Nurses' perceived job related stress and job satisfaction in two main hospitals in Riyadh city

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Abstract: During life, everybody experience several ways of stress. Most authors agree that although anyone may experience stress, the highest incidence is found among caregivers or professionals responsible for the development of other people, such as physicians, nurses, teachers, social workers and psychologist. The nursing staff suffers the total, concentrated and immediate impact of stress deriving from patient’s care. Nurse job satisfaction is a multidimensional phenomenon that is influenced by many variables, stress has been identified as the strongest predictor of nurse job satisfaction, which in turn reflects positively or negatively on nurse retention. This study aimed to investigate the presence of work related stress and its impact on nurses’ job satisfaction. One hundred female nurses were recruited, 60 working in ICU of both adult and pediatrics at King Saud Medical Complex, and 40 working in labor room at Al-Yamamah maternity hospital. Tools for data collection include: Interview questionnaire, Nursing Stress Scale (NSS Gray –Toft & Anderson, 1981) which was 34 items scale used to measure any situations perceived by the participants as threatening because of mismatch between the situation demands and the individuals coping abilities. The Job Satisfaction Survey (JSS).JSS, was 36 items, nine facet scales to assess employee attitudes about the job and aspects of the job. Each facet is assessed with four items, and a total score is computed from all items. Results of this study revealed that near half of the subjects (49%) perceived frequently stress, while only 7% perceived extremely stress. Also results revealed that, 47% of the subjects were ambivalent in their response to job satisfaction and 35% were satisfied. A significant positive relation between level of perceived stress and level of job satisfaction were found in this study (p=0.009).This study recommended another informative study to include another departments in a multi dimensional settings of health care and also recommended that the organizations that employ nurses should implement programs to monitor and manage stress especially regarding staff issues and job demands.


Keywords: stress, job related stress, job satisfaction

1- Introduction

Job satisfaction is an important component of nurses' lives that can affect patient safety, productivity and performance, quality of care, retention and turnover, commitment to the organization and the profession. It is an important determinant of nurses’ retention and turnover, and may also affect performance³. Job dissatisfaction is becoming an increasingly large disorder. Interest in job related stress is renewed with each cycle of nursing shortage (²). Researchers contend that job satisfaction is possibly the most significant yet elusive factor in understanding worker motivation, performance and effectiveness, and recruitment and retention³.

Nurse Job satisfaction is a multidimensional phenomenon that is influenced by many variables. Autonomy has been identified as the strongest predictor of nurse job satisfaction, which in turn reflects positively on nurse retention (⁴)

The widespread nursing shortage and nurses' high turnover has become a global issue (⁵) which is of increasing importance to both the developed and developing countries (⁶).

Many factors may play an important role in Job satisfaction such as environmental factors which included degree of professionalization, organizational climate, supervision, and interpersonal relationships. Characteristics of the job itself included pay, autonomy, and job outcomes. In studies conducted at military civilian facilities job satisfaction has been positively related to autonomy, coworker and supervisor support, resource adequacy, professional growth, promotional opportunity, and distributive justice. Stress levels have been shown to be directly related to job satisfaction (⁷).

In the 1980s and 1990s, many researchers have been addressed nurse job satisfaction. The understanding of nurse job satisfaction and its contributing variables are important for any health
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.

Sources and indicators of stress are varied; however, they could be recognized. Mild to moderate stress may not be observed collectively, thus symptoms at this level of stress are varied and depend on individuals' perceptions of stress. Nursing provides a wide range of potential workplace stressors as it is a profession that requires high levels of skills, teamwork and provision of continuous care.

Maslach et al. identified the following workplace stressors: conflict with physicians, inadequate preparation, problems with peers, problems with supervisor, discrimination, workload, uncertainty concerning treatment, dealing with death and dying patients, and patients and their families. Other sources of stress include workload, leadership/management issues, professional conflict, mood disturbances, age and experience, and emotional demands of caring.

Whenever Sengin reported that, work-related stress is estimated to be the biggest occupational health problem in the United Kingdom (UK), after musculoskeletal disorders such as back problems and stress related sickness absences cost an estimated $4 billion annually.

Hospitals throughout the world are currently undergoing massive changes to their organizational structure in an effort to reduce costs. In some cases, organizational change means hospital closure, job loss, reduced employee status, and higher levels of workload.

Stress and job satisfaction among nurses has been the subject of extensive research for many reasons, including the relationship of these occupational attitudes to measures of job performance. In addition, Shaver & Lacey reported that job stress and job satisfaction were important correlates of anticipated and actual job turnover among nurses.

**Aim of the Study**

This study aimed at investigating the presence of work related stress and its effect on the nurses’ job satisfaction.

**Methodology**

This study aimed to investigate the level of job stress, job satisfaction and any relationship between job stress & job satisfaction among nurses working in critical settings.

