Job Stress among Nurses at Critical Care Units in Medical City Complex Hospitals in Baghdad City

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Abstract

Nursing has been identified as one of the most stressful jobs. Job stress in nurses affects both individual and organizational functioning as well as health care. A descriptive study was conducted among the nurses of the critical care units in the medical complex city to evaluate job stress. A non- probability (purposive) sample of (200) nurses who were working at critical care unit.The result reveals that, all staff nurses who working in critical care unit suffer from stress; that nurses working in critical care units are experiencing severe level of job stress (71%). They study shown that no a significant relationship among overall stress and all demographic data in present study.Stress management strategies should be design to assist critical care nursing staff to deal with job stress and help them to deals the difficulties generated by job pressures to improve the quality of nursing care, Hospital administration support services should be established for at-risk groups to relieve stress.

Keywords: Job Stress,Critical Care Units,Nurses.

1. Introduction

Job stress is an emotional, cognitive, behavioral and mental response to harmful aspects of the job and the workplace. Work stress among nurses has become a global phenomenon occurring in many countries, Stress at work is one of the main problems of human behavior that has invaded the professional performance of human resources for various reasons. This variable is observed at a complex and generalized level in all human activities and is a problem that can lead to the mental breakdown of man and the appearance of various psycho-behavioral disorders in society at its severe level (Abdullah, Mirza and Othman, 2018).

Nurses are exposed to a number of high stress factors, such as: Conflict with doctors, discrimination, heavy workload and persistence in dealing with death, patients and their families. Work stress in the nursing profession is linked to a multitude of negative trends, effects and consequences on physical, mental and behavioral health. Job satisfaction was mentioned among the consequences for attitude and behavior (Ameen and Faraj, 2019).

According to the American Institute of Stress, it is the main factor in up to 80% of all work-related injuries and 40% of turnovers in the workplace, while the European Foundation for the Improvement of Living and Working Conditions reported that 30% of the European working population is affected by work-related stress, 91% of Australians feel stressed about one or more important parts of their lives, Around 450,000 workers in the UK believed that their stress was making them sick , 86% of Chinese workers report stress,Stress is linked to the six main causes of death: heart disease, cancer, lung disease, accidents, cirrhosis of the liver, and suicide (Tsounis,Chatzigianni, Markopoulos&Sarafis,2018).

Working in the intensive care unit is stressful, as the messages examined the professional stress that afflicts the intensive care nurses, and the nursing staff has sources of stress and stress that result from the work in terms of psychological and physical stress , Nurses suffer from frequent requests and increased work pressure, as well as their support is limited in their profession to help them reduce the level of tension, as well as it is very difficult to observe the conditions of work and a difference in the levels of study and construction play an important role in the level of work stress (Lukose, 2015).

Critical units are the most stressful units in a hospital , Nurses working in the intensive care unit are the most vulnerable workers in other units that are vulnerable to work pressures, burnout and due to environmental, social pressures, etc. This leads to workload, conflicts with employees and doctors, inadequate staff and resources, and emotional behavior, 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 , 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((Bayda'a, 2011).

2. Methodology
Design of the study:

A descriptive study was conducted among the nurses of the critical care units of the city of the medical complex, Baghdad city , Iraq to evaluate the work stress of the critical care unit nurses and to determine the job stress in nursing in critical care units. Maintain and identify the relationship between stress and its demographic).

Ethical consideration:
Ethical approval has been granted from the Scientific Research Ethical Committee at the College of Nursing University of Baghdad prior to the initial conduct of the original study.
Sample and Setting of the study:
The study was conduct on nurses in the critical care unit at medical city complex in Baghdad city(Six hospital), Iraq .A non- probability (purposive) sample of (200) nurses who were working at critical care unit.
Instrument construction:
The questionnaire was developed by the researcher for the present study primarily to assess work-related stress among nurses at critical care unit
1- Perceive stress scale (Cohen& Mermelstein, 1994)
2- demographic data : This section contains details about the sample's socio-demographic characteristics, such as (sex, age, educational level, socioeconomic status)
Data collection:
The data is collected through a questionnaire that was included in the study, by meeting nurses suffering from stress at work in the critical care unit after the nurses' participants received information, and the questionnaire was clarified for nurses. This will take 5-10 minutes if the process of collecting data was completed from February 2021 to march 2021.

