

Title:

Evaluation of job satisfaction and burnout among nurses working in hospitals of Erbil, a city in Kurdistan region of Iraq, and the relationship between them during 2015-16

Running title: Job satisfaction and burnout among nurses...

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Abstract:

Background: Facing people's suffering, incurable diseases and death causes nurses to have one of the most stressful jobs. As job satisfaction of nurses is one of the key factors in the provision of quality care and stress and burnout are among the factors that can affect the quality of care by having an impact on nurses' job satisfaction.

Objectives: This study aimed to determine the relationship between job satisfaction and burnout among nurses working in hospitals of Erbil, a city in Kurdistan region of Iraq, during 2015-16.

Methods: This research was a descriptive, correlational and cross-sectional study in which 455 nursing staffs including; nurses, auxiliary nurses and nurse aids, who were working at the public hospitals in Erbil city, Iraqi Kurdistan, were selected to participate in the study using Random Stratified Sampling method. To collect data, demographic information form, Herzberg's job satisfaction and Maslach's burnout questionnaires were used. Collected data were analyzed using SPSS software version 20, descriptive statistics, chi-square statistical tests, and Fisher and Pearson's correlation coefficient tests.

Results: Based on the findings, 7.8% of nurses had low job satisfaction, 45.2% had moderate job satisfaction, 42.7% had high job satisfaction and 4.4% of them had very high job satisfaction.

The results of burnout showed that, the mean value for the aspect of "feeling the lack of personal success was (36.16 ± 12.51), aspect of emotional exhaustion was (13.38 ± 9.86) and depersonalization was (8.67 ± 8.39). Using Pearson's correlation coefficient test between job satisfaction of nurses and all three aspects of burnout, showed a statistically significant but inverse relationship ($P \leq 0.0001$).

Discussion and Conclusion: The authors propose that, by periodic job satisfaction evaluation and identifying the factors that have impact on job satisfaction, the problem and existing dissatisfaction can be removed. To reduce nurses' burnout, methods such as communication skill promotion at work environments, nurses' participation in decision making and reduction of job contradictions and ambiguities can be used.

Keywords: job satisfaction, burnout, nurses.

1. Background:

Healthcare professionals including nurses are in close contact with patients and their families and have important responsibilities for the health and life of the humans. Facing patients' suffering, incurable diseases and death puts nursing among stressful jobs (1). Since nurses' job satisfaction is one of the key requirements for the quality of care (2), it is considered an important component in many studies. Job satisfaction is the extent of positive emotions and attitudes that people have towards their jobs (3), and can have an impact on patients' safety, nurses' moral, spirit, and efficiency, quality of care they provide and nurses' resignation (2). Although many studies have been conducted in regard to the nurses' job satisfaction around the world, very few studies have been conducted on this subject in hospitals of Kurdistan region of Iraq, which are very different in terms of structure, culture, number of patients, civil war, workload and low income. One of these studies is the study of Aziz et al (2014) which was conducted on nurses working in the public hospitals in Erbil city. Its results showed that, 63.8% of the nurses had a moderate job satisfaction (4). Lack of job satisfaction among nurses can threaten their physical & mental health and their quality of life, and act as an obstacle in achieving their developmental goals, and their personal and social function (5). However, in this regard, some studies refer to job satisfaction as an important factor that affects burnout and depression (6) in a way that, low job satisfaction can lead to high levels of burnout, the desire to leave jobs and even disease (7), But its relationship and effectiveness varies in different studies.

Burnout is a psychological state with a series of physical symptoms such as; fatigue, emotional exhaustion and lack of motivation that leads to absents, reduced motivation, mental disorders, cardiovascular disorders and even in extreme cases, hospitalization (8). Burnout is among occupational hazards, and has drawn attentions in recent years (9). Results of a study conducted on nurses in 12 European countries showed that, when nurses work more than planned, report more dissatisfaction and burnout. High level of burnout is one of the problems that may create safety risks for patients and nurses (10), and more than any other factor, affects patient's recovery process (11). It can lead to nurses' decreased work efficiency, physical and behavioral change, and reduced quantity and quality of services provided for patients, and as a result, dissatisfaction with nursing services (12). When nurses feel the burnout, provide lower quality care that ultimately causes losses for the organization. Therefore, the cost of burnout is also paid by organizations (13).

