

# The relationship between Antecedents (Job Stressors) and Burnout in Iranian Nurses

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DOI: 10.6007/IJARBSS/v3-i12/470 URL: http://dx.doi.org/10.6007/IJARBSS/v3-i12/470

#### **Abstract**

Burnout is one of the effective factors in reducing staff performance quality. Stress and burnout lead to quitting the job in the nursing profession to a great extent. Considering the importance of the nurses' physical and mental health and the role of burnout in nursing services quality, the present research aimed to investigate the relationship between the antecedents and burnout among the staff nurses working in hospitals of Shiraz. The research population included 2016 nurses working in the hospitals of Shiraz, of whom 322 were selected through stratified random sampling. The study data were collected using burnout<sup>1</sup> and NBS<sup>2</sup> questionnaires and analyzed using descriptive statistics (mean, variance) as well as inferential statistics (correlation coefficient, variance analysis). The results showed that antecedents (responsibility, work load, lack of community, and supervision) had a significant direct relationship with burnout. Therefore, antecedents cause stress and tension in the work environment and finally cause burnout in nurses.

**Keywords:** Burnout, Antecedents (job stressors), Workload, Lack of community, Supervision, Responsibility.

#### Introduction

Burnout is a common issue in all health systems. Based on the available statistics, one out of 7 practitioners in all health systems is burned out at the end of the day. According to the report by the America Information Office, among the existing jobs, the therapeutic-sanitary ones have the highest rate of job injuries, such as burnout. Nursing is one of the full-tension jobs and nurses, as the main members of treatment team, play an important role in improving health. Nurse is a person who is responsible for controlling the patients every day and is continuously faced with a lot of full-tension factors. In most of the hospital wards, we encounter nurses who, in spite of having much discipline, interest, and perseverance at the beginning of their work,



usually get tired and tend to quit the job after working in this profession for a few years and facing job difficulties and stresses in the work environment.

There is no doubt that these factors lead to burnout and affect the professional performance of these individuals in long term. The first articles on burnout were published in the U.S. in the 1970s and after that, many definitions were provided for burnout. The most common definition of burnout was given by Maslach and Jakson<sup>1</sup>. According to Maslach's theory, burnout is a phenomenon in which the effects of job pressure make the individuals tired little by little and cause them to get exhausted psychologically. Based on this theory, burnout has three dimensions, i.e. emotional exhaustion, depersonalization, and feeling of lack of personal efficiency. Emotional exhaustion is similar to an individual's being under stress and discharging emotional resources. In addition, depersonalization is the negative, cruel, and indifferent response to people. Finally, the feeling of lack of personal efficiency is related to low self-confidence in people, making the staff feel that they cannot do anything for others.

Freedenberg defines burnout as a mood of tiredness or failure which happens after a person shows self-devotion toward a goal, way of living, or human relation, but does not get the expected outcome. He believes that burnout signs depend on the job at the beginning; on the other hand, in depression, an individual's signs are generalized to all situations. Burnout in nurses is important in three aspects and is needed to be studied. In general, the main consequences of burnout are: a- affecting the nurses' mental health and causing moods such as depression, anxiety, self-confidence reduction, lack of volition, and physical signs<sup>3</sup>; b- causing personal involvement or disturbance in performing job duties<sup>4</sup>; and 3- reducing the quality of the services provided for the patients<sup>5</sup>. Burnout in nurses has been examined in foreign countries, especially in Europe and Africa. What prompted the researchers to do this research among Iranian nurses is the cause of burnout in Iranian nurses and its consequences on their performance which seems to be different from other countries. In Iran, nurses are faced with much work and lack of the necessary facilities in the hospital sections. Moreover, their obligation to respond to the supervisors as well as their responsibility towards the patient can cause much stress and tension which gently lead to burnout. What is even more important is the consequences of burnout in Iran. It seems that nurses cannot quit their job due to the type of their employment and lack of jobs in Iran. Thus, they rarely quit their job because the consequences of leaving one's job are tougher and more serious compared to experiencing burnout. Therefore, Iranian nurses adapt with the difficult job and full-tension conditions and this adaptation with stress has no result but burnout.

