

## Research Article



## A Study on the Causes of Routine Work Stress and Coping Strategies Among Female Nurses in Private Diagnosis Centers Across Chennai City

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Accepted on: 29-04-2016; Finalized on: 30-06-2016.

### ABSTRACT

The study aims to analyze the factor influencing the causes of stress with the three factors of occupational stress, health stress and Environmental stress to evaluate the coping strategies in order to overcome stress relationship which impacts with their personal variables. The primary data has been collected from 118 respondent using structured questionnaires on the basis of convenience sampling from the category of non-probability sampling method. The first part of questionnaire deals with causes of stress in three dimensions. Second part deals with coping strategies were compared using factor analysis, Anova delivered from the spss statistical software and graphical presentation were given by the smart PLS. The result of factor analysis it mainly represents the convenient option which is offered to check whether the sample is big enough: the kaiser-meyer-olkin measure of sampling adequacy (KMO-test). The sample is adequate if the value of kaiser-meyer-olkin is greater than 0.5 as the result of occupational stress (0.918). Bartlett's test of sphericity which indicates chi square of 3039.270 under the degree of freedom 45 and their level of significance is 0.000. On the other division of health stress it shows kaiser-meyer-olkin (KMO) results as 0.924 and chi square value of 3039.270 and their degree of freedom of 36 and level of significance is 0.000 as which is less than the p-value of 0.05. Finally based on the environmental stress factor it delivers the KMO result of 0.914 and Bartlett's test of approximately chi square represents the 2549.323 and degree of freedom of 45 and their level of significant is 0.000. The study concludes that hospitals should appoint a human resource manager to collect the grievances from each and every staff so that nurses can easily solve their problems within the hospitals and provide proper orientation training to the trainee nurses about the duties to be done and to experience the value of nursing, mainly there should be a good salary, increments, incentives & bonus available to them so that it will become a positive motivating factor to work more efficiently and effectively. Their work should be recognized and it should be appreciated for their endless service.

**Keywords:** private diagnosis, skilled nurses, routine work stress, coping strategies.

### INTRODUCTION

Stress is universal epidemic which affects everyone irrespective of gender, age, occupation or class. Experts have termed it as the "millennium plague", it affects both males and female employees working in every sector. A lot of researchers have concentrated on focusing the work stress and its impacts on employees in all areas indicating that female employees are facing various stressful conditions. The term stress applies in majority of the work events and it is very commonly seen in the nursing profession as well. Eight major workplace sources of stress have been identified within nursing it includes the situations like death and dying, conflict with doctors, lack of support, inadequate preparation, and conflict with other nurses, work load, shift work and uncertainty over treatment. Generally the problem indicates that stress related to nurses it not only affects them personally but also the patients who are taken care by them. Because they are the ones who take care of the patients for the rest with the guidance of the doctors, it is the most life-threatening, these situation affects the patients, doctors, hospitals apart from affecting them personally. Therefore, this study describes the perceptions of stress on nurses, causes and coping strategies used by them, and to suggest some solutions

for the same. While assisting the nursing community, this study is expected to provide information regarding retention benefits to hospital administration in general which consequently implies a better world for the patients & the enhanced reputation of the general medical community.

The study has identified that there is a research gap between the impact of work pressure and stress management in their workplace due to routine work. The term stress effects majority of the jobs professionals. It is very commonly seen in the nursing profession too. Nurses as employees also face challenges and difficulties in the nature of their job as well as inefficient hospital administration could lead to stress and strain in their workplace. India constitutes 17 percent of the world's population which makes it the second most populated country in the world. Since India shifted to mechanical adjustment policies and liberalization the Indian economy has grown at a fast rate, though concerns about equity and poverty persist. The country has recently become one of the world's fastest growing economies with an average growth rate of over 8 % in the last few years. At the same time, new public health challenges have emerged in the form of changing demographics and environmental conditions; emerging infectious diseases



and antimicrobial resistance, behavioral issues influencing health and the increasing focus on non-communicable diseases. However, the country has made significant strides on many health fronts and these must be rightfully acknowledged such as increased life expectancy, reduction in maternal and infant mortality, besides that nursing being an honorable profession, termed to be oldest arts and an essential modern occupation. Nursing is one of the greatest of humanitarian services and all people whether ill or well, rich or poor, literate or illiterate, young or old, at work or at play, in or out of a hospital, are in some way or other, directly or indirectly closely associated with it. Nursing has its own body of knowledge scientifically based and humanitarianism that promises expanded benefits to people and society. It assists the individual or family to achieve their potential for self-direction for health.

