

Assessment of job Stress Related to Social Environment among Nurses in Cardiac Surgical Intensive Care Units in Baghdad City

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Summary:

Background: Nurses experience increasing demands in the workplace and have limited support in their occupation to help them lowering the level of stress, and one of the observable severities of stress among nurses in intensive care units are the social Stressors. So the study was aimed to assess the social stressors and the severity of stress among nurses in cardiac surgical intensive care units.

Objectives: The study aimed to assess the level and sources of social job stress related to the social relationship experienced by nurses, who were working in intensive care units and to find out the relationship between social stressors and some variables such as age, gender, educational level, marital status, Years of experience in cardiac intensive care units.

Patients and Methods: A descriptive-analytic Study was conducted on cardiac surgical intensive care units nurses in Baghdad hospitals. The sample of the study were selected purposively and consisted of 60 nurses who were working in cardiac surgical intensive care units in Baghdad city (Ibn Al- Bitar Hospital for Cardiac Surgery, Ibn Al-Nafis Hospital for Cardiovascular Diseases, and the Iraqi Center for Heart Diseases) in the period of 1st February 2006 to the 6th April 2006. Data was collected through the use of the constructed questionnaire and the process of the self-administrative report for each nurse as a mean of data collection methods. A Questionnaire was designed to consist two parts; the first part concerned with the demographic characteristics of the sample and the second part concerned with the social environmental stressors, and it contain 14 items describing the social stressors. Data was analyzed through the application of the descriptive statistical analysis (frequency, percentage, mean, standard division, and mean of score) and inferential statistic (chi-Squire test).

Results: The results of the study revealed that the most of sample were female (53 %), their age ranged between (30-39) years, of university graduates, single, with (6-10) experience in cardiac surgical intensive care units. Also the results revealed that nurses in cardiac surgical intensive care units suffer from severe level of stress related to the social environmental stressor RS. (67.69 %).

Conclusions: Nurses who were working in intensive care units suffered from sever job stress related to the workplace stressors, and there is a significant relationship between social job stress and nurses age. Therefore there was a need for an effective stress management to assist such nurses to deal with job stress.

Key words: stress, job stress, intensive care unit.

*Fac Med Baghdad
2011; Vol. 53, No.3
Received July. 2009
Accepted May. 2011*

Introduction:

The definition of stress within the work of Selye; defines stress as a consequence of the interaction between stimuli and the responses, a universal experience in our life, or stress is a result of any demands upon the body. Stress may be present for a person to function; so not all stress is distress [1]. One of the most stressful areas of the hospital is the intensive unit (ICU). The working environment of Intensive Care Unit is a constant source of stress for nurses working in Intensive Care Unit. Critical care nurses practice in a complex assessment, high intensity therapies, Interpersonal conflicts, Knowledge base, Management of the unit, Lack of administrative rewards and continuous nursing vigilance [2]. Also nurses constantly experience a stressful environment because of the complex nature

of patient's health problems requiring an extensive use of very sophisticated technology [3]. Stress occurs when nurses try to manage patient's nursing care within the scope of nursing. Stress also occurs when there is a constant desire to achieve only the best. ICU nurses are confronted not only by the increasing demand for quality care by patient's family and the organization, but also by the demand for technological excellence [4]. The origins of stress among ICU nurses in Baghdad has now been identified and because stress has an impact on the health and well-being of critical care nurses, it is therefore important for organizations to take measures to relieve stress among ICU nurses. Most studies on stress in nursing have focused on general nursing specialties, and relatively little attention has been paid to nurses working in Intensive Care Unit. Therefore the aims of the study are identify the job stress related to social work environment among nurses in ICU, and to find out the relationship between social stressors and some variables such as

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(age, gender, educational level, marital status, Years of experience in cardiac intensive care units).

Patients and Methods:

A descriptive-analytic Study was conducted among nurses in the cardiac surgical intensive care units in Baghdad hospitals. The samples of the study were selected properly and consisted of 60 nurses who were working in cardiac surgical intensive care units in Baghdad city (Ibn Al- Bitar Hospital for Cardiac Surgery, Ibn Al-Nafis Hospital for Cardiovascular Diseases, and the Iraqi Center for Heart Diseases) from the period of 1st February 2006 to the 6th April 2006, and each interview took approximately 20-30 mints for the nurse to fill the questionnaire. A questionnaire was constructed by the investigators based upon the extensive review of the related literature and the nursing stress scales [5] , it consisted of two parts, the first part concerned with the demographic characteristics of sample and the second part concerned with the social environmental stressors, which contain 14 items describing the social stressors. These items were rated according to three level of Likert rating scale, (never 1, some time 2, and always 3) the severity of stresses are measured by relative sufficiency (RS). Data were analyzed through the application of the descriptive statistical analysis (frequency, percentage, mean, standard division, and mean of score) and inferential statistic (chi-Squire test). The validity of the questionnaire was determined by forwarding it to 14 experts in the field of psychiatry ; a pilot study was carried out on 10 nurses working in cardiac surgical intensive care units measuring the reliability of the questionnaire, test and retest technique reliability of two weeks interval were used to find out the correlation between two tests. Alpha correlation coefficient was ($r = 0.87$) for the job environmental stressors. Data were collected from nurses in charge room by using the interview process. Appropriate statistical measures were employed such as (frequency, percentage, mean, mean of score, standard deviation, and relative sufficiency). Data was analyzed through the application of the descriptive statistical analysis

(frequency, percentage, mean, stander deviation, and mean of score) and inferential statistic (chi-Squire test).

