

## Stressors and Job Satisfaction for Nurses in Hospital

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**Abstract:** Stressors affecting job satisfaction are becoming an increasingly significant phenomenon. Stress has a cost for individuals in terms of health, wellbeing, job dissatisfaction, rate of absenteeism and turnover which will in turn affect the quality of patient care. This study aimed to determine the main stressors affecting nurses and its relationship with job satisfaction in Raged hospital, Cairo, Egypt. A descriptive correlational cross sectional design was used on a convenience sample of 213 nurses using expanded nursing stress and job satisfaction scales. The results have shown that most stressful subscale for nurses was death and dying of patients as “Extremely Stressful” and the least stressful subscale was inadequate preparation to help with the emotional needs of patients and their families as “Occasionally Stressful”. There was a negative significant relationship between the impact of stress and job satisfaction among staff nurses in Raged hospital as indicated by (Pearson correlation = - .437, P < 0.05). In conclusion hospital staff nurses were exposed to many kinds of stressors which affected their level of job satisfaction. This emphasizes the need for adopting strategies to reduce stress, increase job satisfaction and finally improving patient quality of care.

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### 1. 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. Stress is your body’s innate replay to situations that are psychologically and physically taxing (Gregory, 1999). Vecchio (1995) described stress as the physical and mental reactions experienced by an individual when confronted by a menacing situation. Anger, frustration, guilt and hurt (Sntamaria, 1994), anxiety, apathy, and illness (ILO, 2001) are the most universally spotted passionate reactions to stress. Stress is considered to be a process in which environmental events or forces, called stressors, threaten an organism’s existence and wellbeing (Engel, 2004; Baum, Singer, and Baum, 1981). Becky (1994) stated that stress is a physical, psychological, or spiritual response to a stressor that may be a reaction to issues such as overwork, decreased support or appreciation, and limited supervision.

Several professions with different jobs are confronted by different kinds of stress, which will affect impress job environment resulting in negative effect on job performance (AbuAlRub. 2004). Therefore, healthcare organizations, for example,

hospitals should provide technological contributions, and appropriate environments to overcome stress (Guido Lde ET al.2009).

Literature had suggested a huge relationship between stress and unfavorable health among medical professionals, for example, an extra-ordinary stress may be responsible for an individual’s heart diseases (Steffy & Jones, 1988), hypertension, headaches, asthma, peptic ulcers, and lower-back pain among others (Siu et al., 2002), and others of mental and physical health (Lambert et al., 2007). This, in turn, induces lower work productivity, job morale (Pejic, 2005), and other human resource management problems, such as higher absenteeism, lower job satisfaction (Healy & Mckay, 2000; Lee, 2004), and higher turnover (Throckmorton, 2007). As a result, higher operational costs, lower job efficiency, and worse service quality may occur, all of which are detrimental to the hospital’s performance.

Job satisfaction is defined as the positive feeling or attitude about various aspects of the job (Lu et al., 2005). Higher levels of nurse job satisfaction have been positively linked to improved quality of care, patient outcomes (Adams & Bond, 2000), and retention of staff (Newman et al., 2001). Job stress, on the other hand is the separation that exists between role expectations and what is being

accomplished in that role (McVicar, 2003); excessive chronic job stress has also been linked to burnout (Jourdain & Chenevêrt, 2010).

There are limited studies that examined the impact of stress on job satisfaction for nurses in Egypt, particularly the Eastern Province. Therefore, we believe that further studies are needed now more than ever because of the rapid changes and the complex technology characteristic of the health care system.

By understanding the effect of stress on job satisfaction, better stress management approaches can be established. As a result, the quality of care might be improved when provided by staff nurses who have lower levels of stress. Also, reducing the level of stress might help to retain staff and thus alleviate the nursing shortage.

### Research objectives:

1. Determine and describe the main stressors that impact nurse's job satisfaction in Raged hospital in Egypt.
2. Investigate the relationship between the impacts of stress on job satisfaction for nurses.