Nursing is generally perceived as a demanding profession. It is both physically and psychologically challenging. The paternal and maternal instinct in a human being is the main source of the nursing impulse and is found in the hearts of people of all ages. A mother's care for her sick child always found expression in such acts to alleviate pain and help the child to get better. In a society, the noblest forms of humanitarianism are showing mercy, love and kindness to those in physical or mental distress. When this impulse or motive is re-enforced by religious philosophies and beliefs, it inspires people to live a life of service and of self-sacrifice for the sake of others. Along with this spirit, special training and experience have made nursing an ideal and useful profession.

Over the past several years, signs of occupational stress appear to be increasing among nurses which have been referred to many factors ranging from downsizing,

restructuring, and merging to role boundary and responsibility. Job stress is the harmful emotional and physical reactions resulting from the interactions between the worker and her/his work environment where the demands of the job exceed the worker's capabilities and resources. It is well known that prolonged stress is a precursor of burnout which is considered a major problem for many professions and nurses are considered to be particularly susceptible. The literature on occupational stress indicates that burnout affects mainly nurses, physicians, social workers and teachers.<sup>1<sup>st</sup></sup> (Tzeng H, 2002). Nurses often complain about overload of work and underpay. Problems persist with nurse's job satisfaction, stress, organizational commitment and intent to leave their job.

## MATERIALS AND METHODS

### Sample collection

Data collection techniques allow the researcher to systematically collect information about objects of study (people, objects, phenomena) and about the settings in which occur. In this collection of data the researcher has to be systematic. If data collected are haphazard, it will be difficult to answer the research questions in a conclusive manner. Both the primary and secondary data collection method were used in the dissertation. First time collected data are referred to as primary data. In this research, the primary data was collected by means of a structured questionnaire. The questionnaire consisted of a number of questions in printed form. It had closed end questions in it. Data which has already gone through the process of analysis or were used by someone else earlier is referred to secondary data were collected from the books, journals, articles and thesis.

**Table 1:** Hypothesis test summary on causes of stress

S No	Null Hypothesis	Test	Sig.	Decision
14	The categories of Time Pressure occur with equal probabilities.	One -sample Chi-square Test	0.000	Rejects the null hypothesis
15	The categories of inability to hand patient without doctor advice occur with equal probabilities.	One -sample Chi-square Test	0.000	Rejects the null hypothesis
16	The categories of limited holidays occur with equal probabilities.	One -sample Chi-square Test	0.000	Rejects the null hypothesis
17	The categories of Headache and Hypertension occur with equal probabilities.	One -sample Chi-square Test	0.000	Rejects the null hypothesis
18	The categories of Anxiety due to depression occur with equal probabilities.	One -sample Chi-square Test	0.000	Rejects the null hypothesis
19	The categories of Loss of appetite occur with equal probabilities.	One -sample Chi-square Test	0.021	Rejects the null hypothesis
20	The categories of Infection due to chemical and drugs occur with equal probabilities.	One -sample Chi-square Test	0.002	Rejects the null hypothesis
21	The categories of mood swimming occur with equal probabilities.	One -sample Chi-square Test	0.023	Rejects the null hypothesis
22	The categories of feeling tired and uncomfortable occur with equal probabilities.	One -sample Chi-square Test	0.000	Rejects the null hypothesis
23	The categories of Lack of tolerance occur with equal probabilities.	One -sample Chi-square Test	0.036	Rejects the null hypothesis
24	The categories of Back and joint pain occur with equal probabilities.	One -sample Chi-square Test	0.003	Rejects the null hypothesis
25	The categories of Lack of concentration due to sleepiness occur with equal probabilities.	One -sample Chi-square Test	0.047	Rejects the null hypothesis

