

Work-Related Stress Among Nurses Working in Dubai, a Burden for Healthcare Institutions

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Abstract

Introduction: Nurse Stress is defined as the emotional and physical reactions resulting from the interactions between the nurse and her/his work environment where the demands of the job exceed capabilities and resources. It is well known that prolonged stress is a precursor to burnout which is considered a major problem for many professions, and nurses are considered to be particularly susceptible. *Objectives:* The purpose of this study is to assess the job stress and to explore the factors associated with job stress in nurses working in Dubai hospitals. *Methodology:* A cross sectional study was used and the sample included 295 nurses working in different hospitals in Dubai from government and private sector. The Expanded Nursing Stress Scale (ENSS), a 57 item self-report survey, is used to assess perceived stress ($\alpha = .96$). *Results:* The present study revealed that the vast majority of the study sample 95% experienced different amounts of stress due to their work. 86% of nurses, who reported severe stress in their jobs, were less than 36 years old, Moreover 73.4% of nurses reporting sever stress levels where those of higher experience. *Conclusion:* This study provides important information to nursing administrators, clinicians, and educators about the stress and factors associated. Adopting stress coping strategy models, training of staff nurse and student nurses on cooperation, integration, team work would help to reduce perceived job related stress.

Keywords

Work Related Stress, Nurses, Dubai

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1. Introduction

Throughout the world, research has shown that work-related stress is a significant problem and represents a major challenge to occupational health. Individuals and organisations struggle to keep up with, and ultimately bow to the dramatically changing nature of work due to globalisation of the economy, the use of new information and communications technology, growing diversity in the workplace, and an increased mental workload. Work-related stress is a common and costly problem that leaves few workers untouched.¹

It has been agreed that, in the health profession, nurses form the largest group of which the principal mission is the

nurturing of and caring for people in the human health experience. They provide around-the-clock services to patients in hospitals, nursing homes, long-term care facilities, as well as to clients using supportive and preventative programs and related community services. As a result, researchers have linked occupational stress to disease and illnesses experienced by nursing professionals.²

A great deal is known about the sources of stress at work, about how to measure it and about the impact on a range of outcome indicators. What is found to be lacking is a translation of these results into practice, and research that assesses the impact of interventions that attempt to moderate, minimize or eliminate some of these stressors. Therefore, it is important to understand how work-associated stress affects

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nurses, and what factors in their working environment cause the greatest burden. It is also of great importance to gain more knowledge about nurses' working conditions, occupational stress and job satisfaction-knowledge that might be used to decrease their occupational stress and increase their job satisfaction.³

In the UAE context, socio-economic development of the health sector has undergone an extensive expansion of its services and facilities to meet the demands of a fast developing nation and a growing population. It was reported that there was a shortage of some experienced nurses, in Dubai. The short staffing causes are more related to the culture.⁴ First of all is the nursing image which is governed by religious and cultural trends. The Emirates view nursing as a maid and undermine the nurse role. Their Islamic culture also reject nursing, as nurses have to deal with males and have a direct contact with them. "There is a need to change the image of this important profession from just 'vaccination givers' to be part of the decision-making process."⁴ On the other hand, the image of male nurses needs to be corrected. "Currently, male nurses account for only 5.7% of all nurses. If men were to enter nursing at the same rate as women, shortages would not be a concern. Moreover, the mushrooming of hospitals in recent years further aggravated the issue of shortage of some more experienced nurses in the country. The failure to distribute manpower based on "actual workload" has resulted in either under-utilization in some hospitals or "overloading" in others.⁴ Nurses struggle each day to overcome the nursing shortage and to do the job following the standers. The challenge has taken a physical toll, causing nurses to develop chronic back pain and repetitive stress injuries. It's taken a psychological toll, making them feel harried and overwhelmed. The study says 41 percent of nurses are dissatisfied with their jobs and 43 percent suffer from burnout. In addition, 75 percent of nurses believe the quality of care at their hospitals is declining, and 40 percent would not feel comfortable having a family member cared for at their facility, according to a 2001 survey by the Washington DC based American Nurses Association. Furthermore, nursing shortage could deeply affect nurses" Increase the nurses' chance of getting psychiatric help because of massive amounts of stress.⁵

2. Objectives

To assess the job stress and associated factors among nurses working in Dubai hospitals.