Statistical Data Analysis:
The statistical analysis of the data of the study is done by using Microsoft office excel 2010 and SPSS package ver. 20.
-Descriptive Statistical Tests (Frequency, Percentage, Mean of Score and Standard Deviation)

-Inferential Statistical Tests (Cronbach Alpha (α) and Chi-square test) .

3. Discussion of the Results
Discussion of the socio-demographic characteristics of the study sample who working at critical care units (Table :1):
Study findings revealed that more than half of nurses are males (55.5%); these results supported by Abdullah and Abbas (2015) which shown that the higher percentage of nurses was male (79%). Furthermore, disagree with a study results accomplished by Jissir and Hassan, (2017) which mentioned that (56.6%) of the participants was females. The high percentage of male study sample in the critical units result is normal condition as work effect of critical care units and most of the study sample from morning shift in critical care units.
Study results showed that most of nurses age are in the range 20-29 years were (48%). This agree with a results obtained in Abdullah, Mirza and Othman, (2018) which revealed that high percentage of the study sample where less than 30 years old. The high percentage of (20-29) years old of study sample because of critical care units were employed the highly qualified and early graduated nurses to provide health care services in critical care units.
Regarding nursing qualification, the highest percentage among nurses (39%) are with Diploma degree, and 30% of the study sample of Bachelor degree. This findings comes along with the study done by Abdullah and Abbas (2015), moreover with Abdullah, Mirza and Othman (2018) which showed that most of nurses graduated from medical institute (Diploma degree).
The nurses participated in the study reported moderate to high socioeconomic status in which 38.5% of them are with moderate level and 33.5% of them are with high level socioeconomic status. The results of the present study is in line with the findings of Jissir and Hassan (2017) which declared that (70%)of study sample at high level of income.
Discussion of the job stress among nurses working at critical care units:(Table :2)
The study findings showed that (71%) of study sample working at critical care units are experiencing severe level of work related stress, while (28.5%) of them experiencing moderate level of work related stress. This results supported in a study done by (Johan, Sarwar & Majeed, 2017) which concluded that most of the critical care nurses of study sample are working under highly stressful working conditions. Furthermore, agree with (Balla, Amara & Mohamed, 2016).
The critical care units is a highly stressful environment, not only for patients and their relatives but also for nurses working in critical care units due to very stressful situations that result from the emergencies, technological devices, and existence of severely injured patients as environmental factors besides other factors which will discussed afterward.
Discussion of the association between job stress and socio-demographic characteristics of study (Table :3)
The findings showed that there is no significant relationship between nurses' stress with regard to their gender, age, nursing qualifications and socioeconomic status at (p-value ≤ 0.05). These findings supported by vahedian-Azimi et al. (2019) in a national survey of critical care nurses in Iran; which agree with the study in that; age, married status, education level, number of children, and shift time were not significantly associated with stress levels. The findings revealed that there are positive significant relationship among overall stress between nurses with

their nursing qualification and socioeconomic status at (p-value= 0.034) and (0.011) respectively. Positive significant relationships among overall stress among nurses with regard to their department and working hours at (p-value= 0.015) and (0.024) respectively.

This supported in a study by Higazee et al., (2016) which concluded that educational level informed relatively very high levels of perceived stress. Additionally, comes in line with a study accomplished by using a Clinical Stress Scale in Cheng et al. (2015) which point out that the 12 hours shifts exhibited less work-related stress. Another study by Babanataj et al., (2018) on nurses who were selected from critical care units of an educational hospital in Sari City, Iran; closely support the results of the current study.

Conclusion

The study concludes the height percentage (71%) of Nurses suffer from sever work related stress and nurses working with long period in critical care unit are more common for job related stress exposures. They study shown that no a significant relationship among overall stress and all demographic data in present study.

Recommendations

Stress management strategies should be design to assist critical care nursing staff to deal with job stress and help them to deals with the difficulties generated by job pressures to improve the quality of nursing care and reduce work related stress. Motivational and equal programs for workers in places most exposed to work pressures.