**Table 2:** Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistics	Std. Error	Statistics
Gender	118	1	2	1.64	0.044	0.483
Age Group	118	1	4	2.31	0.082	0.893
Department	118	1	4	2.36	0.103	1.121
Experience	118	1	4	2.15	0.089	0.966
Income	118	1	4	2.03	0.085	0.924
Number of members in your family	118	1	3	1.76	0.063	0.688
Numbers of children in your family	118	1	3	2.17	0.062	0.671
Numbers of holidays in a month	118	1	3	1.92	0.067	0.723
Types of shifts	118	1	3	2.28	0.071	0.772
Valid N (list wise)	118					

Source: primary data

**Table 3:** Occupational Stress Communalities-1

Stress influences	Raw		Rescaled	
	Initial	Extraction	Initial	Extraction
Lack of job security	1.724	1.652	1.000	0.958
Difficulties in delegating responsibility	1.280	1.204	1.000	0.940
Work overloading in continuous	1.996	1.922	1.000	0.963
Poor coordination with Co-workers	0.625	0.521	1.000	0.834
Lack of team support	2.013	1.941	1.000	0.965
Language difficulties with patient	1.583	1.498	1.000	0.947
Time pressure	1.597	1.534	1.000	0.961
Lack of updating in advanced equipment	1.602	1.541	1.000	0.962
Inability to handle patient without doctor advice	1.541	1.477	1.000	0.959
Limited holidays	0.810	0.705	1.000	0.870

Extraction Method: Principal Component Analysis.

**Table 4:** Health Stress Communalities-2

Stress influences	Raw		Rescaled	
	Initial	Extraction	Initial	Extraction
Headache and Hypertension	1.568	1.456	1.000	0.929
Anxiety due to depression	1.191	1.097	1.000	0.921
Loss of appetite	1.625	1.576	1.000	0.970
Infection due to chemical and drugs	1.416	1.345	1.000	0.949
Mood swimming	1.520	1.441	1.000	0.948
Feeling tired and uncomfortable	1.597	1.476	1.000	0.924
Lack of tolerance	1.838	1.763	1.000	0.959
Back and joint pains	1.527	1.465	1.000	0.960
Lack of concentration due to sleepiness	1.667	1.621	1.000	0.972

Source: primary data Extraction Method: Principal Component Analysis.

**Table 5:** Environmental Stress Communalities-3

Stress influences	Raw	Rescaled
	Initial	Extraction
Inability to run family with low salary	1.000	0.504
No incentives and bonus	1.000	0.905
Problems in family due to Expectation	1.000	1.227
Difficulties in new responsibility of life	1.000	1.682
Lack of recreational facilities	1.000	1.304
Poor quality food items in food court	1.000	1.375
changes in living environment	1.000	1.344
Insulting in front of Patients and Junior staffs	1.000	1.648
Regular conflicts between doctors and patients	1.000	1.765
Lack of encouragement	1.000	1.223

Source: primary data

**Table 6:** Anova Result

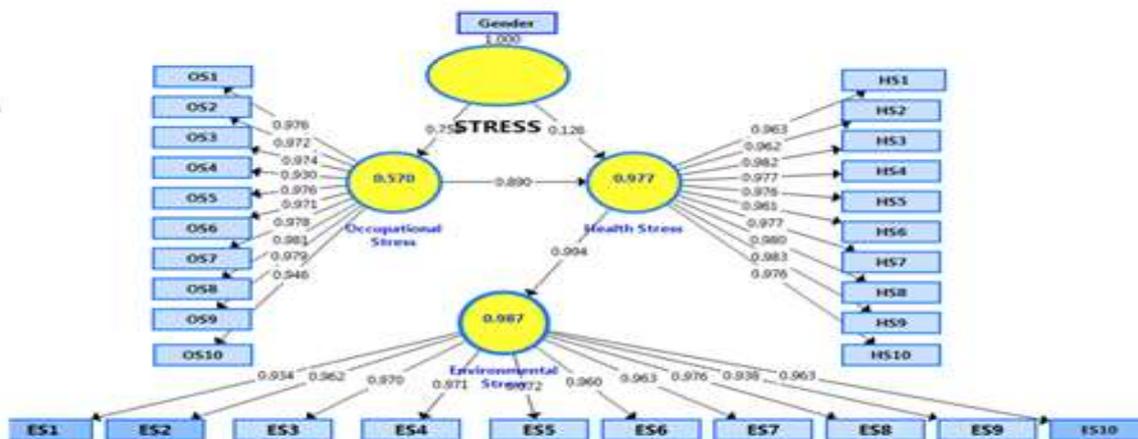
Components		Sig. level
Inability to run family with low salary	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
No incentives and bonus	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
Problems in family due to expectation	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
Difficulties in new responsibility of life	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
Poor quality food items in food court	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
Lack of recreational facilities	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
changes in living environment	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
Insulting in front of patients and junior staffs	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
Regular conflicts between doctors and patients	Between Groups	<b>0.000</b>
	Within Groups	
	Total	
Lack of encouragement	Between Groups	<b>0.000</b>
	Within Groups	
	Total	