3. Methodology

A cross sectional design was carried out on 295 nurse. This

size was calculated out of the target population (all nurses working in clinical departments in Dubai hospitals) of 4890 registered nurses who meet the criteria (3120 are private and 1770 are governmental), using OpenEpi software, with 26.2% predicted prevalence, 5% alpha error, and 1% design effect. There was a proportional allocation of sample to private sector: 185 (63.8%) nurses, and governmental sector: 110 (36.2%) nurses. The data collection tool is the "Expanded Nursing Stress Scale", (ENSS) (French et al., 2000).⁶ It is reliable and valid. A written approval to use this questionnaire was taken from the author. ENSS is an expanded and updated revision of the classic Nursing Stress Scale (NSS) developed by Gray-Toft & Anderson. The NSS was the first instrument to target nursing stress rather than general job stress. The original 34 items of the NSS measured the frequency and major sources of stress in patient care situation. The completed ENSS contained 57 items in nine subscales: (a) Death and Dying, (b) Conflict with Physicians, (c) Inadequate Emotional Preparation, (e) Problems Relating to Peers, (f) Problems Relating to Supervisors, (g) Work Load, (h) Uncertainty Concerning Treatment, (i) Patients and their Families, and (j) Discrimination. The 57 items were arranged in a 5 point Likert response scale. The responses were 'never stressful' (1), 'occasionally stressful' (2), 'frequently stressful' (3), 'extremely stressful' (4), and 'does not apply' (5). The 57-items of the ENSS demonstrated better reliability with Cronbach's alpha ($\alpha = .96$) over the original NSS ($\alpha = .89$). The Individual subscale reliability ranged from $\alpha = .88$ (problems with supervisors) to $\alpha = .65$ (discrimination).⁷

4. Results

Table (1): illustrates the distribution of level of stress experienced by the study sample, as its shows that 44.9% of nurses feel mild stress, more over a 43.6% experience moderate amounts of stress, while 6.4% experience high level of stress, and only 5% have no stress at all. Table (2) demonstrates the distribution of stress factors in the study sample according to rank, as can be seen that the factor of "patients and their families" was ranked the 1st amongst the stress factor with the highest mean stress score of 2.52. whilst the factor of "conflict with physician" had a slight higher score over "death and dying" with 2.26 and 2.25 respectively, thus ranking 2nd and 3rd respectively. The factor of "discrimination" had the least score among all factors with a mean score of 1.21, ranking 9th. Table (3) describes the logistic regression of sociodemographic factors affecting total stress in the study sample, as can be seen that the AGE had the only significant risk of increased stress as it showed that younger nurses had a 46 times more risk of having sever stress. While though statistically significant job experience

didn't contribute to increased levels of stress.

Table (1). Distribution of the level of stress experienced by the study sample.

Total stress score		
Level	No (N=236)	(%)
No stress	12	5.1
Mild stress	106	44.9
Moderate stress	103	43.6
High stress	15	6.40%

Table(2). Distribution of stress factors in the study sample according to rank.

Stress Factors		
Rank	Factor	Mean score
1	Patients and their families	2.52
2	Conflict with physician	2.26
3	Death and dying	2.25
4	Work load	2.17
5	Uncertainty concerning treatment	2.13
6	Inadequate emotional preparation	2.06
7	Problems relating to supervisors	1.87
8	Problems relating to peers	1.6
9	Discrimination	1.21

Table (3). Results of logistic regression of sociodemographic factors affecting total stress in the study population.

Independent variable	B	P	OR	95% C.I. for OR	
				Lower	Upper
AGE (reference is 36+ years group)					
Mild	1.24	0.14	3.46	0.66	18.22
Moderate	1.31	0.12	3.73	0.69	19.96
Sever	3.84	0.01*	46.73	4.84	450.48
Sector (reference group is government)					
Mild	-0.14	0.9	0.86	0.91	8.26
Moderate	-1.2	0.29	0.3	0.032	2.79
Sever	-0.75	0.55	0.46	0.37	5.94
Experience (reference group is higher exp.)					
Mild	-0.33	0.62	0.71	0.18	2.73
Moderate	-0.85	0.21	0.42	0.11	1.65
Sever	-2.1	0.02*	0.12	0.2	0.731
Education (reference group is bachelor of higher)					
Mild	-0.523	0.45	0.59	0.15	2.31
Moderate	-1.019	0.14	0.361	0.09	1.441
Sever	-0.423	0.67	0.65	0.093	4.62
Shift hours (reference group is > 8 hours)					
Mild	-0.77	0.517	0.462	0.04	4.77
Moderate	-1.83	0.12	0.16	0.016	1.61
Sever	-1.71	0.248	0.18	0.01	3.29
No. of patients (reference group is > 3 patients)					
Mild	0.457	0.554	1.57	0.34	7.18
Moderate	0.003	0.99	1	0.21	4.65
Sever	1.03	0.28	2.81	0.42	18.4