## 2. Materials and Methods

### Site and Setting

The data has been collected from emergency department, intensive care unit, medical ward, surgical ward, pediatric ward, transplant unit, oncology unit and neuroscience ward of Raged hospital in Cairo-Eastern province in Egypt.

Raged hospital is a self-operated ministry of health tertiary care facility specialized in oncology, neuroscience and transplant. Eastern province is a large metropolitan area with approximately 6 million populations which has a good representation of Egypt.

### Study Sample

The sample consisted of 213 staff nurses, working in the previously mentioned settings for at least one year continuously with full time employment. Head nurses and supervisors were excluded from the sample because of their work nature that is different from staff nurses work nature. A convenient sampling method has been used to reach the sample participants; however, researchers acknowledge that this type of non-probability sampling method will provide little opportunity to control for biases.

### Tools for data collection

Tool I: Expanded Nursing Stress Scale (ENSS) was used to measure sources and frequency of stress perceived by nurses. The ENSS is an

expanded and updated revision of the classic Nursing Stress Scale (NSS) developed by Gray- Toft & Anderson (1981). 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 by nurses on hospital units (Gray- Toft & Anderson, 1981). There were major changes in health care delivery and the work environment of nurses since the development of the NSS. French et al. (2000). To identify stressful situations those are not reflected in the NSS, a new expanded version useful for diverse work settings was developed. 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 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). 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 will use the approximate means of the previous studies (Kamal et al., 2012), (Dargahi & Shaham, 2011) to make meaningful comparisons.

Tool II: Job satisfaction scale (JSS) which measured employee job satisfaction for nurses. The Job Satisfaction Survey has some of its items written in each direction-positive and negative. Scores on each of nine facet subscales, based on 4 items each, can range from 4 to 24; while scores for total job satisfaction, based on the sum of all 36 items, can range from 36 to 216. Each item is scored from 1 to 6 if the original response choices are used. High scores on the scale represent higher job satisfaction, so the scores on the negatively worded items must be reversed before summing with the positively worded into facet or total scores. A score of 6 representing strongest agreement with a negatively worded item is considered equivalent to a score of 1 representing strongest disagreement on a positively worded item, allowing them to be combined meaningfully. JSS assesses job satisfaction on a continuum from low (dissatisfied) to high (satisfied). There are no specific cut scores or published mean norms that determine whether an individual is satisfied or dissatisfied. Therefore, we will use the approximate means of previous studies for analysis purposes (Kamal et al., 2012), (Dargahi & Shaham, 2011). JSS contained nine facets which are Pay, Promotion, Supervision, Fringe Benefits, Contingent Rewards (performance

based rewards), Operating Procedures (required rules and procedures), Coworkers, Nature of Work, and Communication. (Spector, 1985).

Below (Table 1) are internal consistency reliabilities (coefficient alpha), based on a sample of 2,870. (Spector, 1985).

Table1. JSS internal consistency

Scale	Alpha	Description
Pay	.75	Pay and remuneration
Promotion	.73	Promotion opportunities
Supervision	.82	Immediate supervisor
Fringe Benefits	.73	Monetary and nonmonetary fringe benefits
Contingent Rewards	.76	Appreciation, recognition, and rewards for good work
Operating Procedures	.62	Operating policies and procedures
Coworkers	.60	People you work with
Nature of Work	.78	Job tasks themselves
Communication	.71	Communication within the organization
Total	.91	Total of all facets

### Procedure

Departmental approvals from Medical Science University along with formal IRB approvals from Raged hospital were obtained before data collection. In addition, permissions to use ENSS and JSS were obtained from the authors before data collection. Participation in this study was voluntary and it was based on participants' ability to give informed consent.

Before giving the informed consent, researchers explained the purpose of the study and it was mentioned clearly to the participants that their responses will be treated confidentially and anonymously. The staff nurses were asked to fill two questionnaires. The first questionnaire (ENSS), aimed to measure Job related stress the second questionnaire (JSS), aimed to measure level of job satisfaction. The staff nurses were informed that the questionnaire will be given and it will be collected during their working shift (8 hours). Researchers were present during that time for any questions. All gathered data and information were strictly confidential.