Source: primary data

It represents the average number of variance it can be divided into two groups as between groups and within groups and within groups and their level of significance is <0.05 as 0.000. The table mainly focuses on environmental stress which involved in their day.

**Table 7:** Component score co-efficient matrices

Occupational Stress	Health Stress	Environmental Stress
0.121	0.114	0.039
0.089	0.086	0.072
0.140	0.121	0.099
0.041	0.104	0.136
0.141	0.112	0.105
0.110	0.116	0.110
0.112	0.136	0.107
0.112	0.113	0.134
0.108	0.124	0.139
0.054	0.122	0.097



**Figure 2:** Graphical representation of stress using Smart PLS

**Table 8**

KMO Measures using factor analysis	Occupational stress	Health stress	Environmental stress
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.918	0.924	0.914
Bartlett's Test of Approx. Chi-square	3039.270	2716.120	2549.323
Sphericity df	45	36	45
Sig.	0.000	0.000	0.000

**Sample design**

The sample size was fixed at 118 on the basis of convenience sampling from the category of non-probability sampling method. The respondents referred to in this study are nurses of selected private hospitals in Chennai. Based upon the above title on stress among nurses in private hospitals which implement various hypotheses and it are almost rejected the null hypothesis. The factors such as time pressure, inability to handle patients without doctors' advice, limited holidays, headache and hypertension, anxiety due to depression, loss of appetite, infection due to chemicals, feeling uncomfortable, lack of tolerance, pains in back and joints,

lack of concentration due to sleepiness were significantly accepted and rejected the null hypothesis as their significant level is 0.05.

Based on the above table under demographic details of private hospital nurses in Chennai city. It clearly shows the factor influencing and identifying the stressful situation in their day to day life. When compared the gender include two part namely both male and female standard errors of 0.44 and their standard deviation values as 0.483. In order to experience their age group classified into 4 division of below 20, 21-30, 31-40 and above 40 and their standard deviation value of 0.893. Department is classified into 4 namely Emergency

casualty, ICU, Pulmonary medicine and dialysis unit which act as a most stressful situation in their daily activities under this details most of the experience level of 2-4 years and their income are split into 4 types as below 5000, 5001-10000 10001-15000, and above 15000 finally this standard deviation of 0.924. In order to identify the off shift work were background features. Family members, number of children and their type of shifts work were calculated in order to view the exact stress among them.

Above table mainly shows the occupational or work stress which is reported to all the factors influencing stress among the staff nurses. The staff factors includes lack of job security as their initial value of 1.724 on the raw scale and extraction of 1.652 after the rescaled it denotes the initial values as 1.000 and extraction of 0.958 apart from these factors difficulties in delegating, work overloading in continuous, poor coordination with coworkers, lack of team supports, languages difficulties with patients, time pressure, Lack of updating in advanced equipment, inability to handle patients without doctors' advice are some of the major reasons for implementing stress and their initial value is 1.000 and their extraction is greater than 0.09 after rescaled of absolute results. It is one of the extraction methods as to be determined as the principal component analysis apart from these limited holiday, Poor coordination with coworkers come under the value of (0.870, 0.834) but their initial value is 1.000.

