

Original Research Article

Stress Among Nursing Staff In Corporate Hospitals: An Empirical Study

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ABSTRACT

Introduction: Stress has become one of the important concerns for the health professionals in hospitals. Nursing has been identified as an occupation that has high levels of stress.

Objectives: to measure the effect of job related factors and interpersonal relations on stress; to assess the effect of stress on job performance and job satisfaction; and to identify the association between the type of nursing staff and stress.

Methods: The study is based on disruptive design. Through Stratified Sampling technique, data collected from 220 nurses working in three leading corporate hospitals using the structured questionnaire. The study used descriptive and inferential statistics with the help of IBM SPSS Statistics 20.0.

Results: The results of linear regression found that job related factors ($p= 0.000$) and interpersonal relations ($p= 0.000$) have a significant effect on stress among nursing staff. ANOVA results test indicated that the effect of stress on job performance is significance as $p= 0.035$ whereas the effect of stress on job satisfaction is not found significant as $p= 0.057$. The result of the Chi-Square test presented no significance association between the type of nursing staff and Stress as $p= 0.865$.

Conclusions: The study may be useful for the hospital management to understand the stress among the nursing staff and its effect on job performance and job satisfaction. The study recommends that the top management of hospitals need to prepare an effective organizational plan to reduce the stress.

Key words -Hospitals, Job Satisfaction, Job Performance, Nursing Staff, Stress

INTRODUCTION

Stress has become one of the important concerns for the health professionals in hospitals. It is well documented that health professionals experience high levels of job stress when work demands exceed their ability to cope.

^[1] The term “stress”, as it is currently used was coined by Hans Selye in 1936, who defined it as “the non-specific response of the body to any demand for change”. ^[2] Stress is the condition that results when person-environment transactions lead someone to perceive a discrepancy, whether real or not, between the demands of a situation, on the one hand and, on the other, the resource of their biological,

psychological or social systems. ^[3] In medical terms, the stress is a consequence of the distribution of homeostasis through physical or psychological stimuli. ^[4] However, the health professional reports stresses on the latest research from around the world on the causes of stress in health professionals and on ways to intervene to reduce stress levels. ^[5]

Nursing Staff – Stress, Job performance and Satisfaction

Nursing has been identified as an occupation that has high levels of stress. ^[6] Nurses are exposing to a wide range of potential workplace stressors that requires high levels of professional skills, teamwork

and provision of continuous care for patients. [7] The stress experienced by nurses relate directly to the task of nursing. The nursing job itself has identified as one of the sources of job stress. [8]

Patients are significant people who define a nurse's professional functions, but they do not usually come when they are feeling good. They come with fears, pains and doubts, seeking help. And that is stress starts for nurses. The nursing job is described to be very demanding due to patients that are violent, disagreeable, demanding or severely traumatized. The situation is aggravated by having to make critical on the spot decisions with even an incomplete history of patients while under time constraints.

The work of nurses is characterized by high work demands, the need to learn new technologies, to work to increasingly intensified schedules, and to respond to emergencies. Excessive hours worked and shift work with its changing routine also exacerbates stress. Poor management and supervisory practices have also contributed to stress outcomes. [9] The interpersonal relations are found as one of the sources of stress among the nursing staff. [8,10] Moreover, Nursing has been identified as a stressful occupation. [11,12]

The researchers have been trying to evaluate the effect of stress on job performance and job satisfaction. The scholars have identified stress as a factor in poor job performance and low job satisfaction. [13,14] The occupational stress found to have an affect job satisfaction and job performance among nurses according to the study conducted by Nabirye RC and his colleagues. [15] The results of the study by Arbabisarjou A et. al. showed a negative correlation between Job stress and performance. [16]

Several studies have tried to assess the relationship between stress and job satisfaction. The study conducted by Gray-Toft P, Anderson JG, found that the stress has a significant effect on job satisfaction.

[17] The studies also found a significant negative relationship between nursing stress and job satisfaction. Healy CM, McKay MF, found a significant negative relationship between nursing stress and job satisfaction in their study. [18] The results of the study conducted by Ahsan N and his colleges, showed a significant negative relationship between job stress and job satisfaction. [19] The Multivariate analyses conducted by Flanagan NA, Flanagan TJ also found an inverse relationship between stress and job satisfaction among the nurse. [20] Packard JS and Motowidlo SJ found that stress and job satisfaction are not directly related, and that stress, primarily acting through depression, is associated with lower levels of job performance. The study also found that job satisfaction is unrelated to job performance. [21] In this context, the study focuses on the stress among the nursing staff in corporate hospitals.