Up to now, a large number of studies have been conducted in order to determine the stressful factors (job stressors) which cause burnout. According to these studies, stressful factors in a job are of three types: 1- personal, 2- occupational and environmental, and 3- organizational.

Job stress resources exist everywhere and every time. According to the evidence, there are five types of job stressors: 1- stressors related to the nature of job, workload, and work pressure; 2-stressors related to the role of the staff in the organization, i.e. role obscurity, responsibility towards others, and conflict between internal and external beneficiaries of the organization; 3-stressors related to job development, i.e. lack of job security and lack of job improvement; 4-stressors related to the organization atmosphere, i.e. lack of participation in decision-making and awkward administrative rules; and 5- stressors related to conflict between family and job.



Furthermore, Kim<sup>6</sup> studied two kinds of stressful factors in nurses and other social service providers:

- 1- Care stressors: In the literature related to stress, a direct relationship with patients and taking care of them are determinants of the amount of stress the therapeutic team experiences. The model proposed by Kim is about preventing job stresses which cause burnout in nurses, including the responsibility to take care of the patients, supervising the doctors' work, determining the kind of medical supervision to cure the patients, lack of awareness of the others' expectations, and lack of professional knowledge. Therefore, the causes of burnout in Iranian nurses can be justified based on Kim's model about preventing the job stressors.
- 2- Environmental stressors: According to Kim's model, lack of conformity between the staffs' skill and knowledge and what others expect them to do and the resulting tension finally leads to burnout in the staffs. The stressors resulting from this lack of conformity include workload, salary, reward, and values. It should be mentioned that these stressors are more important and can cause many changes in both individuals and organizations.

In this research, we selected some antecedents (stressors) and studied their relationship with burnout among nurses. The four selected stressors were 1- work load which refers to the duties which are needed to be done in a period of time. This factor potentially causes stress in the staff and nurses bear the highest pressure in these cases<sup>7</sup>. 2- lack of community: Nurses work in a social environment and lack of communication with patients, colleagues, and managers can cause stress in them<sup>8</sup>. 3- supervision: supervision is one of the organizational factors, one of the managers' duties, a continuous cycle, and prerequisite for better performance of the staff. 4-Responsibility: responsibility is one of the job stress factors, especially when it involves taking care of the patients. The difference between responsibility in the nursing profession and other professions is that in most of the jobs, the individuals are free to perform their responsibilities, while the nurses have to perform their duties in special situations. Furthermore, many responsibilities are given to the nurses, but the freedom and the necessary facilities for carrying out the responsibility are not provided. Thus, it is quite natural that these people suffer from much stress.

Many studies have directly and indirectly investigated different effective variables in burnout. For instance, Lee<sup>8</sup> studied the role of natural factors in burnout among nurses. The results showed that burnout increases among the individuals working in the work environments characterized by pressures due to being faced with others' repetitive requests, complicated competition, financial needs and trying to get more income, increase of transmissions, absence from work, and efficiency reduction. These consequences also negatively affect the people who receive the services.

Moreover, Piennar<sup>9</sup> investigated burnout among nurses working with mental patients. The results showed that this group suffered from fatigue and experienced burnout more than the other nurses. Stanley<sup>10</sup> also studied the relationship between job stressors, adaptation, and burnout. In addition, Silvia's research revealed a significant strong relationship between job stressors, emotional tiredness, and failure. However, no significant relationship was found between job stressors and adaptation. Washington<sup>11</sup> assessed the relationship between the leading styles and burnout in nurses. The study findings showed that non-participatory leading styles had a direct relationship with burnout in nurses. Moreover, Zellars<sup>12</sup> investigated the



relationship between role obscurity and conflict and burnout in nurses. The results showed that burnout occurred due to ambiguities and conflict in role.

#### **Research questions**

- 1- Do antecedents such as responsibility, supervision, workload, and lack of communication have any effect on burnout?
- 2- Do gender, education level, and work shifts have any effect on burnout?