### 3. Results

#### A. Descriptive statistics

SPSS program (version 20) was used to analyze the results. Out of 217 Questionnaires distributed, 213 staff nurses completed the Questionnaires. Of the 213 staff nurses who responded, 17 nurses (8%) were male and 196 nurses (92 %) were female, which represents the same percentage of male to female ratio among the whole hospital staff.

22.1% were younger than 30 years old, 59.6% were aged between 30-40 years, and 18.3% were more than 40 years. The nursing samples were therefore, middle age staff nurses (the majority is middle age between 30 years old and 40 years old).

35.7% of staff nurses were holding Diploma degree. 64.3% of staff nurses were holding Bachelor degree.

10.8 % of staff nurses were working in Emergency Department, 17.8% of staff nurses were working in the ICU setting. 26% of staff nurses were working in Medical Wards, 12.2 % of staff nurses were working in Surgical Wards. 12.2% of staff nurses were working in pediatric Ward. 9.4% of staff nurses were working in Transplant unit. 13.6% of staff nurses were working in oncology unit. 3.3% of staff nurses were working in Neuroscience ward. (Table 2)

Table 2. Sample Characteristics

Characteristic	Frequency	Valid Percent
<b>Sex</b>		
Male	17	8
Female	196	92
<b>Age</b>		
< 30 years	47	22.1
30-40 years	127	59.6
> 40 years	39	18.3
<b>Highest level of education</b>		
Diploma	76	35.7
Bachelor	137	64.3
<b>Area of practice</b>		
Emergency	23	10.8
ICU	38	17.8
Medical wards	44	20.7
Surgical Wards	26	12.2
Pediatrics	26	12.2
Transplant	20	9.4
Oncology	29	13.6
Neuroscience ward	7	3.3
<b>Ethnic group</b>		
Saudi	6	2.8
Jordanian	3	1.4
Indian	70	32.9
Egypt	104	48.8
Malaysian	22	10.3
South-Africa	8	3.8

#### B. Expanded Nursing Stress Scale statistics (Perceived job related stress)

The total impact of stress on job among staff nurses in Raged hospital-Cairo in Egypt has been calculated using the mean and the standard deviation measures (N= 213, Mean=2.51, Std. Deviation = 1.29). This is an indication that staff nurses in Raged hospital-Cairo perceived their stress.

**Occasionally to extremely stressful.**

To achieve the purposes of this study, the mean and the standard deviation were calculated for items and subscales of Expanded Nursing Stress Scale. The descriptive analysis indicated that discrimination on basis of sex and being sexually harassed was the most stressful event perceived by staff nurses in Raged hospital as indicated by the Mean = 3.57 "Frequently stressful to extremely stressful". Feeling inadequately prepared to help with the emotional needs of a patient were the least stressful events perceived by staff nurses in Raged hospital as indicated in the Mean = 2.31 "Occasionally stressful to frequently stressful".

Furthermore, the results have shown that the most stressful subscale was Death and Dying (Performing procedures that patients experience as painful, Feeling helpless in the case of a patient who fails to improve, Listening or talking to a patient about his/her approaching death, The death of a patient, The death of a patient with whom you have developed a close relationship, Physician not being present when a patient dies, Watching a patient suffer) as indicated by the Mean = 9.91 (Table 3). The least stressful subscale was Inadequate Emotional Preparation to help in emotional needs of patients and their families (Feeling inadequately prepared to help with the emotional needs of a patient's family, Being asked a question by a patient for which I do not have a satisfactory answer, Feeling inadequately prepared to help with the emotional needs of a patient) as indicated by Mean = 2.39 (Table 3).

