

Assess the Occupational Stress and Coping Strategies among Staff Nurses Working in SRM Hospital

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Abstract

Nursing is a stressful profession. Caring for clients, individuals, families, groups, populations or entire communities, with multiple, complex and distressing problems can be overwhelming for even the most experienced person. Nurses regularly face emotionally charged situations and encounter intense interpersonal and inter professional situations and conflict in the workplace while trying to make appropriate and safe decisions. Research has shown that nursing is a high-risk occupation in respect of stress-related diseases. It is very essential to determine the magnitude of the problem and study the factors responsible for it. The aim of the study was to assess the level of occupational stress and coping strategies, to correlate the occupational stress with their coping strategies and to associate the occupational stress and coping strategies with their demographic variables among staff nurses. Quantitative approach and Non Experimental descriptive research design was used. The Study variables were Occupational stress and coping strategies. The study sample comprised of staff nurses working in SRM general hospital who fulfilled the inclusion criteria and the sample size was 100 staff Nurses. By using Non Probability Purposive Sampling technique they were Selected. The instrument Consist of two parts. Section A includes Self-administered structured questionnaire to assess demographic variables such as age, sex, working experience, marital status, degree and work area and Section B consists of modified mental health professional stress scale questionnaire assess the nurse's stress and coping strategies. The study was conducted at SRM General Hospital, Kattankulathur. The data was analyzed and interpreted based on the objectives using descriptive and inferential Statistics. The Study concluded that 30% of staff nurses had mild occupational stress, 70% of staff nurses had severe occupational stress and 0% had moderate occupational stress. 12% of staff nurses had good coping strategies, 85% of staff nurses had average coping strategies and 3% of staff nurses had poor coping strategies and there is a significant negative correlation between stress and coping strategies. There is a significant association between the age and the level of occupational stress.

Keywords: Occupational Stress; Coping Strategies; Stress-Related Diseases; Staff Nurses.

Introduction

Health professionals frequently suffer from stress owing to the characteristics and working conditions typically found in hospitals. Pressure at work can be positive leading to increased productivity. However,

when this pressure becomes excessive, it has a negative impact. The individual perceives themselves as being unable to cope and not to possess the necessary skills to combat their stress. Stress is acknowledged to be one of the main causes of absence from work. Prevalence of occupational stress amongst nurses in India is 87.4% [1].

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Nursing is a stressful profession. Caring for clients, individuals, families, groups, populations or entire communities, with multiple, complex and distressing problems can be overwhelming for even the most experienced person. Nurses regularly face emotionally charged situations and encounter intense interpersonal and inter professional situations and

conflict in the workplace while trying to make appropriate and safe decisions. Research has shown that nursing is a high-risk occupation in respect of stress-related diseases. Stress can reduce the enjoyment in life, cause hypertension, cardiac problems, reduce immunity, contribute to substance abuse, lead to frustration, irritability and reduce the overall status of mental and physical wellbeing. Stressful work may propagate substance abuse amongst workers, which they might use to reduce or cope with stress. It is very essential to determine the magnitude of the problem and study the factors responsible for it.

Identifying the various sources of occupational stress among the nurses through an evidence-based mechanism to highlight the difficulties in order to ensure a better health care delivery service will help in streamlining the stress management programs towards a specific direction, thereby ensuring that these health care providers remain healthy and stress free. This will lead to better delivery and enhanced quality of health services for the entire population.

Nursing is a rewarding and satisfying profession. But, at the same time, it can also be extremely stressful. Nurses in India, are overburdened as the nurse to patient ratio is low (1:3). They are responsible-along with other health care professionals-for the treatment, safety, and recovery of acutely or chronically ill, injured, health maintenance, treatment of life-threatening emergencies and medical and nursing research. Nurses not only assume the role of caregivers but are also administrators and supervisors of patients. These multiple work roles contribute to significant amount of occupation related stress amongst nursing staff [2].

Occupational stress is any discomfort which is felt and perceived at a personal level and triggered by instances, events or situations that are too intense and frequent in nature so as to exceed a person's coping capabilities and resources to handle them adequately. Anytime occupational stress occurs, it is an indication that the demands placed upon the person have exceeded the person's personal resources, whether these resources are physical, emotional, economic, social or spiritual. A worldwide shortage of nurses has been acknowledged by the Global Advisory Group of the World Health Organization (WHO). As the worldwide nursing shortage increases, the aged population becomes larger, there is an increase in the incidence of chronic illnesses and technology continues to advance, nurses continually will be faced with numerous workplace stressors.