Based on the research questions of this study, the following hypotheses are posed:

- 1. Antecedents such as responsibility, supervision, workload, and lack of communication affect burnout.
- 2. Gender, education level, and work shifts affect burnout.

#### Method

The current research is an applied one regarding its goal and a descriptive one concerning data collection and analysis.

### **Participants**

The study sample included all the nurses working in the public hospitals of Shiraz, Iran. Overall, there were a total of 6 hospitals and 2016 nurses were enrolled into the study. The study sample was selected through stratified random sampling and a 322-subject sample size was determined for the study using the Kocran formual.

#### Instruments

Burnout, hardy personality, and job stressors were assessed using the Nursing Burnout Scale NBS<sup>2</sup>. This scale includes specific antecedents (job stressors) and is used to determine the rate of nursing burnout. The NBS used in this investigation consisted of 78 items. Burnout consists of the three dimensions proposed by Maslach and Jackson<sup>1</sup>, i.e. emotional exhaustion, depersonalization, and personal accomplishment, albeit the dimension of personal accomplishment has been replaced with its opposite, i.e. lack of personal accomplishment to facilitate the interpretation of profiles and the calculation of a global burnout index. It should be mentioned that Cronbach's alpha coefficient of 0.91 was obtained for this 24-item scale. Furthermore, the questionnaire on Hardy Personality was a 17-item measure of commitment, challenge, and control with the Cronbach's alpha coefficient of 0.89.

Each item was rated on a 4-point Likert scale ranging from 1 ('totally disagree') to 4 ('totally agree'). The NBS has been found to have adequate reliability and validity (2).



#### **Data Analysis**

The study data were analyzed through Leasrel and SPSS statistical software, using descriptive statistics (mean, variance) as well as inferential statistics (correlation coefficient, variance analysis).

#### **Results**

Based on the results obtained from the present study, it was found that there was a significant relationship between antecedents and burnout. The first hypothesis was confirmed with the results of the present study. Moreover, there was a significant relationship between supervision and burnout. The study findings showed that responsibility had a significant direct effect on burnout ( $\beta$ =0.34 t=5.66, p<0.01).

1- Also, there were significant relationships between workload and burnout. The results showed that workload had a significant effect on burnout ( $\beta$ =0.26, t=3.61, p<0.01); also, the same result was obtained for lack of communication and burnout ( $\beta$ =0.19, t=3.43 p<0.01). The results of these four hypotheses are shown in Table 1.

[Put Table 1 here]

**Hypothesis 2:** Gender, level of education, and work shifts have no effect on burnout. This hypothesis was investigated using independent t-test and the results showed no significant relationship between burnout and gender, work shifts, and level of education. The results are presented in Table 2.

[Put Table 2 here]

#### Discussion

Hypothesis 1: Supervision affects burnout. This was in line with the results of the study performed by Garrosa<sup>3</sup>. Garrosa explains that existence of too much stress in the work environment implies that supervision is not correctly accomplished, while a strong supervisory system can reduce the stress by eliminating the difficulties and disadvantages. Therefore, lack of appropriate supervision lengthens the existence of stress in the work environment and this persistent stress causes burnout. Sundin et al. 13 also mentioned that the management's lack of attention to problems in the work environment can result in the nurses' more stress and fatigue which lead to burnout in nurses. According to the findings of the previous investigations, supervision is one of the organizational factors and also a part of management duties. Supervision can have dual effects. If supervision is timely and appropriately accomplished, it can recognize and eliminate the existing disadvantages and difficulties and also encourage and support the personnel by taking the desirable points into account. Besides, it can reduce job stresses and thereupon reduce exhaustion. Accurate supervision has a critical role in the health system and lack of precise supervision can create a lot of stress for nurses. When nurses face the problems resulting from lack of precise supervision, including taking care of the patients, lack of workforce, and lack of necessary facilities, and the problems are not solved, it causes much stress, leading to burnout in the nurses<sup>14</sup>.



