A Descriptive Study to Assess Job Stress Among Nurses Working in Intensive Care Units at A Tertiary Care Hospital, Salem

Mrs.T.Gomathi [iD]

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RESEARCH ARTICLE

A Descriptive Study to Assess Job Stress Among Nurses Working in Intensive Care Units at A Tertiary Care Hospital, Salem

Mrs.T.Gomathi

*¹M.Sc (N) II Year student, Shanmuga College of Nursing, Salem- 636007
*Author to whom correspondence should be addressed; E-Mail: thiru_gomathi@yahoo.com

Abstract: Stress is a part of our life. Stress can also create positive and negative influence in our daily lives. As a positive influence stress is a motivating force towards progress and it can create new awareness and exciting new perspective. As a negative influence it creates feeling of distress, rejection, depression, which leads to variety of physical and psychological problems. Many types of disease (psychosomatic illnesses) have been linked with stress including high blood pressure, heart attack, heart disease, peptic ulcer, headache, pain in the neck, asthma, cancer, depression etc. Nurses are responsible for creating the environment in which nursing is practiced and patient care is given, it is important to explore interventions that will reduce the stress and burnout experienced by nurses. By reducing the stressful nature of the nurses' work, nurse could be more satisfied in their positions.

Keywords: Job stress, icu, registered nurses.

Introduction

In this complex world vast majority of people are in state of stress. Stress has always been around in one from another. We all are individual creature with unique requirements. Stresses are unique as well. It is impossible to avoid stress; stressors will be always being there because we live in an imperfect and unpredictable world (Brown, 2000). Stress is a part of our life. Stress can also create positive and negative influence in our daily lives. As a positive influence stress is a motivating force towards progress and it can create new awareness and exciting new perspective. As a negative influence it creates feeling of distress, rejection, depression, which leads to variety of physical and psychological problems (Mehta, 2014). Many types of disease (psychosomatic illnesses) have been linked with stress including high blood pressure, heart attack, heart disease, peptic ulcer, headache, pain in the neck, asthma, cancer, depression etc.

On the threshold of a new century, in health care delivery systems nurses are well positioned to influence the divers' trends impacting on health care and nursing. The changing demographics influenced by an aging population, a shift to diseases patterns and advances in medical and information technology, challenges nurses to keep up with changing health care demands through lifelong learning with foresight, regular environmental scanning and sound health policies (Guerrer et al., 2008). Stress is a subjective phenomenon based on individual perceptions, producing positive (eustress) and negative (distress) perspectives. The workplace for nurses provides a multiplicity of sources of stress. There are differences in the perceptions of nurses in different workplaces, and even between individuals in the same workplace (U. R. Rout ,1990).

Progression along the continuum from eustress to distress is subjective, depending upon the relationship between an individual and their environment. Thus, whilst there is recognition that workload, leadership style, professional relationships, and emotional demand (U. R. Rout ,1990). The concept of stress in the workplace is of great importance in health care and especially nurse is generally considered a high-risk group regarding work stress and burnout. This syndrome has been a major concern in the field of occupational health and healthcare worker, particularly those caring for patients suffering from serious illness Stress affecting nurses across the globe has been convincingly documented in the literature for more than 40 years (Stehle, 1981). Working environment of nurses includes an enclosed atmosphere, time pressures, excessive noise or undue quiet, no second chance, unpleasant sights and sounds, and long-standing hours are the most frequently reported major factors that cause workplace distress for staff nurses (Hipwell et al., 1989).

It is important to identify the extent and sources of stress in a healthcare organization to find stress management strategies to help the individual and the environment (While et al., 2007). Stress in nurses affects their health and increases absenteeism, attrition rate, injury claims, infection rates, and errors in treating patients (Preto, 2009). Unless the healthcare setups acknowledge the problem and taken preemptive steps to tackle the growing menace of chronic stress, personnel costs will keep rising and add to the already soaring costs of care. Nurses' absenteeism, turnover, and sickness significantly increase the cost of employment in healthcare units (Molassiotis et al., 1993).

Materials and Methods

According to the Global Advisory Group of the World Health Organization, there is a worldwide shortage of nurses. Regardless of country, this shortage has an impact upon the care delivered to patients, as well as the physical and mental health of nurses.