Results:

Table (1), Distribution of the sample according to their demographic characteristics

Nurses characteristics	No.	%
1-Gender		
Female	32	53.3
Male	28	46.7
Total	60	100.0
2-Age		
20-29	9	15.0
30-39	40	66.7
40-49	11	18.3
Total	60	100.0
3-Marital status		
Single	38	63.3
Married	22	36.7
Total	60	100.0
4-Education levels		
Secondary	11	18.3
Diploma	21	35.0
Bachelor	28	46.7
Total	60	100.0
5-Years of experience in ICU		
1-5	17	28.3
6-10	22	36.7
11-15	13	21.7
16-20	5	8.3
21-25	2	3.3
26-30	1	1.7
Total	60	100.0

No. =Numbers, % = Percentage

This table shows the sociodemographic characteristic of the ICU nurses, it was indicated that 53.3% of the sample were female, and 46.7% were male, the highest frequent age group were of age 30-39 years (66.7%), and most of sample were single (63.3%) , with regard to their educational level, most of the sample (46.7%) were of Bachelor level. Also the table shows that 36.7% of the sample has (6-10) years of experience in cardiac intensive care.

Table (2), Distribution of the Sample according to their Social stressors.

NO	Response Social stressors	Mild		Moderate		Severe		MS	SD	RS%	Severity
		F	%	F	%	F	%				
1	Poor relationships with doctors.	18	30.0	32	53.3	10	16.7	1.87	.68	62.34	Moderate
2	Poor relationships with co-workers.	20	33.3	30	50.0	10	16.7	1.83	.69	61.00	Moderate
3	Lack of support from my immediate supervisor.	6	10.0	18	30.0	36	60.0	2.40	.68	80.00	Severe
4	Lack of administrative support	10	16.7	16	26.7	34	56.7	2.40	.76	80.00	Severe
5	Difficulty in working with nurses of the opposite sex.	30	50.0	14	23.3	16	26.7	1.77	.85	59.00	Moderate
6	Lack of respect from colleagues.	28	46.7	27	45.0	5	8.3	1.62	.64	54.00	Moderate
7	Poor benefit or rewards for good performance.	8	13.3	21	35.0	31	51.7	2.38	.72	79.34	Severe
8	Inadequate payment.	8	13.3	14	23.3	38	63.3	2.50	.72	83.34	Severe
9	Lack of participation in decision making.	26	43.3	17	28.3	17	28.3	1.85	.84	61.67	Moderate
10	Lack of understanding from administration about the demands of the job.	39	65.0	14	23.3	7	11.7	1.47	.70	49.00	Mild
11	Difficult to express my opinions or feelings about my job condition to my supervisor.	3	5.0	11	18.3	46	76.7	2.72	.56	90.67	Severe
12	Avoid the people in my unit as much as possible.	41	68.3	13	21.7	6	10.0	1.42	.67	47.34	Mild
13	Criticism by supervisor.	17	28.3	21	35.0	22	36.7	2.08	.81	69.34	Severe
14	Poor doing socially with my people on my unit.	18	30.0	22	36.7	20	33.3	2.3	.80	67.67	Severe
Total								2.030	.217	67.69	Severe

F= Frequency, % = Percentage, MS =Mean of score, SD = Stander deviation, RS =relative sufficiency [Non severity: (RS< 33.33) %, Mild :(33.33-49.99) %, Moderate: (50.00-66.66)., Severe: (66.67 – 100.00) %].

This table shows the mean of score (MS), and the relative sufficiency (RS) of the sample in the area of social stressors. They ranged from severe level of stress including (7) items NO. (3, 4, 7, 8, 11, 13, and 14) RS: range from (90.6-67.67) %, moderate level of stress including (5) items NO. (1, 2, 5, 6, and 9) RS: range from (62.34-54.0) %, to mild level of stress including (2) items NO. (10 and 12) RS: range from (49.0-47.67) %. The result of this area of stress reached the sever level of stress RS: (67.69%), and the item NO.11 (Difficult to express my opinions or feelings about my job condition to my supervisor) had The more severity level of stress, RS: (90.67%).