Despite the importance of job satisfaction, limited studies in certain parts of the hospital with small sample size have been conducted in Kurdistan region of Iraq. Also, the tools used in the previous studies to evaluate the job satisfaction were not suitable to measure all aspects of job satisfaction. Furthermore, although burnout in different work

environments is an important issue, no study in this regard has been conducted in hospitals of cities of Kurdistan, Iraq. This is despite the importance of burnout in nursing staffs and its direct impact on patients' health. Considering the different work condition and environment in different countries, it is necessary to examine and evaluate the nurses' burnout in order to reduce it by early detection.

In this regard, the author's experience and observation and well as interaction with nurses in various hospitals in Erbil city indicate several stress-inducing factors such as; the city's location (as a capital of Kurdistan region of Iraq and its closeness to the war zone), cultural and social fabric of the city (subject to immigration and the influx of refugees), limited number of hospital in proportion to the population and hospital admissions, high level of violence in hospitals due to cultural heterogeneity of patients and their relatives, and crowded therapy environments (due to patients referral from smaller cities around Erbil and refugees). Many factors such as; disproportionate number of nurses compared to the volume and variety of patient care, high working pressure, civil wars (ISIS attack) and its negative consequences, increasing night shifts, low wages and benefits, and overlapped responsibilities at workplace put nurses under a lot of pressure in Erbil. Therefore, it is crucial to examine and evaluate the nurses' burnout.

Considering the limited number of studies on this subject in Kurdistan and the dissimilar results of foreign studies, and also as the relationship between these two variables (job satisfaction and burnout) in Kurdish nurses who work in different cultural context has not yet been explored, this study was conducted to determine whether there is a relationship between the nurses' job satisfaction and burnout. Elucidating this relationship can help administrators plan and promote human and organizational resources. Therefore, this study aimed to investigate the prevalence and the relationship between these two variables. The findings of this study can provide administrators and nursing managers with documents in order to take effective steps in promotion of nurses' job satisfaction and reduction of burnout and consequently, can improve the quality of patient care.

2. Objectives:

This study aimed to determine the relationship between job satisfaction and burnout among nurses working in hospitals of Erbil, a city in Kurdistan region of Iraq, during 2015-16.

3. Method:

This research was a descriptive, correlational and cross-sectional study which was conducted during 2015-16. The study population consisted of all nursing staffs

including; nurses, auxiliary nurses and nurse aids who were working in public hospitals in Erbil, Kurdistan region of Iraq and were interested to participate in this study. After approval of the project by the University's Research Council and the process of translation and re-translation, as well as determining the validity and reliability of the tools, based on the total number of nurses and the number of wards in the hospital, and by using sample size formula, 455 nurses were selected to participate in the study through Random Stratified Sampling method.

Then the researcher, while explaining the objectives of the study and obtaining informed consent from the nurses, distributed 455 questionnaires among qualified nursing staffs and supervisors who wished to participate in the study. After a few days questionnaires were returned to the researcher and those questionnaires that were incomplete were removed. Finally, 436 questionnaires that were correctly completed were analyzed.

Inclusion criteria were included; to have at least 1 year experience of working in hospital, to be interested to participate in the study, not having intense stress (like the death of a close relative, divorce, bankruptcy and loss of property in the past year according to their statement), not taking sedative and tranquilizing medications (according to their statement) and not having known mental disorder (according to their statement).

This data were collected from demographic information form, Herzberg's job satisfaction and Maslach's burnout questionnaires (all three questionnaires were in Kurdish language).

Demographic information form consisted of 17 questions about; gender, age, level of education, type of employment, work experience, the name of the current ward and duration of employment in there, occupation, type of shift, etc...

The Herzberg's job satisfaction questionnaire contained 51 questions in Likert's scale ranging from very high to low, which measured the job satisfaction at 8 job dimensions; job status, job security, wages and benefits, working conditions, policymaking management, supervision, and communication with colleagues and in life. High scores on this scale indicated higher job satisfaction. The scientific validity of the Persian version of Herzberg's job satisfaction has been confirmed in several studies (14-16). The reliability of the questionnaire has also been evaluated in several studies, and was 0.94-0.96, (14, 15, 17). In the present study, the reliability of the tool was investigated on 20 nurses and its value of Cronbach's alpha was 96.4%.

Maslach's burnout standard questionnaire, which was developed in 1981 by Maslach et al, as a gold standard assessment tool is the most commonly used tool for measuring the

rate of burnout, and contains 22 items that measure three dimensions of burnout. The three dimensions include; emotional exhaustion (9 items), depersonalization (5 items) and lack of personal success (8 items). High emotional exhaustion score indicated the loss of interest and indifference that meant emotional resources have been exhausted. Depersonalization forms with the development of negative attitudes and distrust in recipient of work and services. Completion (personal success) evaluates the sense of competence and successful accomplishment, and reduced personal success is identified by tendency towards negative self evaluation particularly in relation to working with the patient. High score in the first and second dimensions (emotional exhaustion and depersonalization) and low score in the third dimension (lack of personal success) reveal the high level of job burnout. Maslach et al Burnout questionnaire has been frequently used in other countries in various studies and the credibility and reliability of this tool has been confirmed.

