A COMPARATIVE STUDY ABOUT THE IMPACT **OF STRESS ON JOB SATISFACTION BETWEEN** JORDANIAN AND SAUDI NURSES

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Abstract

Abstract There is accumulative evidence that stress negatively affects health care providers. Stress in nursing is increasing due to the changing nature of the profession. This stress results from internal and external sources. Stress decreases job satisfaction for the nurses resulting in numerous undesirable consequences. The purpose of this study was to identify the sources of stress for Jordanian nurses and to compare the effect of stress on job satisfaction between Jordanian and Saudi nurses. A descriptive cross-sectional correlational design was used to meet the purposes of the study. A total of 150 nurses from a private hospital in Amman Jordan and 100 nurses from a self-operated hospital in Dammam, Saudi Arabia completed the study questionnaires. The results showed that the stressful situations for Jordanian nurses were: death and dving, workload and patients and their families questionnaires. The results showed that the stressful situations for Jordanian nurses were: death and dying, workload, and patients and their families. There was a significant negative relationship between stress and job satisfaction for Jordanian nurses r(148) = -0.630, p<.05 and for Saudi nurses r(98) = -0.437, p<.05. Jordanian nurses were less satisfied with their jobs compared to Saudi nurses Z = -2.09, p < .05. In conclusion, stress is a global problem for nurses and negatively affects job satisfaction. Nurse managers should take appropriate actions to decrease stress helping their nurses to work afficiently and affectively. work efficiently and effectively.

Keywords: Stress, job satisfaction, nurses, Jordan, and Saudi Arabia

Introduction

Stress is an emotional reaction to cope with surrounding environment. Stress is defined as a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation as Merriam Webster definition, 2009. Vecchio, 1995 described stress as how the person reacts physically or mentally to threatening situations. The term "stress" refers to an unequal situation that occurs when the environmental demands exceed adaptable resources of an individual (Burnard, 1991;

Whitom, 1982). Whitom and Burnard defined stress as psychological, physiological or spiritual discomfort that is experienced when environmental stimuli are too demanding or exceed a person's coping strategies. Stress is considered to be a dynamic status in which stressors, environmental events or forces, overhang an organism's survival and wellbeing (Engel, 2004). Stress in organizations is an extremely important phenomenon. It is generally associated with several vital individual physiological, psychological, and behavioral symptoms (Hopper, 1988). These symptoms includes but not limited to: Anger, frustration "burnout", guilt and hurt (Ahmad M. Saleh, 2013), anxiety, apathy, and illness (Ahmad M. Saleh, 2013; Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010) There is accumulative evidence that stress has a strong relationship with unfavorable health outcomes among medical professionals. High stress levels are associated with individual's heart diseases (Hanke & Dudek, 1997). Moreover, stress can increase the risk for hypertension (Healy & McKay, 2000), headaches, asthma, peptic ulcers, and low-back pain (Lambert, Lambert, Petrini, Li, & Zhang, 2007; Siu O-L, 2002). The final results allover is lower (work productivity and job satisfaction)(Healy & McKay, 2000; Lee, 2004), higher (turnover and absenteeism) (Throckmorton, 2007) and lack of organizational commitment (Al-Aameri, 2003; Hopper, 1988). Yearly, organizations loose hundreds of billions dollars as a result of stress-related illness (Al-Aameri, 2003). These outcomes create a significant managerial awareness for understanding stress

