

# Assessment of Occupational Stress among Nurses' at Baghdad Medical Complex Hospitals in Baghdad City, Iraq

RaadKhamees Obaid<sup>1\*</sup> Wissam Jabbar Qassim<sup>2</sup>

## **Abstract**

**Background:** Occupational stress is a major and complex issue in working environments. It is among the major reasons for decreased earnings in organizations and its effects on employees are physical and psychological. Work stress is far more important in health care field, as the provision of health services is very laborious and high - risk.

Amis the study aimed to assess occupational stress among nurses and Find out the relationship between sociodemographic characteristics of the nurses and occupational stress in the Baghdad Medical Complex.

**Methodology:** A descriptive study is conducted to assess the occupational stress among nurses' at Baghdad Medical Complex Hospitals in Baghdad City from 1st October. 2019 to 4th Apr 2020. A multistage is a sample of (316) out by (1653) nurses. The sample chooses by cluster sampling. Baghdad Medical complex, which The findings of the current study revealed that the level of occupational stress among nurses was measured using a questionnaire survey and professional stress scale.

**Results:** In this study, hospital nurses reported moderate and mild stress levels. The main occupational stressors for nurses were a poor attitude of a doctor, a work in stressful departments (emergency / ICU), insufficient income, excess work, time pressure and labor with insufficient meal and rest. Stress reduces skills of attention, focus, judgment and decision making. **Recomndiation:**The study recommended that the Medical City Complex Hospital's in Baghdad should focus on the importance of occupational stress among nurses and attention to the importance of organizational commitment and its impact on occupational stress to reach the provision of quality health care.

**Keywords---** Assessment, Occupational stress, Nurses.

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## 1. Introduction

occupational stress as destructive psychological and physical feelings of emotional reactions caused by job needs that do not match the employees capacity and resources (1).

Rosenthal and Alter (2012) job stress as personal anxiety in the work environment. A workload is mostly stressed if a worker feels he can not meet his job or his supervisor's demand, as Ullrich and Fitz Gerald (1990) discussed that "workplace or work stress generates when a difference exists between the demands of a workstation or boss and the ability of a worker to manage" (2)

Researchers have been investigating the impact of occupational stress on the physical and mental health and behavior

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<sup>1</sup>MSc Student, University of Baghdad, College of Nursing, Community Health Nursing Department, Iraq

<sup>2</sup> Assist. Professor PhD, University of Baghdad, College of Nursing, Community Health Nursing Department, Iraq

of employees over the past decades (3). Work stress is one of the most important sources of stress in every person's life. Workplace stress has become a common and expensive problem. It is one of the main reasons for lower productivity in organizations and its effects on employees are physical and psychological.

Work - related stress in the field of health care is much more essential because the healthcare system is very laborious and risky. Conditions should be suitable and supported by reduced employee stress to ensure the quality, effectiveness, efficiency and equity of these types of services. (4).

Occupational stress in the nursing profession is related to changes in work conditions and leads to changes in the nurses' health, well-being, and job satisfaction, resulting in emotional exhaustion or burnout. These, in turn, lead to poor-quality nursing care and low patient safety (5).

Occupational stress and the work environment have a strong interrelationship with nurses' stress at work. A negative or poor work environment (e.g. Low wages, shortages of necessary medical equipment and lack of adequate rest) contribute to stress in nurses and affect nursing care and performance and patient safety (6).

Excessive work hours are one factor related to negative work environments, as they can be seen as a workplace policy that nurses have to follow. Working for long hours can adversely affect nursing care performance, sometimes resulting in unintended negative consequences for patient care (7). Sometimes, nurses have to work extended work hours due to work policy (as in hospitals). Extended work hours have negative consequences for nurses (e.g. Stress, poor health, and emotional exhaustion) and patients (e.g. Patient identification and communication error) (8).

## **2. Methodology**

### **Ethical consideration**

Permission has been obtained from Baghdad Medical Complex H to ensure their acceptance, cooperation and to arrange for the administrations of hospitals to do study as well nurses who have agreed to participate in the study .

### **Design and setting of study**

A Descriptive study which related to assess level of occupational stress among Nurses Working at Baghdad Medical Complex hospitals Baghdad City, Iraq. Initiated from (1st October. 2019 to 4th Apr 2020).

**Sampling and sample size:**A multistage is a sample of (316) out by (1653) nurses. The sample chooses by cluster sampling through instrument of self-report.

### **Instrument of study**

The researcher uses an instrument of (NIOSH Questionnaire) are rated as Always, Never, or Sometimes and scored as (3) for Always, (2) for Sometimes and (1) for Never.