Numerous studies have proven the validity of burnout questionnaire (18, 19). The reliability of the questionnaire has also been evaluated in several studies and reliability coefficient of burnout questionnaire's tertiary dimensions has been reported more than 0.7 (19-23). In the present study, the reliability of the tool was investigated on 20 nurses and the value of Cronbach's alpha was equal to 70%.

3.1. Ethical Considerations

To conduct the study, the author, after obtaining the confirmation from the Ethics Committee of Tehran University of Medical Sciences, attended the health department of Erbil in Kurdistan and requested for permission to conduct the a study in Erbil's hospitals. The author introduced herself to hospitals' authorities and provided necessary explanations about the purpose, characteristics, and process of the study and received permission from the authorities, and with the help of nursing managers, eligible nursing staff were selected.

3.2. Data Analysis

In the present study, collected data was analyzed using descriptive and inferential statistical methods. To describe the data, tables of frequency distribution and graphs, percentage of frequency and criteria such as; mean, standard deviation and inferential statistics test including Fisher and Pearson's correlation coefficient were used. For computer analysis of the data, SPSS software version 20 was used.

4. Results:

Based on the findings, more than half of the samples were; female nurses (51.8%), married (75.7%) and between the ages of 22-33 years (53.7%). The majority of them

had nursing associate degree (67.9%), with one or two children (38.8%) and had full time employment (90.6%), also, 27.3% of their spouses had associated degree and 44% were employed. From the total number of the participants, 29.4% had less than 5 years of work experience in nursing, while, more than half of the nurses (54.4%) had less than 5 years of work experience in current ward and were working on permanent morning and evening shifts (57.8 %). The job positions of the majority of them (88.1%) were nursing and had no second job (82.6%). More details are shown in Table 1 and 2.

The findings of job satisfaction of nurses showed that, 7.9% of nurses had low job satisfaction, 45.2% had moderate job satisfaction, 42.7% had high level of job satisfaction and only 4.4% had very high job satisfaction.

The findings related to the dimensions of burnout showed that, lack of personal success was (36.16 ± 12.51), emotional exhaustion was (13.38 ± 9.86) and depersonalization was (8.67 ± 8.39). Using Pearson's correlation coefficient test, there was a statistically significant but inverse relationship between job satisfaction of nurses and all three dimensions of burnout (emotional exhaustion, depersonalization, lack of personal success), ($P \leq 0.0001$), (Table 3).

In regard to the relationship between job satisfaction and demographic variables, the variables only had significant relationship with marital status ($P=0.004$) and ward ($p=0.005$).

The results relating to the relationship between dimensions of burnout and demographic variables showed that, emotional exhaustion had significant relationship with age ($p=0.033$), general employment history ($p=0.025$) and working hours ($p=0.001$). Depersonalization had a significant relationship with age ($p=0.017$), general employment history ($p=0.005$), and working hours ($p=0.001$), and Lack of personal success had a significant relationship with marital status ($p=0.005$).

5. Discussion:

Nurses' job satisfaction is one of the requirements for the quality of care, and its constant monitoring is a useful tool to facilitate the development of the related organizations.

Based on the findings of this study, less than half of the nurses had moderate and high job satisfaction and a small number of nurses had low and very low job satisfaction.

In the study of Ghamari Zare et al (2012), only 7.5% of nurses had low job satisfaction and 17.3% of them had high job satisfaction and the majority of nurses 75.2% had moderate job satisfaction (24). The results of a study by Price et al showed that, half of the studied nurses (50%) were satisfied with their job (25), which is consistent with the

findings of the present study. The results of a study by Mirzabeigi et al also showed that, only about a third of nurses (34.3%) were satisfied with their job (26). While, in the study of Jafar Jalal et al (2015) the majority of nurses (62%) had low job satisfaction, (34%) had moderate job satisfaction and only 4% had high job satisfaction (2). According to the results of Karimi Baboukani et al, only 35% of nurses were quite satisfied with their current job, while 45% of them were not satisfied with their job, and 14% were neither satisfied nor dissatisfied, and in general, the level of job satisfaction among them was low (27).