The occupational stressors can be categorized into four major groups. Firstly, the working conditions, including shift and week-end work, inadequate remuneration, hours of work, discrimination and safety at the work environment. Secondly, relationships at work including quality of relationships with peers, subordinates and supervisors. Thirdly, role conflict and ambiguity including ill-defined role, functions, expectations, and duties. Fourthly, organization structure and climate which includes communication policy and practice, major changes in the workplace, culture of the organization, and lack of participation in decision-making. Another cause is career development including underutilization of skills or failing to reach full potential. Another contributing factor is the nature of the job which might amount to an immense amount of physical and emotional exhaustion. A study conducted in Rawalpindi found that almost all nurses reported their work related stress as either severe or moderate. However, over two-third of them reported as being in control of work life. Another study investigated the difference between female doctors and nurses regarding the home-work stress and burnout. Data were collected from 143 women (69 doctors and 74 nurses) working in public hospitals of Lahore. Results indicated that the nurses were significantly different from female doctors in the levels of depersonalization of others and reduced personal accomplishment dimensions of burnout. Results also suggested that the relationship between home-work stress and burnout was moderated by organizational sources of support predominantly in nurses.

Santos et al. (2003) found that among nurses in Missouri USA, occupational stress was related to the physical environment and responsibility. Studies indicate that, in addition to nursing itself, organizational and management characteristics influence the stress, nurses experience at work (*Santos et al., 2003; Stordeur et al., 2001*). Nurses are a group of professionals that work with patients, relatives, and hospital caregivers in various stressful life situations [3].

Through their dealings with suffering, illness and death they confront existential issues on a daily basis. They have to cope with stress at work and even in their private lives. Reasons for stress may vary in different areas of health care. In a literature review, four different areas that create stress were highlighted; these are also prevalent in studies of nurses: workload, leadership issues, professional conflict, and emotional nursing care demands (*Mc Vicar, 2003*) [4].

The presence of workplace stress imposes a cost factor on any work setting. Costs, directly related to workplace stress, can involve absenteeism, employee turnovers, and short- and long-term disabilities, medication expenses related to psychotherapeutic medications, workplace accidents, and worker's compensation claims and lawsuits. The Luminari Landmark Study found, among workers examined, 1 in 5 were at risk for stress-related health problems, 2 in 5 experienced distress because of too much pressure or mental fatigue at work, 1 in 10 were so tired at the end of the work day that they did not enjoy their nonworking time, and 1 in 5 stated their work regularly interfered with responsibilities at home and kept them from spending time with their families. Researcher have several months of working experience in various intensive care units. Various ICU areas include Coronary Care Unit, Cardio Thoracic Care Unit, Neonatal ICU, Medical Surgical ICU and Respiratory Care Unit. The researcher realized the occupational stress faced by medical professionals especially, nurses in ICU. This inspired the researcher to conduct the study

Aim of the Study

1. To assess the level of occupational stress and coping strategies among staff nurses.
2. To correlate the occupational stress with their coping strategies among staff nurses.
3. To associate the occupational stress and coping strategies with their demographic variables.

Methodology

Quantitative approach and Non Experimental descriptive research design was used. The Study variables were Occupational stress and coping strategies. The study sample comprised of staff nurses working in SRM general hospital who fulfilled the inclusion criteria and the sample size was 100 staff Nurses.

By using Non Probability Purposive Sampling technique they were Selected. The instrument Consist of two parts. Section A includes Self-administered structured questionnaire to assess demographic variables such as age, sex, working experience, marital status, degree and work area and Section B consists of modified mental health professional stress scale questionnaire assess the nurse's stress and coping strategies. The study was conducted at SRM General Hospital

Ethical Consideration

Formal approval was obtained from the Institutional review board and Institutional ethical committee of SRM University, Kattankulathur, Chennai, Tamilnadu, India. In addition, the participants were informed of their right to withdraw anytime during the course of the study.