P<0.05, B= constant, OR= Odds Ratio, CI= Confidence interval

5. Discussions

The present study revealed that the majority of the study sample 88.5% experienced mild to moderate amounts of stress due to their work. This finding is consistent with other studies carried out by Hamidi and Eivazi⁸ (2010) to

determine the levels of employees' job stress in urban health centers in Hamadan, Iran. They surveyed 120 nurses. The result showed that the participants in all of the health centers were at moderate level of stress. The results of a study by Christina and Konstantin's⁹ (2009) support the above findings where they explored nurses' job stress in Greek registered mental health and assistant nurses. They surveyed 85 nurses working in six acute psychiatric wards where the results reported that nurses experienced moderate level of stress. This study confirms results from earlier studies on the determinants of job stress in the nursing profession (Blegen,¹⁰ 1993; Irvine & Evans¹¹, 1995; Mc Vicar¹², 2003): Characteristics of the job and work conditions are predictive of stress-related outcomes. Nurses are exposed to various stress sources from physical, psychological and social working environments. Stress is part of everyday life for health professionals such as nurses, physicians, and hospital administrators since their main responsibility focuses upon providing help to patients who are usually encountering life crises. Typically, nurses from both public and private hospitals report a similar pattern of stressful experiences (Dewe,¹³ 1987; Hingley and Cooper¹⁴, 1986). In contrast with the present study where 60% of nurses reporting severe stress are interestingly coming from private sector compared to 40% from governmental sector. The logistic regression of socio demographic factors affecting total stress in the study sample, found AGE had the only significant risk of stress as it showed that younger nurses had a 46 times more risk of having sever stress. While though statistically significant job experience didn't contribute to increased levels of stress Looking at the sources of stress, Patients and their families were identified as the most frequent source of stress for the present sample of nurses. The second most reported stressor was conflict with physician and then followed by death and dying. The least important source of stress was discrimination. With regard to comparison of perceived stressor types in other studies, Govender¹⁵ (1995) pointed out that 'workload' was identified as the greatest perceived source of stress. The second major stressor source was 'emotional issues related to death and dying'. However, it is interesting that the most frequently mentioned job areas which the nurses found particularly stressful in the study conducted by Nixon¹⁶ (1995) were extremely high levels of work pressure, physical and verbal abuse from patients, their escorts and relatives, staff shortages, problems with doctors, lack of appreciation for their work, and having to perform tasks not trained for or capable of. Death and dying was the least perceived source of stress, which contrasts with general nursing stress research, which consistently identifies workload and emotional issues related to death and dying as being major stressors.^{13,14} Our findings were consistent with Finlayson et al.'s¹⁷ (2002) study which evaluated perceptions

of work overload where *discrimination* had the lowest mean subscale score. Issues of dealing with the patients and their families provided a source of stress among the nurses. In particular, patients and their families making unreasonable demands are the most stressful events. Rainham DC, Gray-Toft P, et al., Phillips S, French SE, et al¹⁸ revealed that nurses are experiencing many demands on the job and are constantly coping with patients demands, maintaining their competence in a rapidly changing field, placing themselves at risk of physical assault, and experiencing ethical dilemmas. Nurses have to heed patients' requests even if they are unreasonable. Nurses also have to deal with patients' families at the same time. In the factor of Death and dying, death of a patient was perceived as a great source of stress. These findings are consistent with those of Hipwell et al¹⁹ (1989). Hipwell et al (1989) who pointed out that nurses who have to deal with dying patients may feel inadequately prepared to cope and sometimes report even levels of stress due to this source higher than that due to workload. It was shown that many nurses and nursing students have difficulty dealing with death. The study conducted by Mallory²⁰ (2003) indicated that nursing students' attitudes toward care of dying were improved after an educational component in palliative care. This was consistent with previous research that showed that education does have a positive effect on nurse's attitudes towards care of dying. Quint²¹ (1967) suggested that nursing students exposed to dying patients but lacking education in how to care for the dying experienced death anxiety and negative attitudes toward care of the dying, eventually withdrew from caring for the dying. Quint also theorized that if nursing students were to receive systematic death education with planned assignments, they would develop positive attitudes toward dying and be less likely to withdraw from care of dying. Research into the effectiveness of various educational programmes in death education as highlighted by Mok et al²² (2002) presents many challenges. Nurses have benefited from the programme in the areas of change in attitudes, increased self-awareness, having a positive attitude towards death and dying and acquiring the knowledge and psychosocial skills in providing culturally sensitive care for dying patients. The present study found that criticism by a physician was the second more stress influencing factor for the study sample of nurses. This finding can be supported by a study of Shiu²³ (2003) on nurse-physician relationship that found that physicians were very disruptive in the workplace, and over 90% of participating nurses in his study reported that they had either experienced or witnessed physicians criticism.

6. Conclusion

Job related stress is quite high among nurses. The age played

an important role in perceiving work related stress. Nursing training and experience had also an immense implication on perceiving stress. Patient's families and patients themselves making unreasonable demands proved to be very stressful events, Critical issue, e.g. dealing with death or dying of a patient, proved to be highly stressful, implicating effective educational programs for the nursing staff.

Recommendation

Promote team work between nurses and physicians, pointing out job duties and responsibilities would aid in limiting conflicts, being accountable for things which nurses had no control upon, having to make decisions under pressure must be eliminated. Providing training with real life scenarios, psychosocial counseling to nurses should be provided and improved in health care institutions. It is also recommended that nursing managers should promote social support concepts especially between nurse peers and their supervisors as to help reduce occurrence of high stress levels among nurses. Sensitive issue, Discrimination, must be addressed among nurses, equal access to job opportunities, career advancements, and training programs.

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