2005, Hopper, 1988). Tearly, organizations foose hundreds of billions dollars as a result of stress-related illness (Al-Aameri, 2003). These outcomes create a significant managerial awareness for understanding stress sources and developing programs for reducing its negative consequences. Nurses as any other health professionals are affected by these stressors. The most important effect of the stress upon nurses is the reduction of the job satisfaction leading to turnover. The current nursing shortage and high turnover rates are of great concern nationwide because of its impact upon the efficiency and effectiveness of any health-care delivery system (Al-Aameri, 2003). Retaining nurses after recruitment is another persistent problem associated with low job satisfaction due to stress. Nurse managers should focus on the causes of stress to overcome these obstacles. In order to minimize costs and improve performance, healthcare organizations should focus on creating an environment that improves job satisfaction and retains productive and experienced employees. Sources of job stress may be found both internal -within the individual person and external -within the working environment (Ahmad M. Saleh, 2013; Al-Aameri, 2003). Internal personal characteristics as flexibility, interaction with colleagues, and type A behavior might cause job stress might include but not limited to role structure, misfit between the employee

and the environment, and inadequate management (Ahmad M. Saleh, 2013; Al-Aameri, 2003).

Several studies have tried to determine the link between stress and job satisfaction. Job satisfaction and job stress are the two hot focuses in human resource management researches (Coomber & Barriball, 2007; Gui, Barriball, & While, 2009; Lu, While, & Barriball, 2005; Utriainen & Kyngas, 2009). Job satisfaction is defined as the positive feeling or attitude about various aspects of the job (Lu et al., 2005). Job satisfaction is viewed as the interaction outcome between the worker within his work environment as the interaction outcome between the worker within his work environment and his job (Al-Ahmadi, 2002). Satisfied employees are more likely to be more productive (Al-Ahmadi, 2002; McNeese-Smith, 2001) and to stay longer in their jobs (Andrews & Dziegielewski, 2005; Chaboyer, Williams, Corkill, & Creamer, 1999; Freeman & O'Brien-Pallas, 1998; Shields & Ward, 2001). Moreover, Higher levels of job satisfaction have been positively linked to improved quality of care, patient outcomes (Ahmad M. Saleh, 2013), and retention of staff (Ahmad M. Saleh, 2013; Andrews & Dziegielewski, 2005; Newman, Maylor, & Chansarkar, 2001; Shields & Ward 2001) Ward, 2001).

There are some studies (AbuAlRub & Al-Zaru, 2008; Ahmad M. Saleh, 2013; Al-Ahmadi, 2002; Kamal, 2012; Mrayyan, 2005) about the stress and job satisfaction in Jordan and Saudi Arabia.However, our knowledge this is the first study comparing the levels of stress and the effects of stress on job satisfaction between the two countries. Therefore, the purposes of this study were to:

- Determine the most and least perceived sources of stress impacting job satisfaction for Jordanian nurses.
 Investigate the effect of stress on job satisfaction for Jordanian nurses
 Compare the effect of stress on job satisfaction between Jordanian and
- Saudi nurses.

Materials and Methods

Research design, sample and setting A descriptive correlational cross-sectional design was used on a convenience sample of 150 nurses from Jordan and 100 nurses from Saudi Arabia. This is a continuation study for a preliminary study that we did in Saudi Arabia about the effect of stress on job satisfaction (Ahmad M. Saleh, 2013). The nurses should work at least for 6 months in the areas to get out from the orientation period. In order to avoid bias nurse managers were excluded due to the nature of their work. The nurses were recruited from a major private hospital in Amman, Jordan and a major self- operated hospital in eastern province in Saudi Arabia. These two hospitals were chosen because they are approximately the same in size and specialty, and covers large metropolitan cities in Jordan and Saudi Arabia.

Ethical Considerations

Before data collection started at any site, IRB approval from the research and ethical committee was obtained from the hospital in Saudi Arabia. This letter was submitted to the ethical committee in the private hospital in Amman, Jordan and they approved the study to be conducted at the hospital based on the Saudi approval letter after the committee meeting.

Data Collection Procedure

Research assistants explained the study to the participants and got their informed consent. The participants filled three questionnaires: The first questionnaire is Expanded Nursing Stress Scale (ENSS), which measured job related stress. The second questionnaire is Job Satisfaction Scale (JSS), which measured level of job satisfaction. Finally, all participants were asked to fill the sociodemographic questionnaire.