As per the study concentrating on factors as health stress, it plays an tremendous role in effectively most of the people and does not allow them to work efficiently and effectively on the basis of health-related factors under raw and rescaled form of analysis denotes the stress influences such as headache and hypertension anxiety due to depression, loss of appetite, infection due to chemical and drugs, mood swimming, feeling tired and incomplete, lack of tolerance, back and joints pains, lack of concentration due to sleepiness are the major causes of stress, the raw values of health stress indicated at the initial value is greater than (1.097-1.838) on the other side rescaled value implies the initial value is 1.000 and their extraction is 0.000 than 0.921 – 0.972. It also classified as the principal component analysis.

## RESULTS

The result of factor analysis it mainly represents the KMO result of occupational stress (0.918). Bartlett's Test of sphericity which indicates chi square of 3039.270 under the degree of freedom 45 and their level of significance is 0.000. On the other division of health stress it shows KMO results of 0.924 and chi square value of 3039.270 and their degree of freedom of 36 and level of significance is 0.000 as which is less than the p-value of 0.05. Finally based on the environmental stress factor it delivers the KMO result of 0.914 and Bartlett's test of approximately chi square represents the 2549.323 and degree of freedom of 45 and their level of significant is 0.000.

## DISCUSSION

Based on the socio-demographic information demonstrates that dominant part (59%) of the medical caretakers in the main remedial facility and controlled by experienced seniors. The vast majority of the medical attendants were females and this might be because of the way that individuals trust that nursing is a female calling. The dominant part of them depends just on their pay earned and cash is paid them as per their rank. The larger part of them was additionally advanced inside of ten years of stay and some were yet to be advanced as at the season of study. As to the reasons for anxiety, lion's share of the medical attendants recognized poor compensation, taking care of an extensive number of patients, absence of motivating forces, absence of advancement, nursing troublesome patients, and provocation from patient's relatives. This discovering bolsters the perspective of Stordeur. Others causes recognized incorporate; non-helpful environment, the absence of doctor's facility types of gear, deficiency of wellbeing laborers, an absence of congruity among staff and the uproarious environment. This finding is predictable with the study completed by Kane [2009], Majority of the medical attendants acknowledged that absence of fixation, absent-mindedness, and withdrawal as the most mental sorts of anxiety experienced in the ward. Mental anxiety classification was minimum experienced by the medical attendants in central Onasoga olayinka. A Euro. This study mainly concentrated larger part of the medical caretakers recognized wellsprings of anxiety and immediate superfluous anxiety, changed the circumstance, communicated their emotions as opposed to restraining them, dealt with their time better, and balanced their standard and state of mind as different methods for overseeing stress. Social insurance experts are more defenseless to word related anxiety as a result of the exceptional everyday action. Medical attendants are not ever considered as requiring help but rather just as the parental figures, and applying a few methods for nursing stress burnout avoidance are essential than we ever suspected. With the worldwide increment in the matured populace, the power of social insurance issues, the frequency of constant ailment and propelled innovation, medical caretakers have confronted with an assortment of business related stressors. In looking to recognize which stretch administration exercises work the best, it is prudent to attempt various distinctive methodologies particularly the solid ones and afterward figure out which ones appear to be the best. People can get to be wiped out on the off chance that they work too long at a high supported pace without anxiety administration.

## CONCLUSION

In this modern world healthcare acting as a tremendous role due to increases of incurable disease because of Instant food items which increase the prestige of an individual's as well as spoil the lives of every person. Even



though the doctor diagnoses the situation of the patient apart from physicians and doctors who manage the health chain within hospitals, the nursing care profession is the key difference between efficient and inefficient hospital care. Nurses as employees also face challenges and difficulties and both the nature of the job as well as inefficient hospital administration could lead to both stress and strain in their workplace. So their stress may be reduced while taking certain profitable measures. Finally, the study concludes that hospitals should appoint a human resource manager to collect the grievances from each and every staff so that nurses can easily solve their problems within the hospitals and provide proper orientation training to the trainee nurses about the duties to be done and to experience the value of nursing. Mainly there should be a good salary, increments, incentives & bonus available to them so that it will become a positive motivating factor to work more efficiently and effectively. Their work should be recognized and it should be appreciated for their endless service.

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Source of Support: Nil, Conflict of Interest: None.