Instruments

The tool was developed by the investigator himself the tool developed for this study is a self administered questionnaire based on the review of literature discussion with experts and investigators personal experience. The tool comprise of three sections

The tool consists of two sections

Section A Self-administered structured questionnaire was used to assess demographic variables such as age, sex, working experience, marital status, degree and work area.

Section B Tool 1- modified mental health professional stress scale questionnaire was used to assess the nurse's stress and coping strategies.

Method of Data Collection

The investigator had collected data with effect from 05/02/2015 to 21/02/2015 in SRM General Hospital; Kattankulathur The investigator introduced her to the samples and the purpose of the study was explained to ensure better co-operation and collaboration during the data collection period. The written consent from the samples was taken and they were assured confidentiality. Using Questionnaire method, data collection procedure was completed. The questionnaire was administered regarding occupational stress and coping strategies among staff nurses. Approximately 10-15 minutes was spent to elicit the data for each staff nurse. The self-instructional module was distributed to each staff nurses at the end of the data collection procedure. The data gathering process was continued till the sample size was 100.

Statistical Analysis

The information collected from the study participants was scored and tabulated. The data was entered into the master coding sheet and saved in EXCEL. Statistical analysis was conducted with the help of the Statistical Package for Social Sciences (SPSS)-16. Mean, percentage and Standard deviation

was used to explain the demographic variables and Pearson Correlation was used to assess the Relationship between Occupational stress and Coping Strategies and Chi-square test was used to associate the demographic variables with Occupational stress and coping Strategies.

Results

Section A: Analysis of demographic variables of Staff nurses

The frequency and percentage distribution reveals

that 97% of the nurses belong to the age group of 21-28 years and 3% of the nurses belong to the age group of 28-34 years. In gender female occupies 89% and male occupies 11%. In year of experience, 30% of nurses has less than 1 year experience, 62% of nurses has 1-4 years of experience, 6% of nurses has 4-10 years of experience and 2% of nurses has more than 10 years of experience. In marital status 26% of nurses are married and 74% are unmarried. In educational qualification 85% of nurse is BSc. Nursing staffs and 15% of nurses are diploma nursing staffs. In work area, 10% are from emergency department, 29% from intensive care unit, 35% from medical and surgical ward and 26% from other wards.

Table 1: Frequency and percentage distribution of demographic variables of Staff nurses

N=100

Demographic Variables		Frequency	Percentage
Age	21-28 years	97	97%
	28-34 years	3	3%
Gender	Female	89	89%
	Male	11	11%
Year of experience	<1 years	30	30%
	1-4 years	62	62%
	4-10 years	6	6%
	>10 years	2	2%
Marital status	married	26	26%
	single	74	74%
Educational qualification	Degree in nursing	85	85%
	Diploma in nursing	15	15%
Work area	Emergency department	10	10%
	Intensive care unit	29	29%
	Medical and surgical ward	35	35%
	others	26	26%

Section B: Analysis on level of occupational stress and coping strategies among staff nurses.

Table 2: Percentage distribution table of occupational stress and coping strategies

S. No.	Questions	Never	Sometimes	Often	Always
	Working Environment				
1	Noisy working area	22	64	12	2
2	Lighting is poor or inadequate	64	18	3	15
3	Skills are under-utilized	12	52	18	18
4	Unit is over crowded	18	46	31	5
5	Ventilation is poor causing suffocation	51	22	22	5
6	Co-workers are competent	25	62	5	8
7	Very frequent night shifts	26	46	23	5
8	Handling too many patients per shift	25	34	25	16
9	Have enough freedom to take work related decision	28	50	10	12
10	Equipments and supplies are not adequate	23	43	20	14
11	Break time during shift hours	20	29	29	22
12	Relationship with superiors, colleagues and subordinates are not friendly	26	33	19	22
	Patient Related Difficulties				
13	Patients in the unit are difficult and demanding	23	55	17	5
14	Harassment from aggressive relatives	24	50	21	5
	Organisational Structure And Processes:-				
15	Had good incentives for overtime	27	46	15	12