Data Collection Tools

Data Collection Tools <u>Tool I:</u> The ENSS is an expanded and updated revision of the classic Nursing Stress Scale (NSS) developed by Gray- Toft &Anderson in1981(French, Lenton, Walters, & Eyles, 2000). The original 34 items of the NSS measured the frequency and major sources of stress by nurses in hospital units. To be in congruent with the major changes in health care delivery and the working environment stressful situations where the nurses work, a new expanded version developed by French et al. (2000). 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 questionnaire is a 57 items 5 point Likert scale. The responses were "never stressful" (1), "occasionally stressful" (2), "Frequently stressful" (3), "extremely stressful" (4), and doesn't apply (5) (French et al., 2000). The doesn't apply score of (5) was considered (0) in the statistical analysis as it was described in the scale and previous researches (Ahmad M. Saleh, 2013; doesn't apply score of (5) was considered (0) in the statistical analysis as it was described in the scale and previous researches (Ahmad M. Saleh, 2013; French et al., 2000). The higher the score, the more the respondent agreed that the situation was stressful. A total and sub-scale mean score can be derived from this instrument which ranges from 0-4. There are no specific cut scores or published mean norms for the ENSS that determine whether an individual is stressed or not. However, higher scores indicate higher levels of stress. For the purposes of this study, we used the approximate means of the

previous studies (Ahmad M. Saleh, 2013; Dargahi & Shaham, 2012; Kamal,

previous studies (Ahmad M. Saleh, 2013; Dargahi & Shaham, 2012; Kamal, 2012) to make meaningful comparisons. <u>Tool II:</u> JSS has nine facet subscales. Each scale has 4 items, ending of a total of 36 item questionnaire. Some of the items are written in negative direction. Therefore, the scores were reversed to make the appropriate calculations. JSS assesses job satisfaction on a continuum from low (dissatisfied) 1 point, to high (satisfied) 6 points. Scores for total job satisfaction, based on the sum of all 36 items, can range from 36 to 216. Higher scores represent higher job satisfaction. There are no specific cut scores or published mean norms that determine whether an individual is satisfied or dissatisfied. Therefore, we used the approximate means of each subscale from previous studies for

used the approximate means of each subscale from previous studies for analysis purposes (Ahmad M. Saleh, 2013; Dargahi & Shaham, 2011; Kamal, 2012). JSS Internal consistency reliabilities (coefficient alpha), based on a sample of 2,870 for the nine subscales range between 0.6-0.82 with a total internal consistency of 0.91(Spector, 1985).

Data Analysis

Data Analysis SPSS software version 20.0 was used to analyze the data (SPSS Inc., Chicago, IL, USA). To determine the most and least perceived sources of stress that impact nurses' job satisfaction (purpose 1), descriptive statistics with means and standard deviations was used. The means were compared with the means of the previous studies to make meaningful comparisons. To investigate the effect of stress on job satisfaction for Jordanian nurses (purpose 2), Pearson correlation coefficient was used. To compare the effect of stress on job satisfaction between Jordanian and Saudi nurses (purpose 3) results of the correlation coefficient between Jordan and Saudi Arabia were compared together with the total sample correlation between stress and job satisfaction. Fisher r-to-z transformation was used. In this test, a z value was calculated then was applied to assess the significance of the difference calculated then was applied to assess the significance of the difference between two correlation coefficients, ra (correlation between stress and job satisfaction in the Jordanian sample) and rb (correlation between stress and job satisfaction in the Saudi sample). Alpha was set at 0.05 for all analyses.

Results

One hundred fifty nurses from Jordan and 100 nurses from Saudi Arabia participated in this study. Sociodemographic characteristics of the sample are described in (Table 1). The only difference between the groups was regarding the educational level. Jordanian nurses have higher education levels compared to Saudi nurses. The Jordanian and Saudi nurses were young and distributed among the working areas which represents the whole

hospital. The average income was not reported because there is a huge difference in the salaries between Saudi Arabia and Jordan.