**Research Design:**

Descriptive correlational cross sectional design was utilized in this study.

**Research Questions:**

1-What is the level of job related stress among nurses working in critical settings?
2-What is the level of job satisfaction among nurses working in critical settings?
3-Is there a relationship between job related stress & job satisfaction among nurses working in critical settings?

**Setting:**

The study was carried out in two different settings; King Saud Medical Complex (KSMC), and Yamamah Maternity Hospital, (in ICU, NICU, Oncology & Obs. Gyn.) at Riyadh, Kingdom of Saudi Arabia.

**Subjects:**

Subjects consisted of 100 nurses working in ICU, NICU, Oncology & Obs & Gyn., with the following criteria:-

1- Staff nurses (no head nurse or supervisor)
2- Working in the same area for at least 6 months
3- Full time employment.

**Tools of data collection:**

Three tools were utilized in this study:

1-**Interview Questionnaire:**

It includes information about nurse’s age, nationality, marital condition, educational level, number of years of experience, and departments of work.

2-**Job satisfaction scale:**

Job satisfaction was assessed through using job satisfaction scale which developed by Spector, P.E., (1985). This questionnaire consisted of 36 statements about sensation of job satisfaction. Each scoring response is classified to 1-5 degrees: 1 for disagree very much, 2 for disagree moderately, 3 for disagree slightly, 4 for agree moderately, 5 for agree very much. In total score for each nurse the high score indicates job satisfaction and the low score indicates job dissatisfaction.

3-**Nursing stress scale:**

Nursing job stress was assessed through using a nursing stress scale which develop Gd by Gray-Toft & Anderson, (1981). This questionnaire consisted of 59 statements about stressful situation. Each scoring response is classified one to five degrees. 1 degree is assigned for doesn’t apply, 2 degrees for never stressful, 3 degrees for occasionally stressful, and 4 degrees for frequently stressful, 5 degree for extremely stressful. In total score for each nurse the high score indicates high level of stress and the low score indicates low level of stress.
Pilot Study:
A pilot study was conducted on 10 nurses, to test feasibility of tools and time required to be applied. Simple modification was done by omission of some items of the interview questionnaire that they were not consistent with this study, content, validity was done to ensure validity of the tools.

Administrative design:
Before the conduction of the pilot study as well as the actual study, an official permission was obtained from the responsible person in each setting.

Procedure:
Once an official permission was obtained from the responsible authorities, the aim and the nature of the study were explained to subjects who agree to participate in the study and an oral consent was obtained. Tools utilized to collect the desired data were explained. Participants were assured that all their data are highly confidential, anonymity was also assured through assigning a number for each nurse instead of names to protect their privacy. The nurses were interviewed individually in their units to filled the sheets individually. The duration for data collection lasts 6 months precisely from October, 2012, to March, 2013.

Statistical Analysis:
Collected data were coded and analyzed. Descriptive statistics for the variables were calculated. Data were presented using descriptive statistics in the form of frequencies and percentages, persons r test was used to test the relation between the job stress and job satisfaction The variables were significant at P value= 0.009, All the analysis was performed using SPSS Inc. Chicago, IL, USA. Version 18.

3- Results
Table 1: shows the frequency distribution of socio-demographic characteristics of the study subjects, Regarding the age, data showed that about 36% were in the age group of more than 20 to less than 30 years, while near one quarter of the study subjects (24%) aged 40 years and up. In relation to the nationality, data illustrated that about 28% were Saudi and the majority were Pilipino and Indian. Also the table revealed that about 53% were single and 36% of the studied subjects lived with their families.

Table 2: The table illustrated the frequency distribution of the studied subjects according to their level of education, experience years, and departments they working in: The data presented in this table showed that: most of the studied subjects (78%) were having diploma degree in nursing, while 39% were having less than 5 years of experience and more than half of the subjects (59%) working in ICUs.

Table 3 & Figure 1: The table and the figure showed that near half of the subjects(49%) perceived frequently stress, while only 7% of the studied subjects perceived extremely stress.

Table 4 &Figure 2: The table and the figure showed that about 47% were ambivalent in their response to job satisfaction, while 18% and 35% were dissatisfied and satisfied respectively.

Table 5: This table shows a significant positive relation between level of perceived stress and level of job satisfaction (p=0.009).