Table (1): Distribution of the Nurses According to their Socio-demographic Characteristics

Variables		F	%
Gender	Male	111	55.5
	Female	89	44.5
	Total	*200*	*100*
Age **M±SD= 31±8**	20 – 29 years	96	48
	30 – 39 years	63	31.5
	40 – 49 years	31	15.5
	50 ≤ years	10	5
	Total	*200*	*100*
Nursing qualification	Secondary school	52	26
	Diploma	78	39
	Bachelor	61	30.5
	Postgraduate	9	4.5
	Total	*200*	*100*
Socioeconomic status	Low	56	28
	Moderate	77	38.5
	High	67	33.5
	Total	*200*	*100*

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

Table (2): Overall Assessment of job Stress among Nurses Working at Critical Care Units

Stress	f	%	M	SD
Mild	1	.5		
Moderate	57	28.5	2.71	.468
Severe	142	71		
Total	*200*	*100*		

f: Frequency, %: Percentage, M: Mean, SD: Standard Deviation
Mild= 0-13, Moderate= 14-27, Severe= 28-40

Table (3) Association between job stress and demographic Characteristics(age, gender, Nursing Qualifications and Socioeconomic status (N=200)

| Demographic data	Rating	Job Stress levels			P.Value (Chi-square)
		Mild %	Moderate %	Severe %	
Gender	**Male**	0	37	74	*P-value= .139*
	Female	1	20	68	
Age	**20 – 29 years**	1	24	71	*P-value= .731*
	30 – 39 years	0	19	44	
	40 – 49 years	0	12	19	
	50 ≤ years	0	2	8	
Nursing Qualifications	**Secondary school**	1	16	35	*P-value= .519*
	Diploma	0	25	53	
	Bachelor	0	13	48	
	Postgraduate	0	3	6	
Socioeconomic status	**Low**	0	22	34	*P-value= .110*
	Moderate	1	22	54	
	High	0	13	54	
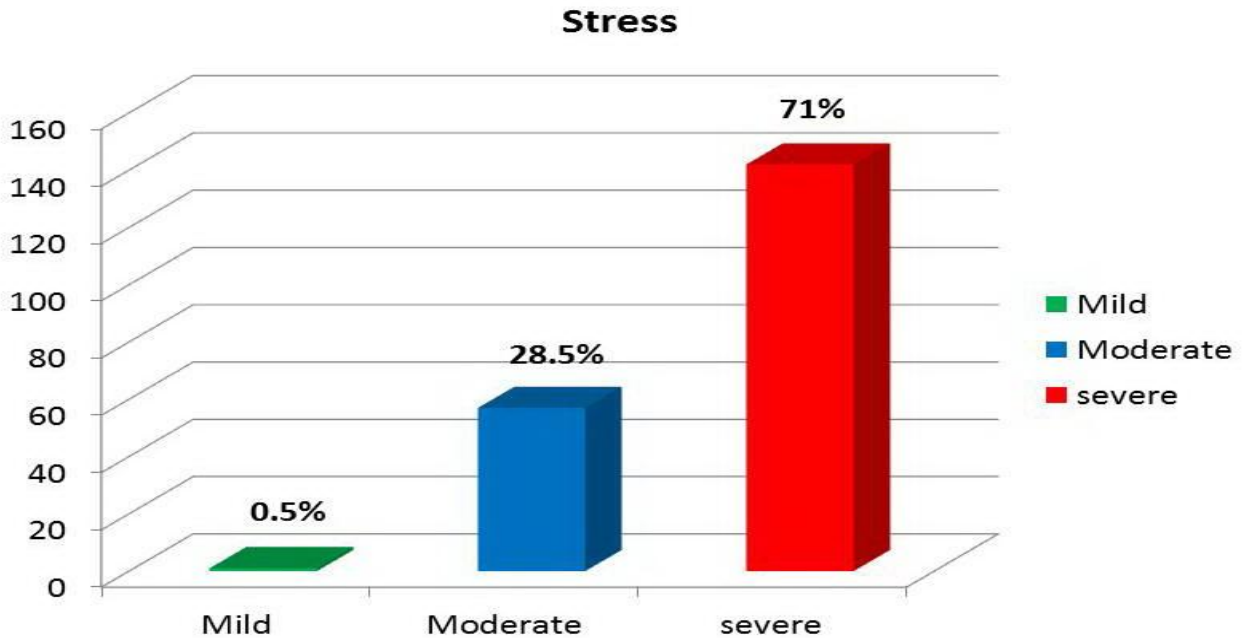
Figure (1): Levels of Job Stress among Nurses working at Critical Care Units (N=200) Reference

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