Jordanian nurses perceived their stress as indicated by the mean and the standard deviation of the ENSS (2.8 ± 1.4). The most stressful situations for Jordanian nurses were in order: death and dying, workload, and patients and their families. The least stressful situation was: problems with peers (Table 2). Jordanian nurses were moderately satisfied; however, they were significantly less satisfied than Saudi nurses (mean \pm SD, 3.1 ± 1.1 vs 3.7 ± 1.5 P < .05). The subscale means and the total mean for job satisfaction range from 1- 6. The subscales means of the JSS are presented in (table 3)

Stress was associated with job satisfaction for Jordanian and Saudi nurses, r (148)= -0.630, p<.05, r(98)= -0.437, p<.05 respectively. The difference between these correlations was statistically significant, Z = -2.09, p < .05. In general, this means that Jordanian and Saudi nurses' job satisfaction is reduced by stress. However, Jordanian nurses are affected more than Saudi nurses by this stress. The correlation between stress and job satisfaction when the two samples were combined together was -0.681, p<.05.

Characteristics	Jordanian Nurses (N=150)	Saudi Nurses (N=100)
Sex		
Male	15 (10)	17(17)
Female	135(90)	83(83)
Age		
< 30 years	30(20)	22 (22.0)
30-40 years	80(53.3)	60(60.0)
> 40 years	40(26.7)	18(18.0)
Total sample	33±3.6	36.6±4.2
Education level*		
Diploma	10(6.7)	36(36.0)
Bachelor	135(90)	64(64.0)
Master	5(3.3)	0
Area of practice		
Emergency	18(12)	11(11.0)
ICU	22(14.7)	16(16.0)
Medical wards	27(18)	20(20.0)
Surgical Wards	31(20.7)	17(17.0)
Pediatrics	17(11.3)	11(11.0)
Transplant	13 (8.7)	10(10.0)
Oncology	11(7.3)	8(8.0)
Neuroscience ward	11(7.3)	7(7.0)

Table 1: Sociodemographic characteristics of the sample Values are given as frequency (%) or mean ± SD. * Means statistical significance at 0.05 level

Subscales	Mean±SD
Death and Dying	3.94±1.3
Conflict with physicians	2.96±1.4
Inadequate preparation	2.11±1.1
Problems with peers	$1.44{\pm}1.2$
Workload	3.75±1.8
Uncertainty concerning treatment	2.81±1.9
Problems with supervisors	2.65±1.0
Patients and their families	3.56±1.2
Discremination	1.64±0.9

Table 2: (Jordanian ENSS subscale description)

Subscales	Mean±SD
Pay	2.85±2.6
Promotion	3.12±1.7
Supervision	2.98±1.6
Fringe benefit	3.00±1.5
Contingent reward	3.30±1.4
Operating condition	3.61±1.2
Coworkers	3.34±1.4
Nature of work	3.01±1.3
Communication	2.91±1.4

 Table 3: (JSS subscale description)

Discussion

To our knowledge this is the first study comparing the effect of stress on job satisfaction for nurses between two Arabic countries. The results showed that the satisfaction is reduced by stress in the two countries which indicate that this is a global problem. The results of this study showed that nurses extensively exposed to stress and sometimes they are exposed to stress daily. As concluded from other studies, this study supported the phenomenon that the stress can be derived from different areas, including, internal and external factors.

Jordanian nurses were more educated than Saudi nurses, this might be explained because the BSc program has been established at the Jordanian universities since 1972 compared to newly established programs in Saudi Arabia, where most of the programs were higher diploma. This also might explain why Jordanian nurses perceived their stress more. Even so, the most stressful situation for the Jordanian and Saudi nurses was the death and dying. This is in congruent with other studies (Ahmad M. Saleh, 2013; Hamaideh, Mrayyan, Mudallal, Faouri, & Khasawneh, 2008). The major portion of this stress emerged from the fear that the physician will not be present in medical emergencies (Ahmad M. Saleh, 2013; Hamaideh et al., 2008). The stress from these situations can be explained by the nature of the cases admitted to these hospitals which include: oncology, neuroscience and transplant. Moreover, this subscale is stressful by its nature even in normal situations. Subsequently, nurses will be the most staff among all health care professionals who are affected by this situation because they are the ones who have the widest and the longest contact with the patients The second most stressful situation for Jordanian nurses was