Hypothesis 2: Responsibility affects burnout. This hypothesis was confirmed, which is in agreement with the results obtained by Peterson<sup>15</sup>. Peterson states that due to lack of proper job description and priority in therapeutic duties, often all the responsibilities in hospital sections are put on the nurses' shoulders. These conditions lead to a lot of stress and cause burnout. In work environments with proper staff support, an appropriate organizational atmosphere is created and people feel more responsible, which creates a positive attitude toward the profession. Otherwise, the stress resulting from responsibility and lack of support can cause burnout. Many researchers believe that burnout outbreak is related to the full-tension nature of the nursing profession which means that nursing is essentially a stressful profession. This stress results from the nurses' responsibility which is protecting the humans' life and health.

Hypothesis 3: Workload significantly affects burnout. This hypothesis was confirmed by the study results which were consistent with those obtained by Garrosa et al. and Podsakoff<sup>17</sup>. Podsakoff mentioned that workload and its related stress caused burnout outbreak without the supervisors' and managers' support and attention.

Nowadays, the nurses' duties and responsibilities have increased due to the patients' high expectations and technology innovations and this has resulted in tension outbreak.

Hypothesis 4: Effective relationships significantly affect burnout. This hypothesis was also confirmed and the obtained results were in line with those of the studies conducted by Peterson<sup>15</sup>, Garrosa et al.<sup>2</sup>, and Prosser<sup>18</sup>. McDonald states that lack of effective interpersonal relationships in a society which is responsible for taking care of the people's health causes much stress for nurses. Pruessner<sup>19</sup> with by supervisors; otherwise, we should not expect any improvement. Therefore, the nurses, especially the novice ones who are less skillful, have to communicate with their colleagues and supervisors in order to use their experiences. In case effective relationships are not created for the nurses, they feel inefficient and stressful, eventually leading to burnout outbreak.

#### Conclusion

The prior studies conducted on burnout and its effective factors and the results of the present research showed that a large number of antecedents (stressors) cause burnout. In this research, the effect of 4 antecedents on burnout was investigated. Considering the nurses' critical role in protecting the society's health, first their own mental and physical health must be taken into account. In order to increase the nurses' performance quality, not only it is important to recognize the antecedents (stressors), but also it is necessary to eliminate or at least reduce them.

Managers can make right decisions through appropriate supervision, understanding the existing difficulties, and consulting with the nurses to solve the problems and reduce the existing stress. Another effective issue in this regard is the managers' understanding the nurses' hard working conditions, supporting them in full-tension situations, and appreciating them.

# **Recommendations for Future Research**

In this study the relationship between burnout and job stressors was investigated. It is recommended that the researchers assess burnout in other jobs. Moreover,



using questionnaires with fewer questions is recommended to raise the quality and accuracy of the sample group's responses.

#### The Limitations of the Study

One of the limitations of the current study was using a questionnaire with a lot of questions which was quite time-consuming to answer and this caused the nurses not to cooperate with the researcher.

# Acknowledgement

The authors would like to thank all the nurses working in the public hospitals of Shiraz as well as the authorities of Shiraz Payam-e-Noor University for their cooperation in conducting the research. Research Improvement Center of Shiraz University of Medical Sciences, Shiraz, Iran is also appreciated for improving the use of English in the manuscript.

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# **Tables**

Table 1. The effect of antecedents on burnout in nurses

Burnout		β	Indirect effect	T effects	total
Antecedents domination:					
Supervision	0.34		0.07	0.41	5.66
Responsibility	0.26		0.16	0.42	3.61
Work load	0.19		0.05	0.24	3.43
Lack of community	0.30		0.07	0.37	4.46

Table 2. The effect of gender, level of education, and work shifts on burnout

	μ	DF	t	
				P
				_
66.026		1 542	240	0.455
		1.545	240	0.455
68.055		0.826	247	
65.234				0.124
65.816		0.748	247	
61				
				0.410
	65.234 65.816	66.026 24.647 68.055 65.234 65.816	66.026 1.543 24.647 68.055 0.826 65.234 65.816 0.748	66.026 1.543 240 24.647 68.055 0.826 247 65.234 65.816 0.748 247