However, in the study about the job satisfaction of nurses in Erbil, 63.8% of nurses were neither quite satisfied nor completely dissatisfied, 22% were satisfied and only 14.2% were dissatisfied with their jobs (4). In another study that was conducted on Kurdish speaking nurses, nurses' job satisfaction was at moderate level (28). Further studies in other cities showed moderate levels of job satisfaction (24, 29-33).

Considering the impact of various aspects of job on the nurses' job satisfaction, and the fact that, these dimensions are different in different countries, cities and hospitals, the difference in the score of job satisfaction is also expected and explainable. The differences in job satisfaction could be due to differences in working conditions and the existing professional situation in the research environments. Ingersoll et al in their study showed that, the job satisfaction is different based on the position of employees, the environment and the role of nurses (34).

In the present study, the findings related to dimensions of burnout showed that, the mean of lack of personal success was (36.16±12.51), emotional exhaustion was (13.38±9.86) and depersonalization was (8.67±8.39). Also, the lack of personal success was (48%), emotional exhaustion was 42% and depersonalization was 40%. The level of burnout in numerous domestic and foreign studies is different. For example, Arab et al (2012) concluded that, 5.4% of nurses had high level of depersonalization, 41.1% had high level of feeling of lack of personal success and 35.6% had high level of emotional exhaustion (35). Also, in the study of Farsi et al, majority of the studied subjects had the feeling of moderate to high emotional exhaustion and low personal success. The researchers in the present study found that, the majority of nurses who participated in this study had a good status in terms of job burnout (36).

In several studies, different dimensions of burnout such as emotional exhaustion and lack of personal success have been reported at the moderate level and depersonalization has been reported at low level (37-39). In comparison with studies conducted in other countries, the results of Holland and Armstrong studies at the Cancer Center in New York (USA) showed that, the level of nurses' burnout at emotional exhaustion dimension was moderate to high and lack of personal success dimension was high (40).

Lopez et al also reported the dimensions of emotional exhaustion and depersonalization of burnout at low level and the lack of personal success at high level, which are consistent with the results of this study (41).

The findings of this study however are not consistent with the results of some other studies. In the study of Zargar Shirazi et al (2015), burnout at the dimension of emotional exhaustion was (90.26±74.7), at the dimension of depersonalization was (21.11±75.3), and at the dimension of lack of personal success was (14.20±78.4). Therefore, the burnout at the dimensions of emotional exhaustion, depersonalization, and then lack of personal success were higher than average among studied nurses (42). In some other studies, the level of nurses' burnout at all three dimensions of burnout, were low (43).

The level of burnout is different in various studies, which probably the difference could be due to several reasons including; differences in the roles of nurses, type of shift, long working hours, high workload, and conditions and discrimination at the workplace (44). It could be said that, people in similar working conditions do not suffer the same level of burnout and burnout is influenced by several factors (37). In the meantime, what is important is that, the high level of burnout is one of the problems that may cause safety risks for patients and nurses (10). Therefore, empowering nurses in the use of effective strategies related to their general health (both individual and organizational) should be considered in nursing managers' planning. The methods of communication skill improvement in nursing work environments could be used such as; holding in-service training workshops, participating nurses in decision makings, occupational support, reducing job's conflict and mitigation, psychological interventions to reduce work-related stresses and increasing adaptability in the workplace to reduce burnout. High prevalence of burnout at the dimension of lack of personal success requires special attention and interventions.

In regard to the relationship between job satisfaction and burnout, the results of this study showed that, between the job satisfaction of nurses and all three dimensions of burnout (emotional exhaustion, depersonalization, lack of personal success) there was an inverse and significant relationship ($P \leq 0.0001$). This result is consistent with the result of Mooghali et al study in which job satisfaction had an inverse and significant relationship with all three dimensions of burnout at both private and public sectors ($P < 0.01$).

Significant and inverse relationship between nurses' job satisfaction and burnout is also seen in other studies (44, 45). In this regard, Sekol and Kim in 2014 conducted a study with the aim to assess job satisfaction and burnout among pediatric nurses at surgery, intensive care, hematology / oncology wards at an acute care hospital. Based on the

findings, they found a significant relationship between job satisfaction and burnout at four of the studied wards ($p < 0.001$), (46).

The results of this study are not consistent with the results of some studies that found a significant and positive relationship between job satisfaction and burnout among nurses (47-51). It can be said that, the inconsistency between these studies and the present study could be due to difference in studies' samples and environments. Because, in the present study, the samples were nursing staffs and samples in other studies were non-nursing staffs.