16	Inadequate delegation of responsibility	13	62	18	7
17	Poor or insufficient salary	21	16	19	44
18	Had appreciative promotions	56	25	7	12
19	Appreciation for good performance	31	41	14	14
20	Job insecurity	30	46	23	1
21	Poor communication from management	22	32	33	13
	Education and Training				
22	Orientation and induction program immediately after joining	20	37	24	19
23	Regular in-service education and training	11	47	27	15
24	Stress handling sessions/seminars	26	40	16	18
	Coping Strategies				
25	Going on holidays	31	61	5	3
26	Spending time with family weekly	43	47	6	4
27	Medication/yoga	53	29	15	3
28	Relaxation exercises	47	39	9	5
29	Taking drugs for coping stress	86	8	5	1
30	Explore ways to manage time	34	50	13	3
31	Accept things you can't change	26	47	16	11

Table 2: Percentage distribution of occupational stress

S. No.	Occupational Stress	Number of Respondents	Percentage
1	Mild	30	30%
2	Moderate	0	0%
3	Severe	70	70%
	Total	100	

From the above Table 2 it shows that 30% of staff nurses has mild occupational stress, 70% of staff nurses has severe occupational stress and 0% has moderate occupational stress.

Table 3: Percentage distribution of coping strategies

S. No.	Coping Strategies	Number of Respondents	Percentage
1	Good	12	12%
2	Average	85	85%
3	Poor	3	3%
	Total	100	

From the Table 3 it shows that 12% of staff nurses has good coping strategies, 85% of staff nurses has average coping strategies and 3% of staff nurses has poor coping strategies.

Section C: Correlation of occupational stress with their coping strategies among staff nurses

Table 4: Correlation between occupational stress and coping strategies

N=100

Pearson's Correlation		Working Environment	Patient Related Difficulties	Organizational Structures and Processes	Education and Training	Coping Strategies
Coping Strategies	Pearson Correlation	-0.462	-0.021	-0.138	0.117	1.000
	Sig. (2-tailed)	0.000**	0.835	0.170	0.247	
	N	100	100	100	100	100

From the Table 4, it is seen that there is a significant negative correlation between working environment and coping strategies and the p value is -0.462, there is also significant negative correlation between patient related difficulties and coping strategies and the p value is -0.021. There is a significant negative

correlation between organizational structures and coping strategies, the p value is -0.138. There is no significant correlation between education, training and coping strategies, the p value is 0.117.

Section D: Association of occupational stress and coping strategies with their demographic variables among staff nurses

Table 5: Association between Demographic variables and Occupational Stress

N=100

S. No.	Demographic Variable	Class	Level of Occupational Stress		Chi-Square Value	Degrees of Freedom	P- Value
			Less	More			
1	Age	21 - 28 Years	66	31	6.00	1	0.01**
		28 - 34 Years	0	3			
2	Gender	Male	6	5	0.72	1	0.40
		Female	60	29			
3	Working Experience	< 1 Year	19	11	1.32	3	0.72
		1 - 4 Years	43	19			
		4 - 10 Years	3	3			
		> 10 Years	1	1			
4	Marital Status	Married	16	10	0.31	1	0.58
		Single	50	24			
5	Educational Qualifications	B.Sc., Nursing	61	27	3.60	1	0.06
6	Work Area	Emergency Department	8	2	1.56	3	0.67
		Intensive Care Unit	19	10			
		Medical and Surgical ward	21	14			
		Others	18	8			

From the Table 5 it is seen that there is a significant association or relation between the demographic character Age and the Levels of occupational stress. The p value of age is 0.001. 66% from the age group of 21-28 years has more occupational stress when comparing to the age group 28-34 years. From this

study it is concluded that as the age increases the stress level is decreased. Other demographic characters Gender, Working experience, marital status, Educational qualification and Work area not influence the level of stress.

Table 6: Association between: Demographic variables and coping strategies

N=100

S. No.	Demographic Variable	Class	Level of Coping Strategies		Chi-Square Value	Degrees of Freedom	P- Value
			Good	Not Good			
1	Age	21 - 28 Years	30	67	0.01	1	0.93
		28 - 34 Years	1	2			
2	Gender	Male	4	7	0.17	1	0.68
		Female	27	62			
3	Working Experience	< 1 Year	8	22	2.32	3	0.51
		1 - 4 Years	22	40			
		4 - 10 Years	1	5			
		> 10 Years	0	2			
4	Marital Status	Married	6	20	1.03	1	0.31
		Single	25	49			
5	Educational Qualifications	B.Sc., Nursing	28	60	0.23	1	0.63
6	Work Area	Emergency Department	3	7	1.42	3	0.70
		Intensive Care Unit	11	18			
		Medical and Surgical ward	11	24			
		Others	6	20			

From the Table 6 it shows that there is no significant association or relation between the demographic

characters and the levels of coping strategies.