The occupational stress questionnaire form style was a multi choice have been scored and rated on three levels Likert scale, (3) points for always, (2) points for sometimes answer and

(1) point for the never which evaluated by cutoff point (0.66) due to scores (1, 2 and 3) respectively. Scores of responses are categorized according to the following level:

### **Statistical Analysis**

The data of the present study is analyzed through using the Statistical Package of Social Sciences (SPSS) version (24). The following statistical data analysis approaches were used in order to analyze data and assess the results of the study. The researchers used descriptive and inferential data analysis to obtain results.

### 3. Results and discussion

Table (1): Regarding to the sample age 42.4% of nurses at age 29-38 years old Al, which study in Jordan to Exploring the Relationship between Occupational Stress and Organizational Commitment among Nurses in Selected Jordanian Hospitals found that 38.7% of nurses at age less than 25 years old(9). The study in Egypt for Assessment of Work Stress and Organizational Commitment among Female Nurses at Zagazig University Hospitals, Sharkia Governorate, Egypt) they found that (63.68%) of them at age more than 30 years old. This finding supported our finding (10). According to nurse gender most of them were female found that 86.7% of nurses were females. Also, Haque (2014) found that 84.7% of nurses were females (11)

According to their marital status most of them were married found that 58% of nurses were married. Haque (2014) found 98.3% of nurses were married(11). Regarding to experience in nursing, one third of them had 1-5 years of experience in nursing. Dagget, Molla, &Belachew, (2016) found that 77.1% of nurses had years of experience from 1-5 years. Han, Han, An, & Lim, (2015) found that 29.5% of nurses had 2-4 years of experience.(12) This result similar to our study finding.

The Jordanian found that 39% of nurses had 5-10 years of experience in nursing field. Haque (2014) found that 61.9% of nurses had 11-20 years of experience in field(9). The study in Egypt was found that 79.47% had years of experience more than 10 years(10).the study of Secondary he found that 44% of them had 11-15 years of experience in nursing. This finding not consisted with our finding( 13)

Regarding to monthly income, most of them had 300000-600000IQD monthly income was (36.7%). According to educational qualification, (41%) of them had diploma degree. Dagget, Molla, &Belachew, (2016) found that (61.6%) of nurses had diploma in nursing.(14) This finding supported to the present study finding.

Figure (1): Most of the study participants experience a moderate level of occupational stress Finally, (n = 251; 79.4%) of nurses had moderate level of occupational stress followed by those who experience a mild level of occupational stress (n = 63; 19.95), and those who experience a severe level of occupational stress (n = 2; 0.6%). Haque(2014) found that nurses had moderate occupational stress(11). Study in Egypt found that moderate stress was the frequent degree of work stress among the studied nurses (64.7%), however mild stress & severe stress represented 23.2%, & 12.1% respectively. This finding similar to our study finding( 10). but this result not consisted with the finding of study in Jordan was found that 70% of nurses not had job stress (9).

Dagget, Molla, &Belachew, (2016) found that 34% of nurses had moderate level of job-related stress (14). the study of Gadirzadeh, Adib-Hajbaghery, & Abadi, (2017) found that nurses gained a moderate level of job stress score. This finding supported our study result (15).

Talasaz, Saadoldin, &Shakeri, (2017) in their study (Job Satisfaction and Occupational Stress in Organizational Commitment Among Midwives Working in the Maternity Wards; Mashhad, Iran, 2014) found that 93.3% of nurses had occupational stress grade (II)(16)

The table (2): There are statistically significant inverse correlations between participants' age and occupational stress ( $r = r = -.23$ ; at  $p < 0.01$ ) respectively. There are statistically significant inverse correlations between participants' years of experience in nursing and each of stress related to role conflict, stress related to role ambiguity, stress related to workload, occupational stress, and organizational commitment ( $r = -.253$ ; at  $p < 0.01$ ). So tow study in Egypt was found that there is

significant statistical relationship between nurses age and years of experience with occupational stress. This finding supported our finding(10,11), there is significant statistical relationship between occupational stress and nurses age and work experience. This result consisted with our finding(16).Dagget, Molla, &Belachew, (2016) found that there is no significant relationship between occupational stress and their age(14). This result different of the present study finding.

Table (3): There are statistically significant differences in occupational stress among the groups of(marital status, monthly income and educational qualification (p.value =.000) at p: 0.05. There is no significant statistical relationship between job stress and marital status(9). So that another study was found that there is no significant differences between job stress and nurses marital status.(15) This result disagree with our finding.there is significant statistical relationship between nurses marital status with occupational stress(10,6). This finding consisted with our findingregarding supporting result of educational qualification there is no significant statistical relationship between job stress and educational qualification(9). Talasaz, Saadoldin, &Shakeri, (2017) found that there is no significant statistical relationship between job stress and educational qualification. This result not consisted with our finding(16).

the Egyptian study was found that there is significant statistical relationship between nurses' educational level with occupational stress (10). Gadirzadeh, Adib-Hajbaghery, & Abadi, (2017) found that there are significant differences between job stress and nurses educational qualification. This finding consisted with our finding (15).