Nursing profession has been considered a stressful occupation. Nurses are always facing challenges both externally and internally whether it is work related or outside the work place. The stressors include: dealing with death and dying patients; conflicts with colleagues, lack of skill and training, frequent changes in technology, lack of protocol and guidance, unequal power balance between doctor and nurses, demand from the public and heightened public awareness about health and their right. Nursing is quite stressful among other occupations, When treating critical patients, it is even considered wearisome, and being a part of such day – to- day routine makes the nurse susceptible to stress. Many studies of stress in nurse in developed countries have shown chronic stress as a major contributor to suicide or suicidal thoughts, smoking, excessive coffee consumption, and alcohol.6.

Objectives of the Study

1. To assess level of stress among nurses working in Intensive care units.
2. To find out association between level of stress with selected demographic variables.

Hypothesis

H1 : There is a statistically significant association between the selected demographical
variables and the stress scores of nurses working in critical care areas at < 0.005 level.

Operational Definitions

1. ASSESS: It is the organized, systematic and continuous process of collecting data and the statistical measurement of stress level.
2. JOB STRESS: In this study, it refers to emotional strain resulting when nurse is working in Intensive care units as measured by modified nursing stress scale.
3. NURSES: In this study, registered nurses who are working in Intensive care units.
4. SELECTED HOSPITALS: In this study, the selected hospital is Shanmuga Cancer Hospital Salem, Tamil nadu.

Assumption

1. The nurse will have stress regarding job related factors.

DELIMINATION:

1. The sample size was delimited to 30 nurses.
2. The study period was delimited for 1 month.
3. The sample was delimited to nurses who are working in intensive care units.

Conceptual Frame Work

Nancy burns defines a study framework as belief explanation of the theory or those portion of theory that are to be tested in a study. It spells out the logic that the researcher is using in planning a study. Conceptual framework is a group of concept that are logically constructed and analytically organized to provide rationale and tool for the integration and interpretation of information. It is expressed conceptually through models where it is the conceptual basis for many theories, such as health belief model, general systems theory etc. A good conceptual framework always captures something real and presents in a way that is easy to remember and apply.

Health Belief Model is provided the conceptual framework for this study. This model consists of following components that serve as the main constructs of the model: perceived seriousness, perceived susceptibility, perceived threat, perceived benefits, and perceived barriers. Most recently other constructs have been added to this model which includes cues to action, modifying factors, and self-efficacy. Research Approach In descriptive survey, the research objective is utilitarian. The traditional strategy for descriptive survey includes determining programme objectives, developing means to measure the attainment of those objectives, collecting the data and interpreting the data in terms of those objectives

Research Design

The research design of a study spells out the basic strategies that researcher adopt to develop evidence that is accurate and interpretable. The research design is the researcher's overall plan for answering the research question. Non-experimental descriptive design will be used to identify the stress of the nursing staff working in the critical care units.

Research Variables

1. STUDY VARIABLE: Stress of nursing staff.
2. EXTRANEOUS VARIABLES:

Demographic variables such as age, gender, marital status, qualification, year of experience.

Research Setting

The study is conducted in the Intensive care units of Shanmuga Cancer Hospital, Salem, Tamil Nadu, India

Population

Nurses from selected Intensive care units of Shanmuga Cancer Hospital, Salem, Tamil Nadu, India

Sample

The samples are nurses who fulfill the inclusion criteria(Kaul J , 2005).

Sample Size and Sampling Technique

The sample size taken for this study was 30 staff nurse and the sampling technique was simple random sampling technique used.

Criteria For Sample Selection

Inclusion criteria

The study includes those who are:

1. Staff nurses working in
2. Who are willing to participate in the study. Intensive care units of Shanmuga
3. Cancer Hospital, Salem, Tamil Nadu, India

Exclusion criteria

The study excludes

Nurses who are not available at the time of data collection or who refuse to participate in the study.

Tool For Data Collection

The tool consists of the following sections:

Section I: A self-administered structured questionnaire to assess the demographic profile consisting of age, gender, marital status, education, total year of experience, years of experience in critical care unit, type of unit, years of experience in the present ward(Nizami et al., 2006).

Section II: A modified nursing stress scale to assess the stress level of nurses working in Intensive care unit .