Table 3. ENSS subscale description

Subscales	N	Mean	Std. Deviation
Death and Dying	213	3.91	1.224
Conflict with Physicians	213	2.67	1.399
Inadequate Preparation	213	2.39	0.968
Problems with Peers	213	2.57	1.471
Problems with Supervisors	213	2.70	1.307
Workload	213	2.68	1.252
Uncertainty Concerning Treatment	213	2.70	1.194
Patients and Their families	213	2.87	1.211
Discrimination	213	3.08	1.863

### C. Job Satisfaction Scale Statistics

The total job satisfaction among staff nurses in Raged hospital has been calculated using the mean and the standard deviation measures and the result was: Mean= 3.68. Std. Deviation = 1.51. This is an indication of moderate job satisfaction among staff nurses in Raged hospital in Egypt compared to the means of the previous studies

(Kamal et al., 2012), (Dargahi & Shaham, 2011).

In Job Satisfaction Scale the majority of the nurses have expressed the highest level of satisfaction regarding (nature of work) as indicated by the Mean = 4.46, Std. Deviation = 1.33. The lowest level of satisfaction was regarding (the operating condition inside the organization and the duties that they have to do or accomplish at work) as indicated by the Mean = 2.85, Std. Deviation = 1.36 (Table 4).

Table 4. JSS subscale description.

Subscales	N	Mean	Std. Deviation
Pay	213	3.54	8.03
Promotion	213	3.32	1.82
Supervision	213	4.34	2.13
Fringe Benefits	213	3.32	1.38
Contingent rewards	213	3.26	1.38
Operating Condition	213	2.85	1.36
Coworkers	213	4.22	1.35
Nature of work	213	4.46	1.33
Communication	213	3.79	1.44

### Correlations results

#### The effect of demographic variables

Two tailed T-test (independent sample test) has been used to investigate the impact of stress on gender (There were more female staff nurses 92 % than male staff nurses 8%). There were no significant statistical differences between the impact of stress on gender as indicated by ( $t = 0.9$ ,  $P = .32$ ,  $P = 0.05$ ). Also, two tailed T-test has been used to investigate the effect of stress on educational level (Diploma or Bachelor Degree). There were no significant statistical difference in perceived job related stress due to level of education as indicated by ( $t = 0.73$ ,  $P = .46$ ,  $P = 0.05$ ).

One way ANOVA test have been used to investigate the effect of work place (ICU, Emergency, Medical Wards, Surgical Wards, Oncology unit, Transplant unit and pediatric ward) on the perceived job related stress. There were no statistically significant difference in job related stress due to work place as indicated by ( $F = 1.10$ ,  $sig. = .43 > 0.05$ ).

#### The impact of stress on job satisfaction for nurses

To achieve the purpose of identifying the impact of stress on job satisfaction for staff nurses in Raged hospital, a Pearson correlation test has been performed. There was a negative significant relationship between stress and job satisfaction among staff nurses in Raged hospital as indicated by (Pearson correlation =  $- .437$ ,  $P < 0.05$ ).

### 4. Discussions

The purpose of this study was to describe main stressors affecting nurses in Raged hospital, Cairo in Egypt. Study results have shown that the

most stressful categories for staff nurses Raged hospital were performing procedures that patients experience as painful, Feeling helpless in the case of a patient who fails to improve, Listening or talking to a patient about his/her approaching death, The death of a patient, The death of a patient with whom you have developed a close relationship, Physician not being present when a patient dies, Watching a patient suffer, as indicated by Death and Dying subscale mean = 9.91 "extremely stressful" which result in moderate job satisfaction level (total job satisfaction mean = 3.68).

In Raged Hospital, this might be explained by the nature of the cases that are admitted to the hospital because the hospital is a tertiary care facility specialized in oncology, neuroscience and transplant. These kinds of cases have a high mortality rate by their nature. Moreover, some of these cases will be on do not resuscitate order, which explains why the primary consultant is absent when the patient dies.

It is acknowledged that the death of somebody renowned to an individual has an impact on the person experiencing the bereavement. (Kubler-Ross 1973, Parkes, 1975). Nurses are identified as having more wide contact with patients than any other healthcare professionals (Costello, 2001). The deaths of patients have an impact on nurses. This can affect them both in their work environment and external environment. Education about grief theory and support from others are useful for staff in developing strategies for coping with patient deaths (WILSON, Janet and KIRSHBAUM, Marilyn, 2011).