workload. This is due to nationwide shortage problem of nurses. The shortage of nurses and high staff turnover rates (Healy & McKay, 2000; Lim, Bogossian, & Ahern, 2010) compromising the nurses' ability to provide expert and compassionate care (Dargahi & Shaham, 2012). High rates of staff turnover cause negative effects on productivity and effectiveness of nurses. Jordan as any other country in the world has shortage in nurses, especially female nurses. Majority of the nurses reported that they do not have time to respond to the patients' needs and they sometimes work in the break times. In addition to the workload that the nurses have, plenty of nurses mentioned that the non-nursing activities add burden to them and decrease the time they have to take care of their patients. Nurses' job satisfaction and retention are two related concepts; nurses who are satisfied in their jobs are likely to retain these jobs. Most of the Jordanian nurses will work in Jordan after graduation for one to three years. Once the nurses get the necessary experience, they will leave Jordan to become financially stable. This is one of the major problems for the nursing administration in Jordan which is a very high turnover rate. Patients and their families are another burden which increased the stress to Jordanian nurses. Jordan as any other Arabic country has an workload. This is due to nationwide shortage problem of nurses. The

Patients and their families are another burden which increased the stress to Jordanian nurses. Jordan as any other Arabic country has an extended family members. Once the patient is admitted to the hospital, a plenty of visitors will come. These visitors will ask a lot of questions about the patients' condition that the nurses do not have the authority to answer. Furthermore, they will stay in the patient room with large numbers which affect the nurses' ability to perform their tasks making situation extremely stressful to the nurses. If anything goes wrong to their patients, families usually made unreasonable demand and blame nurses. Over and above, some family members become very abusive and violent when their loved one is in critical situation or died (Michael & Jenkins, 2001) Plenty of studies showed that stress negatively affects the job satisfaction (AbuAlRub & Al-Zaru, 2008; Ahmad M. Saleh, 2013; Al-Ahmadi, 2002; Applebaum et al., 2010; Chaboyer et al., 1999; Coomber & Barriball, 2007). The results of this study also gave further support for this result. During the last decades, nursing has changed in many ways, putting an extra pressure on nurses. Several researchers describe nursing career as stressful job. Work under pressure and stress are the leading factors for this dissatisfaction(Dargahi & Shaham, 2012).

Comparable with other studies (Ahsan, 2009; Al-Ahmadi, 2002; Dargahi & Shaham, 2012; Kamal, 2012) Jordanian nurses were moderately satisfied. Poor relationships with other professions and lack of a higher level of education for staff nurses might lead to lower levels of confidence and higher levels of stress. On the other hand, a higher level of education for nurses will increase confidence and ability to discuss issues as equals with professional colleagues.

In this study, Jordanian nurses were more educated than Saudi nurses and the problem with peers was the least stressful situation for them. Regardless to that, they were still more stressed and less satisfied than Saudi nurses. The lowest satisfaction subscale for Jordanian nurses was the payment. Comparing Jordanian income with the life expenses to Saudi salaries and their life expenses, there will be a huge difference which makes Jordanian nurses less satisfied.

Conclusion

Nurses are affected by stress not only in Jordan but also in Saudi Arabia reflecting a global problem. Stress negatively affects job satisfaction. Therefore, managers in health care organizations should realize that stress must exist to a certain extent that is productive to their organizations. When it turns out to be negative, it has to be managed effectively. Documenting the causes and the extent of stress in any health care unit is essential for successful interventions. Nursing interventions are needed to decrease nurses' stressors; these will help nurses to perform their jobs safely and competently.

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