Table (3), the relationship between the demographic characteristic of the sample and the social stressors in the work environment

Stressors Variables	Social Stressors						Total
	Mild		Moderate		Severe		
	F	%	F	%	F	%	
<u>Gender</u>							
Female	0	0	31	51.7	1	1.7	32
Male	0	0	28	46.7	0	0.0	28
Total	0	0	59	98.3	1	1.7	60
CS							NS. (0.533)
<u>Age</u>							
20-29	0	0	8	13.3	1	1.7	9
30-39	0	0	40	66.7	0	0	40
40-49	0	0	11	18.3	0	0	11
Total	0	0	59	98.3	1	1.7	60
CS							S. (0.050)
<u>Marital status</u>							
Single	0	0	37	61.7	1	1	38
Married	0	0	22	36.7	0	0	22
Total	0	0	59	98.3	1	1	60
CS							NS. (0.633)
<u>Educational level</u>							
Secondary	0	0	10	16.3	1	1.7	11
Diploma	0	0	21	35.0	0	0.0	21
Bachelor	0	0	28	46.7	0	0.0	28
Total	0	0	59	98.0	1	1.7	60
CS							S. (0.104)
<u>Years of experience in ICU</u>							
1-5	0	0	17	28.3	0	0.0	17
6-10	0	0	21	35.0	1	1.7	22
11-15	0	0	13	21.7	0	0.0	13
16-20	0	0	5	8.3	0	0.0	5
21-25	0	0	2	3.3	0	0.0	2
26-30	0	0	1	1.7	0	0.0	1
Total	0	0	59	98.3	1	1.7	60
CS							NS. (0.882)

[S = Significant (p. value ≤ 0.05), NS = Non significant (p. value > 0.05)]

This table indicates that there was a significant relationship between Social stressors and Age of nurses, and there were non - significant relationship between Social stressors and other variables (gender, educational level, and years of experience in cardiac surgical intensive care units).

Discussion:

Analysis of nurses stressor items in table (2) showed that Lack of support from supervisor, Poor benefit or rewards for good performance , Inadequate payment, Difficult to express opinions or feelings about job conditions to my supervisor, Criticism by supervisor, Poor doing socially with my people on my unit were among the highest rated

items. The present result is in agreement with a study which reported that lack of support and understanding from senior staff was one of the most stressful aspects [6]. Beside that it was found that lack of organizational support and involvement had the strongest relationship with stress [7]. Some of these stressors are similar to the findings from other studies of stress in doctors and nurses [8, 9]. Another important source of stress was a lack of firm cooperation between team members including nursing colleagues, nursing administrators [10]. Inadequate pay, lack of understanding from administration about the demands of the job, a perceived lack of respect, poor relationship with doctors and co-workers are the greatest sources of stress [11].

A study of Callaghan (2000) reported that more than 20% of the nurses cited a need for better or benefits, and suggest that issue around having little opportunity for advancement, poor benefits are major sources of stress for nurses [12]. A study mentioned that lack of reward may now be displacing some of the other issues of stressors. So nurses must be supported better, but this is hindered by lack of understanding of how sources of stress vary between different practice areas [13]. Another source of stress in working environment are (Poor relationships with doctors, Lack of participation in decision making, Poor relationships with co-workers, Lack of respect from colleagues and being undervalued) In a study of Shiu (2003) on nurse-physician relationship found that doctors were very disruptive in the workplace, and over 90% of participating nurses in his study reported that had either experienced or witnessed doctor "verbal abuse" [10]. A study mentioned that another reason that nurses and doctors are conflicted is concerning treatment. The nursing profession values are centered on "care" versus the medical focus of "cure" [12] . The result of the present study is in line with the findings of Tsai (1993) who found that nurses working in ICU are more often confronted with life sustaining treatment decisions and ethical issues concerning issues of patient care management [13]. Many nurses found that their care for a patient was some what incomplete why they had no influence in, or discussion, on decisions made. Also poor communication between nursing and staff was stressful [14]. Study findings among ICU nurses in Hong Kong also reported the causes of stress being nursing critically ill patients, increasing workload and interpersonal relationship among the staff [15]. Maintaining a professional relationship among working colleagues is important results in a harmonious working environment. Teamwork and collaboration need to be strong or else nurses will find difficulties in speaking about problems. They will not be able to resolve conflicts in a healthy manner and also may not be able to participate in clinical decisions. This is agreed by Cottrell (2000) who stated that poor professional relationship may cause a stressful working

environment [16]. Therefore, specialized knowledge and competency are required for nurses to communicate and collaborate effectively which will thus improve patient care. In fact, both physicians and nurses find difficulty when confronted with inter-professional problem due to lack of ability and unwillingness to accept responsibility [17]. Findings of the present study table (3) indicated that social stressors are positively correlated with age at p-value (0.050), while gender, educational level, and years of experience in cardiac surgical intensive care units were non - significant relationship with Social stressors. Young age and less years of work as a nurse were negatively related to the stressors of work for nurse's. Also inadequate preparation and less experience members tend to be stressful aspects, with regard to educational level [18]. Stress among new graduate nurses has been shown to be more common among younger nurse perhaps because of the initial shock of the job in reality, a lack of adaptation in working [19]. This result is in agreement with a study which reported that opportunity for growth and movement and increase in knowledge and skill was found to be a key in motivation towards empowerment. Lack of opportunity in any form contributes to occupational stress and nurse in ICU found that peer support was critical for effective coping to decrease their work stress [20].

Conclusions:

The nurses who were working in intensive care units suffered from severe job stress related to the workplace stressors, and there is a significant relationship between social job stress and nurses age.

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