Discussion

Stress has become the number one malady of our time. The constant pressure associated with living in a fast-paced world has created an environment where nearly everyone feels the effects of stress. Stress is a term used to describe the wear and tear the body experiences in reaction to everyday tensions and pressures, change, illness, injury or career and lifestyle changes, are common causes of stress, however, it's the effects of stress, like pressure and tension, that we feel in response to the little everyday hassles-like rush hour traffic, waiting in line, and too many emails-that do the most damage

Stress is therefore a response to pressure. To some degree pressure can be beneficial, when it inspires motivation and commitment, but excessive pressure becomes stress, which is harmful and can lead to major illness, even death. There is no such thing as "good" stress.

Work-related stress is the result of a conflict between the role and needs of an individual employee and the demands of the workplace. Research has shown that feeling stressed at work is not confined to particular occupations or levels within organizations. Workers with management responsibilities also show stress symptoms. Different individuals may react differently to stress and the same person may react differently to stress at different times and the responses were also different.

Varendi. L (2010) conducted a study by Centro Universitario, Brazil on Stress among nurses who work at the intensive care units. Stress has been observed among various professionals, including intensive care unit (ICU) nurses, due to their close contact with patients in distress and at the risk of death. This situation becomes worse due to the need for direct and intensive care. This study was performed to characterize nurses working at ICU and verify the presence of stress among them. A total of 21 ICU nurses from five hospitals located in the state of Sao Paulo answered a series of questions about the ICU and completed the Nurse Stress Inventory. Study results showed that 57.1% of nurses consider the ICU a stressful place, and 23.8% achieved a high score, indicating the presence of stress. Stress continues to affect these professionals, and institutions do not offer any special care for nurses in the sense of promoting comprehensive health care [5].

Hall J. (2012) conducted a study by Pakistan Psychiatric Society on Occupational Stress and Job Satisfaction among Nurses in Intensive Care Units at a Tertiary Care Hospital. A Cross sectional study was

conducted at Rawalpindi General Hospital with 50 female staff nurses working in ICUs as samples. Pressure Management Indicator in terms of Job Satisfaction, Organization, Mental wellbeing, Physical well-being, a 120 item self-report measure, encompassing many areas of stress evident in the workplace, was used. On the scale for sources of pressure, the mean score on workload was 19.28 + 5.77, on personal responsibility the mean score was 14.04 + 2.99 and on the home/ work balance the score was 19.92 + 4.36. The mean scores of participants on all these items were more than the standard scores. Results showed that the nurses in ICUs at a tertiary care hospital have a high index of occupational stress and majority of it generates from the administrative disorganization of the firm and less from the personal or the monetary factor [6].

Sari Goldstein Ferhen (2012) conducted a study by University of Medical Sciences, India on job satisfaction of intensive care unit nurses in different hospitals in Jammu And Kashmir State. 126 nurses were selected as samples. Stress Rating Scale was used as the method of data collection. Results showed that only 8% were highly satisfied with the job because of the work itself and with competency of supervision. 92% were under severe stress [7].

Hence all these above studies describes that Nurse face stress and it affect their work productivity also. Here the organization play a Major role that they have to take some steps to reduce the stress for their employees and staff nurses themselves should take some initativeness to reduce their stress and to enhance their coping strategies.

Conclusion

The Study concluded that 30% of staff nurses had mild occupational stress, 70% of staff nurses had severe occupational stress and 0% had moderate occupational stress. 12% of staff nurses had good coping strategies, 85% of staff nurses had average coping strategies and 3% of staff nurses had poor coping strategies and there is a significant negative correlation between stress and coping strategies. There is a significant association between the age and the level of occupational stress

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Conflict of Interest

Dr. Abirami P, Ms. Bensha Benett declares that no conflict of interest. In addition, this study was not funded

Statement of Human and Animal Rights

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2008

Statement of Informed Consent

Informed consent was obtained from all the study participants for being included in the study.

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