationship the occupational stress with its dimensions among nurses in Imam Reza, which means that the significance level has been less than.05.

Dimensions		S.E	C.R	p-value
Problems Relating to Peers	<--- job stress	0.005	30.02	***
Lack of Support	<--- job stress	0.005	19.376	***
Inadequate Preparation	<--- job stress	0.004	33.118	***
Conflict with Physicians	<--- job stress	0.005	33.063	***
Uncertainty Concerning Treatment	<--- job stress	0.004	38.27	***
Workload	<--- job stress	0.004	33.777	***
Suffering and Dying	<--- job stress	0.004	38.611	***

**Table1:** The relationship between job stress and its dimensions in nurses. For job stress and dimensions.

\*\*\* Indicates the confidence level is less than 05.

	FMIN	X2/df	Efficiency indexes (Indexes of model validation)					RMSEA	Fitting model indexes			
			RFI	TLI	IFI	NFI	CFI		AIC	BCC	ECVI	MECVI
Default model	0.627	11.474	0.914	0.921	0.941	0.936	0.941	0.165	286.95	288.054	0.747	0.75

**Table 2:** model indexes and patterns

Minimum was achieved, Chi-square = 240.950, Degrees of freedom = 21, Probability level = .000

In Table 2, we present the parameters and patterns of fitting model. X2/df index if to be between the 1 and 3; represents the more efficient model which in this study were 11.474. Fitting Model Indexes include AIC, BCC, ECVI, MECVI which are used to determine the most fitting models among several models. A model that has the smallest values is considered as a fitting model. According to Table 3, fitting indexes values for the AIC, BCC, ECVI, MECVI in proposed model were 286.950, 288.054, 0.747, and 0.750 respectively.

Efficiency indexes in the studied model are included CFI, NFI, IFI, TLI, and RFI, which standard and acceptable levels for each is the 0.9. As a default, these indexes are between zero and one, and whatever index to be closer to number one the efficiency of model is better. The above mentioned index values were include: 0.941, 0.936, 0.941, 0.921, and 0.914 respectively. RMSEA Index which calculates the mean square errors acceptable if to be

smaller than 0.1, which this value for the studied model was 0.165. Also the FMIN index for this model was 0.627, whereas the standard rate is between zero and, and the model is more fitting whatever index to be closer to number one.

## Discussion and conclusion

Based on the findings of this study, there was a significant relationship between job stress and its dimensions. Given the significance of the relationship between job stress and its dimensions, it seems that there's a lot of stress among nurses. Quality of health care is one of the important missions in any society, and the hospitals and health centers are responsible for providing it. Nurses as the largest provider of clinical services have a significant impact on performance of these systems. In addition these people due to the nature of their jobs and certain working conditions are faced with several job stress factors that if not controlled and not try to reduce them, will threaten the physical and psychological health of nurses<sup>(17-19)</sup>.

Finally, such a situation can cause behavioral problems among nurses and ultimately reduce the level of individual performance and productivity of the organization<sup>(20)</sup>. Saeedi suggested that main job stress factors in nurses included: patients who have dealing with pain and suffering, the presence of patient's family in the ward, excessive workload, verbal and physical aggression, death and dying, lack of manpower, uncertainty nursing tasks, unavailability of doctors, and lack of resources and equipment<sup>(21)</sup>.

In the present study also the patient's suffering and death were the most important factors for job stress. According to the Tyson, the greatest sources of job stress include: lack of organizational support, lack of understanding the real needs of section by managers, disagreements with managers, lack of personnel, increased volume of work due to lack of personnel, job security and work-home interface<sup>(22,23)</sup>.

In the present study, some factors such as workload and lack of support were similar to the study of Tyson.

In the study by Ghasemi and Attar, results showed that suffering and death of patients, and workload were important factors of job stress in nurses<sup>(24)</sup>. Lim et al showed that different factors are related to occupational stress, including overloading of work, conflicts in the work environment, ambiguity in carrying out tasks, failure to recognize skills,

and experiences of aggression, all of which have direct effects on physical and mental health<sup>(25)</sup>.

In several studies that have used from Expanded Nursing Stress Scale to measure nurses job related stressors, results showed that workload is most important factor in job stress among nurses<sup>(26,27)</sup>. The result of the study by Sveinsdottir AL showed that lack of support from colleagues and superiors and less satisfaction with the head nurses contributed significantly to the appearance of stress<sup>(28)</sup>. In our study, the lack of support had less effective role in the creation of job stress. Hospital managers should identify, manage and control the sources of stress that are causes of conflict between nurses or nurse and physician. In addition, with the proper time management and optimum use of time, problems related to lack of time and workload is solvable<sup>(29)</sup>.

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