As in the nursing profession, nurses are constantly faced with stressful and difficult conditions (long shifts, lack of breaks at night shifts and low wages), as a result, they spend too much energy, but do not receive as much rewarded (52). In accordance with the Siegrist (53) model, they do not perceive a balance between effort and reward, and this makes them to be discontented with their job and feel burnout. In addition, factors such as; job satisfaction, conditions of the workplace, work experience, high workload, work-related stress and fatigue also affect burnout (6).

The results of the present study about the relationship between job satisfaction and demographic variables indicated that, these variables were associated with marital status ($p = 0.004$) and ward ($p = 0.005$). Other studies in United States and Iran have shown this association (27, 32, 46, 54, 55), however, some other studies have not shown this association (2, 26, 27, 28, 56).

It could be said, differences in the impact of different demographic factors on job satisfaction in different studies are due to differences in cultural and socio-economic as well as the conditions of the research environments.

The results of the relationship between dimensions of burnout and demographic variables showed that, dimensions of emotional exhaustion and depersonalization had a significant relationship with age, general employment history and hours of working. Dimension of lack of personal success only had a significant relationship with marital status. These results are consistent with many studies conducted in Iran and Korea (44, 57). However, the results of this study are not consistent with some other studies (37, 58-61).

6. Conclusion:

This study provides documents in relation to job satisfaction and burnout among nurses for the hospital managers and health policymakers in Kurdistan, Iraq. Considering the fact that, majority of nurses who participated in this study had a moderate job satisfaction, it is crucial that, hospital nursing managers make plan to improve nurses'

job satisfaction. The authors suggest that, by periodic measuring of job satisfaction and identifying factors that have impact on job satisfaction of nurses, and also using strategies such as; creating opportunity for nurses' promotion based on their abilities, improving the culture of society in regard to the importance of nurses and nursing profession, providing facilities and opportunity to update nurses' knowledge and using experienced consultants, resolve existing problems and dissatisfactions. Based on the results of this study, it could be said that, reducing nurses' burnout should be the priority for nursing managers and health policymakers.

Since the monitoring of employees' job satisfaction is a useful tool for improvement of the related organization, and ignoring this sensitive issue leads to burnout and low quality care (29), the authors suggest that, hospitals' managers and authorities should constantly monitor the level of job satisfaction and burnout among nursing staffs that are dynamic components of the organizations. Also, by taking into account the factors affecting these two variables, along with the use of methods to increase motivation, they should enhance job satisfaction and decrease burnout of nurses and ultimately improve the quality of health care for patients.

Since the present study examined the relationship between two variables of burnout and job satisfaction in the public hospital in Erbil, Kurdistan region of Iraq, it would be recommends that, the relationship between these two variables should also be examined in hospitals of other provinces in Kurdistan with standard tools used in this study, and the results of them would be compared with findings of this study. Furthermore, intervention studies should be conducted by future researchers to reduce burnout and increase job satisfaction of nurses.

Table 1: Summary of Demographic Characteristics

Characteristics	No	Percent
Sex		
Female	226	51.8
Male	210	48.2
Age		
	234	53.7
22-33	147	33.7
34-45	50	11.5
46-57	5	1.1
>57		
Education		
Course	2	.5
Primary Nursing School	13	3.0
LPN	63	14.4
Associate Degree	296	67.9
Bachelor	56	12.8
Master Degree	6	1.4
Marital Status		
Single	101	23.2
Married	330	75.7
Widow	1	.2
Divorced	4	.9
Employment		
Contractual	37	8.5
Projective	4	.9
Official	395	90.6

Table 2: Summary of Demographic Characteristics

Characteristics	No	Percent
Total Experience (year)		
<5	128	29.4
6-10	117	26.8
11-15	90	20.6
16-20	35	8.0
>20	66	15.1
Experience recent ward (year)		
<5	237	54.4
6-10	134	30.7
11-15	45	10.3
16-20	15	3.4
>20	5	1.1
Responsibility		
Nurse	384	88.1
Head Nurse	45	10.3
Supervisor	3	.7
Matron	4	.9
Shifts		
Fix(morning/evening)	252	57.8
Fix (night)	35	8.0
Circular(M/N,M/E)	103	23.6
E/N	40	9.2
24Hours	6	1.4

Table 3: Correlation between Burnout Dimensions and Total Job Satisfaction

Total job satisfaction Burnout	r	P value
MBI 1-7 (depressive anxiety syndrome)	-.377**	.000
MBI 8-14 (Depersonalization)	-.286**	.000
MBI15-22 (The reduction of personal achievement)	-.160**	.000
** . Correlation is significant at the 0.01 level (2-tailed).		

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