Experiencing discrimination on the basis of sex and being sexually harassed was frequently stressful for staff nurses in clinical area as indicated by discrimination subscale mean 3.08 "frequently stressful" which contribute in reduction of job satisfaction. Job satisfaction is one of the critical components of employee attitudes that are likely to be affected by perceived discrimination. Perceived discrimination is an individual's perception that he or she is treated differently or unfairly because of his or her group membership. Furthermore, when individuals feel they are mistreated because of their group membership, they often feel isolated and aggressive, which can result in negative work related behaviors (Ellen et al., 2001).

This subscale is apparent in the analysis due to the high diversity of nationalities working at Raged hospital (refer to sample characteristics table 2). Each group feels that they are discriminated when compared to others. Moreover, the domination and total delegation of authority for men in the eastern culture might exaggerate the effect of this subscale to be apparent.

Factor of the intense emotional support that is needed for the patient and family is yet another burden of stress placed on nurses. However, this was the least stressful subscale in the study, mean = 2.39 which clearly indicate that staff nurses were avoiding emotional demands of the patients and their families. This might be due to the lack of time and the work overload that the nurses have.

Poor clinical structure, 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. Therefore, these issues need to be confronted as a means of caring for staff. The recently agreed clinical structure (more clearly related to the preparation for the role) may lead to increased autonomy and satisfaction. Better relationships with other professions (e.g. physician/nurse) may also relieve stress. This could be achieved through closer integration during parts of training to enhance understanding of each other's roles. A higher level of education for nurses will increase confidence and ability to discuss issues as equals with professional colleagues (ALHussami, 2008).

Many studies have shown that an individual nurse may behave quite differently in stress perceiving. These factors may include, for example, gender, age, education (Lee & Wang, 2002). However, the effect of personal factors, such as those studies regarding the effect of education, marital status, and number of children on stress perception and associated coping behaviors had not come to a consensus (Chang, et al. 2004). None of these factors reached the significance in this study also.

Seeking strategies to relieve the stressors that are affecting the nurse in Raged hospital is one of the major tasks that administration should concern to achieve a higher level of satisfaction for staff nurses and for the clients (patients and their families in the organization). Numerous writers have suggested that manager behaviors can have a significant impact on health outcomes for subordinates (WHO, 2007).

There was a significant negative relationship between stress and job satisfaction among nurses in nurses in Raged hospital as indicated by (Pearson correlation = - .437,  $P < 0.05$ ). This correspondent with results of the researches that have studied the relationship between stress and job satisfaction (Ruggiero, 2003).

This study indicates the importance of adopting strategies to reduce the perceived job related stress and to demonstrate more social support for the staff nurses in the work place in Raged hospital. Nurse Managers should promote an organizational culture characterized by cooperation, social

integration, and team work among nurses. This will result in reduction of the stressors, achieving the holistic and the highest quality of care provided for the patients. Moreover, researchers recommend to foster cooperation, social interaction concepts, and effective coping mechanism among nursing students for future behaviors. Students who learn the importance of cooperation and social integration during their education might better understand the significance of coworker support in the work place.

#### Conclusion:

Raged hospital - Cairo staff nurses were exposed to many kinds of job related stressors which affected their level of job satisfaction. The most stressful aspect for them was death and dying subscale and the least stressful aspect for them was inadequate preparation to help with the emotional needs of patients and their families. This emphasis adopting strategies to reduce perceived job related stress and thus increase job satisfaction which will be reflected on patient care quality.

#### Recommendation:

- 1- Future researches employ a longitudinal design to gain further insights into the effect of frequently occurring job related stressors over an extended period of time.
- 2- Designing stress reduction interventions that increase effectively job satisfaction, decrease absenteeism and turnover.
- 3- Empowering employees by sharing in problem solving and decision making.

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