Method of Data Collection

Phase 1: After obtaining the permission from the concerned authorities and informed consent from the samples the investigator would collect the baseline demographic data.

Phase 2: Modified stress scale was to identify the stress level of nurses working in Intensive care unit.

Plan For Data Analysis

The data obtained was analyzed in terms of the objectives of the study using descriptive statistics. The plan of the data analysis was worked out with experts in the field of statistics and nursing. The plan of analysis was as follows:

1. Organization of data
2. Tabulation of data in terms of frequencies, percentage, mean, median, mode and standard deviation.
3. Classifying stress score using mean and standard deviation as follows:
    a. Mean + standard deviation
    b. (mean + standard deviation) to (mean- standard deviation)
    c. Mean – standard deviation 28-62 : Mild
4. 63-93 : Moderate
5. 94-120 : Sever

CONCEPTUAL MODEL BASED ON ROSENSTOCK'S & BECKER'S HEALTH BELIEF
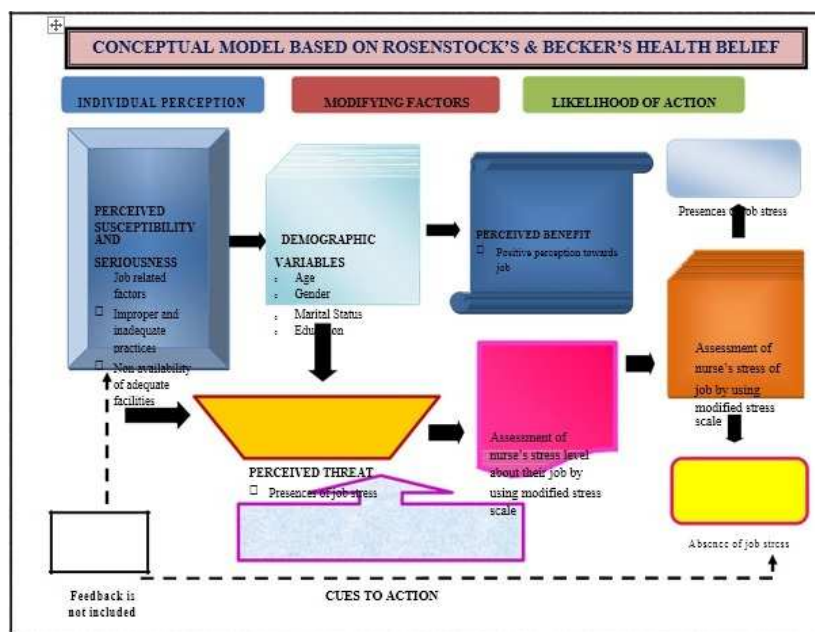
Results and Discussion

Analysis is the process of organizing and synthesizing data so as to answer research question and test the hypothesis. After carefully collecting data, the researcher is faced with task of organizing the individual pieces of information so that the meaning is clear. Interpretation is the process of making sense of the results and of examining these implications.

The analysis and interpretation of data in this study were based on data collected through modified stress scale.

The data were analyzed according to objectives of study, which were:

1. To assess level of stress among nurses working in critical care areas.
2. To find out association between level of stress with selected demographic variables.

The investigator collected the data for analysis and interpretation using modified nursing stress scale and checklist. In order to examine the proposed association the data weretabulated, analyzed and interpreted using descriptive and inferential statistics.

SECTION I: Distribution of selected demographical variables according to the classification.
TABLE 1: Frequency and percentage distribution of nurses according to their socio-demographic variables

n = 30

Sr. No	Socio-Demographical variables		Frequency(f)	Percentage (%)
1.	**Age in years**			
	a.	20-25	8	26.7
	b.	26-30	16	53.3
	c.	>30	6	20
2.	**Gender**			
	Male	12	40	Male
	Female	18	60	Female
3.	**Marital status**			
	Married	17	56.7	Married
	Unmarried	13	43.3	Unmarried
4.	**Education**			
	Diploma	16	53.3	Diploma
	Bachelor	14	46.7	Bachelor

Table 1: reveals that

1. Majority of the nurses 16(53.3%) is in between age group of 26 to 30 years whereas 8(26.7%) belonged to 20-25 years and minimum number of nurses were 6 (20%) belongs to more than 30 years.
2. Majority of the nurses 18(60%) were female, whereas 12(40%) were male.
3. Majority of the nurse 17(56.7%) were married while 13(43.3%) were unmarried.
4. Majority of the nurses 16 (53.3%) have completed diploma whereas 14(46.7%) have completed bachelor in nursing.