Table 6 &7: those tables showed the relation between the level of stress and job satisfaction and different socio-demographic characteristics as: age and department of work, Both tables revealed no relation between the age, department and either the level of stress or the job satisfaction.
Mean 182.22 \( P = 0.000 \)  
Figure 1- Frequency Distribution of Stress among the study subjects:

<table>
<thead>
<tr>
<th>Level of job satisfaction</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissatisfied</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Ambivalent</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>Satisfied</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4-Frequency distribution of job satisfaction among study subjects:

Mean 61.88 \( P = 0.000 \)  
Figure 2: Frequency distribution of the job satisfaction among the study subjects:

Table 5-Correlation between Job stress and Job Satisfaction:

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>0.259</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Persons \( r \) Test \( (P = 0.009) \)

Table 6- Relationship between the Level of Stress and Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Stress</th>
<th>X</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 -</td>
<td>Never</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Occasionally</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frequently</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Never</td>
<td>11.1%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Occasionally</td>
<td>15.2%</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Frequently</td>
<td>19.6%</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>28.6%</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>Never</td>
<td>.0%</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Occasionally</td>
<td>12.1%</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Frequently</td>
<td>9.8%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>14.3%</td>
<td>1</td>
</tr>
<tr>
<td>35</td>
<td>Never</td>
<td>.0%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Occasionally</td>
<td>15.2%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Frequently</td>
<td>9.8%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>28.6%</td>
<td>2</td>
</tr>
<tr>
<td>40 and up</td>
<td>Never</td>
<td>77.8%</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Occasionally</td>
<td>27.3%</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Frequently</td>
<td>13.7%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>14.3%</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 7-Relationship between the Level of Stress and Department

<table>
<thead>
<tr>
<th>Department</th>
<th>Stress</th>
<th>X</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICU</td>
<td>Never</td>
<td>33.3%</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Occasionally</td>
<td>66.7%</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Frequently</td>
<td>60.8%</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>42.9%</td>
<td>3</td>
</tr>
<tr>
<td>Oncology</td>
<td>Never</td>
<td>.0%</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Occasionally</td>
<td>.0%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Frequently</td>
<td>2.0%</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>.0%</td>
<td>1</td>
</tr>
<tr>
<td>OBGYN</td>
<td>Never</td>
<td>66.7%</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Occasionally</td>
<td>33.3%</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Frequently</td>
<td>37.3%</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>57.1%</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

4. Discussion:  
Stress has become a more recognized term over the past decade and is a major cause for concern for many nurses at work. The Health and Safety Executive (HSE) define stress as “the adverse reaction people have due to excessive pressure of other demands placed on them” It is important to understand the impact on nursing staff because the psychological and mental harm caused by stress can adversely affect the delivery of patient care\(^{(23)}\).  
The most severe stressors for nurses included health risks posed by contact with patients, lack of recognition and insufficient staff. Watching patients
suffer, demands of patients and staff issues were also severe stressors for professional nurses. 

The severity of stressors was higher for professional nurses (compared with enrolled and auxiliary nurses)

The aim of this study was to investigate the effect of nurses’ perceived job related stress and job satisfaction in two main hospitals in Riyadh city.

The findings of the current study revealed that the age of more than one third of the nurses were ranging between 20 to less than 30 years and have average experience of less than 5 years, the presented data are accepted because for both diploma and bachelor degrees it is the accepted age from graduation to have less than 5 years’ experience, also, This data are in accordance with international data which revealed that nurses tend to be withdraw early from the clinical sector possibly because of early retirement, or change of work area. Probably, the working condition in the hospitals does not really favors the long-term stay of nurse in their work.

In relation to stress among studied subjects, findings of the present study showed that near half of the subjects (49%) perceived frequently stress, this finding supported by Verdon et al. 2012, who mentioned that the nursing has long been considered one of the most stressful professions in addition to researches findings support the conclusion that the multiple health care setting translate into significant stress levels among nurses.

Data in this study revealed that there is a significant positive relation between level of perceived stress and level of job dissatisfaction, this is in agreement with Carol et al, 2013 who mentioned that job stress affect health team personnel themselves, their performance, interest and job satisfaction, moreover, it is noticed that, suicide among them appears to be more common than in general population.

The present study revealed that there was no relation between the age & department of work and either the level of stress or the job satisfaction which is contradicting with (Onyett) who mentioned in his study that the age was found to be significantly related with personal satisfaction or accomplishment. A probable explanation for this is that older nurses are those who manage to control occupation successfully, are still occupied with nursing duties and feel satisfied with it, meanwhile, Nursing personnel feels that ICUs are high demanding departments and stressful.

**Conclusion**

This study concluded that, there was a significant relationship between job related stress and job satisfaction while the sociodemographic characteristics, experiences and workplace have no effects or relation with either perception of stress or job satisfaction.

**Recommendation**

This study recommended the following:

1- Another informative study to include other departments in multi-dimensional settings of health care.

2- Future research should be conducted to identify best practices for preventing violence and stress.

3- Research also needs to be conducted to determine the relationship of severity of stress to the change in work productivity.

4- Organizations that employ nurses should implement programs to monitor and manage stress especially regarding staff issues and job demands.

**Limitations of the study**

- The majority of the studied sample participated in this study were non-Saudi who are suffered already from homesickness which interfered with the causes of stress.

- Many nurses worked in critical departments as oncology refused to participate in the study.

**Acknowledgment**

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**References**