#### 4. Conclusions

4.1 Regarding to the sample age of nurses at age 29-38 years old, the gender was more than a half are females compared to males. Concerning the educational qualification, more than two-fifth hold an associate degree or diploma degree.

Most of the study participants experience a moderate level of occupational stress.

There are statistically significant inverse correlations between participants' age and Occupational stress. There are statistically significant inverse correlations between participants' years of experience in nursing and occupational stress

#### 5. Recommendation

Intensify training programs on how to deal with the stress of working for patients in hospitals.

Table (1) Participants' socio-demographic characteristics (N = 316)

Variable	Frequency	Percent	
<b>Age: Mean (SD): 33.72 ± 8.87</b>	19-28	97	30.7
	29-38	134	42.4
	39-48	62	19.6
	49-60	23	7.3
	Total	316	100
<b>Gender</b>	Male	141	44.6
	Female	175	55.4
	Total	316	100
<b>Marital status</b>	Not married	102	32.3
	Married	199	63
	Widower	9	2.8

	Divorced	6	1.9
	Total	316	100
<b>Years of experience in nursing:</b> Mean (SD): 11.04 ± 8.73	1-5	107	33.9
	6-10	77	24.4
	11-15	49	15.5
	16 and more	83	26.2
	Total	316	100
<b>Monthly income (Iraqi Dinar)</b>	300.000-600.000	116	36.7
	601.000-900.000	110	34.8
	901.000-1.200.000	78	24.7
	1.201.000-1.500.000	12	3.8
	Total	316	100
<b>Educational qualification</b>	Nursing High School	88	27.9
	Associate degree (Diploma)	130	41.1
	Bachelor's degree	94	29.7
	Graduate degree	4	1.3
	Total	316	100

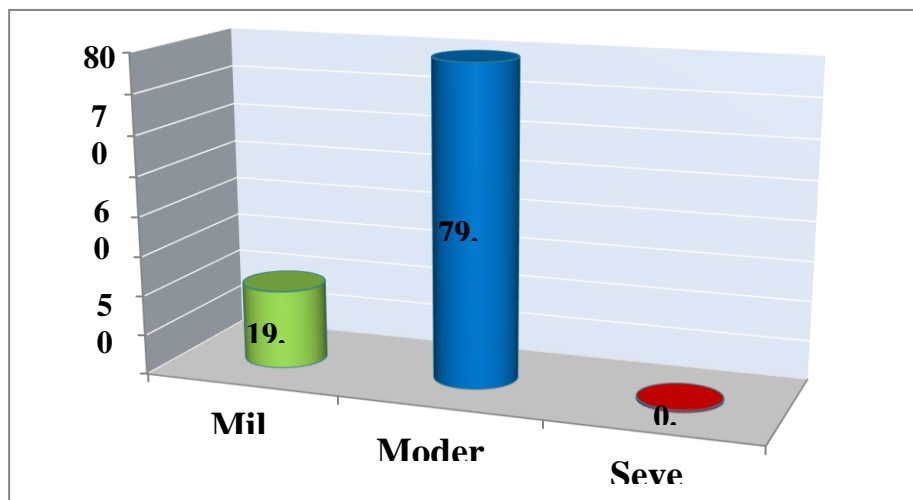


Figure (1) Occupational Stress Levels

Table (2) Correlations among study variables

Name of variable	Pearson –correlation	
	Value	P ≤
Occupational Stress	-0.23**	0.01
Age Mean (SD): 33.72 ± 8.87		

Occupational Stress	-0.25**	0.01
Years of experience in nursing: Mean (SD): 11.04 ± 8.73		

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table (3) Differences in occupational stress among the groups (marital status, monthly income and educational qualification)

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
<b>Occupational Stress Marital status</b>	Between Groups	1331.4	3	443.810	6.111	.000
	Within Groups	22660.3	312	72.629		
	Total	23991.8	315			
<b>Occupational Stress Monthly income</b>	Between Groups	1962.8	3	654.260	9.266	.000
	Within Groups	22028.9	312	70.606		
	Total	23991.7	315			
<b>Occupational Stress And educational qualification</b>	Between Groups	1420.4	3	473.452	6.544	.000
	Within Groups	22571.4	312	72.344		
	Total	23991.7	315			

F: ANOVA test, sig: significant, df: degree of freedom.

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