SECTION II: Findings of the job stress scores of the nurses working in the critical care ward.
TABLE 2: Frequency and percentage the job stress scores of the nurses working in the critical care ward.

n = 30

Stress level	Frequency	Percentage (%)
Mild(28-62)	2	6.7%
Moderate(63-93)	24	80%
Severe(94-120)	4	13.3%

Table.2. Reveals that majority of the nurses 24(80%) had moderate stress, whereas 4(13.3%) had severe stress and 2(6.7%) had mild stress.

SECTION III: Analysis and interpretation of data to find out an association between stress scores of nurses with selected demographic variables.

Table 3: Association between the stress score of nurses with their selected socio-demographic variables.

n=30

Sl. No	Demographical Variables	Stress Level			X^2 Cal.	X^2 Tab.	df
1.	Age (in years)	Mild	Moderate	Severe	Value	Value	
	20-25	1	6	1			
	26-30	1	14	1	3.490	0.479	4
	>30	0	4	2			
2.	Gender						
	Male	1	10	1	0.486	0.784	2
	Female	1	14	3			
3.	Marital status						
	Married	0	14	3	3.190	0.202	2
	Unmarried	2	10	1			
4.	Education						
	GNM	0	13	3	3.037	0.219	2
	B.Sc(N)	2	11	1			

$p < 0.05$

Table.4. Revealed that the calculated chi square values for the socio-demographic variables such as age, gender, marital status and education were less than the tabulated chi square values. Hence there was no significant association between the job str ess scores and selected demographic variables.

Findings

1.Findings related to distribution of nurses according to their age. In the present study, sample of 30 staff nurses were selected who working in Intensive care units of Shanmuga Cancer Hospital, Salem, Tamil Nadu, India .Findings showed that Majority of the nurses 16(53.3%) is in between age group of 26 to 30 years and minimum number of nurses were 6 (20%) belongs to more than 30 years. The study findings were supported with the findings and the study done by Guerrer FJ, Bianchi ER at Brazil.

2.Findings on stress scores regarding job among the nurses according to their gender. In the present study, Findings related to stress scores regarding job among the nurses majority of the nurses 18(60%) were female whereas 12(40%) were male. Similar findings were seen in study done by Guerrer FJ, Bianchi ER at Brazil, majority of the nurses were female(91%)

3.Findings on association between stress scores of nurses with selected demographic variables In the present study Majority of the nurses 16 (53.3%) have done diploma whereas 14(46.7%) have done bachelor in nursing. Similar findings were seen in study done by Manisha.P. at Navi Mumbai, majority of nurses 64% completed diploma whereas 26% nurses completed bachelor in nursing (Pawar, 2014).

4.Findings on association between stress scores with selected demographic variables. Analysis was done for identifying association between stress level and selected demographic variables by computing chi-square test. The study findings showed that there was no significant association between the stress scores of nurses regarding job and the selected demographic variables namely age, gender, marital status and education. Similar findings were in study conducted by Goodfellow A , Varnam R, Rees D and Shelly M P., revealed that there was no significant association found with the same socio demographic variables.

Conclusions

Majority of the nurses 16(53.3%) is in between age group of 26 to 30 years whereas eight (26.7%) belonged to 20-25 years and minimum number of nurses were 6 (20%) belongs to more than 30 years. Majority of the nurses 18(60%) were female whereas 12(40%) were male. Majority of the nurse 17(56.7%) were married while 13(43.3%) were unmarried. Majority of the nurses 16 (53.3%) have completed diploma whereas 14(46.7%) have completed bachelor in nursing. Chi square values for the socio-demographic variables such as age, gender, marital status and education were less than the tabulated chi square values. Hence, there was no significant association between the stress scores of nurses regarding job and selected demographic variables.

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CONFLICTS OF INTEREST

"The authors declare no conflict of interest".