MATERIALS AND METHODS

Objectives

The objectives of the study are to measure the effect of job related factors and interpersonal relations on stress among the nursing staff; to assess the effect of stress on job performance and job satisfaction; and to identify the association between the type of nursing staff and stress.

Hypothesis

The study has formulated five hypothesis based on the literature to test. They are: H₁ Job related factors has a significant effect on Stress among nurses, H₂ Interpersonal relations have a significant effect on Stress, H₃ Stress has a significant effect on job performance, H₄ Stress has a significant effect on job satisfaction, and H₅ There is a significance association between the type of nursing staff and Stress.

Study design, sampling and data collection

The study was based on disruptive design. Nursing staff working in three leading corporate hospitals located in

Hyderabad, India was considered as the population of the study. A Stratified Sampling technique was used to select the sample for the study. The population is divided into three 'strata' such as Staff Nurse, General Nurse and Midwifery Nurse. Then a simple random sample was drawn from each strata (group). The targeted sample size was 300 i.e. 100 samples from each hospital. The data was collected using the structured questionnaire with help of the students of health administration from a leading institution. At the end of the data collection and data cleansing process, the final sample of the study was 220 with 73.33% response rate. Besides the primary data, the study also consulted the secondary data such as articles published in various journals.

The appropriate statistical tests were used to analyze data. The study used descriptive statistics such as Frequencies and Percentages for the analysis of demographical data and the inferential statistics such as Linear Regression, ANOVA and Chi-Square Tests were used to test the hypothesis and draw inferences. The data analysis was performed with the help of IBM SPSS Statistics 20.0.

RESULTS

Demographic details of the respondents

Table 1 presents the demographic details of the respondents of the study. Out of the total sample respondents, majority i.e. 70 percent were females and 30 percent of were males. It can be observed that 61.8 percent of the respondents were between age group of 26 - 35years, 23.6 percent were less than 25years old and 13.6 percent were between age group of 36-45years. The respondents belongs to the age group of 46 - 55 years were only one percent and there were no respondents above the 56 years old. The marital status of the respondents found that 75 percent were married and the rest i.e. 25 were unmarried. Out of the total

respondents, 36 percent were Staff Nurses, 45 percent were General nurses and 19 percent were Midwifery nurses. It can be also found from the table 1 that more than 80 percent of the respondents had working experience of between 1-10 years. Majority of the respondents i.e. 60.9 percent had the working experience between 1 - 5 years and 20.9 percent had the working experience between 5 - 10 years in the hospitals. Off course, only 10.9 percent of the respondents had less than one year working experience and one percent of the respondents had 16 years and above working experience in the hospitals.

Table 1: Demographic details of the respondents (n=220)

Demographic Variables	Frequency	%
Gender		
Female	154	70
Male	66	30
Age		
18-25 years	52	23.6
26-35 years	136	61.8
36-45 years	30	13.6
46-55years	2	1
56 years and above	0	0
Marital status		
Married	165	75
Unmarried	55	25
Type of Nursing Staff		
Staff Nurse	79	36
General Nurse	99	45
Midwifery nurse	42	19
Years of experiences		
Less than a year	24	10.9
1-5 years	134	60.9
6-10 years	46	20.9
11-15 years	14	6.3
16 years and above	2	1

Hypothesis testing

The study used the interracial statistics to test the set hypothesis. The H₁ i.e. Job related factors has a significant effect on stress among nurses was tested using the simple Linear Regression. In the process, a single independent variable (job related factors) was used to predict the value of a dependent variable (Stress).The result indicated the significance with p= 0.000, which is less than 0.05 (Table 2).Hence, the proposed hypothesis i.e. job related factors has a significant effect on stress among nurses was accepted.

Table 2: Effect of Job related Factors – Results of Linear Regression

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.161	.112		19.257	.000
	Work related stress	.037	.056	.062	.651	.032

a. Dependent Variable: Stress

The second hypothesis i.e. H₂: Interpersonal relations have a significant effect on stress among nurses is also tested using the Linear Regression. The interpersonal relations considered as an independent variable and stress as a dependent variable. The result

showed the significance with p= 0.000, which is less than 0.05 (Table 3). Therefore, the proposed hypothesis i.e. interpersonal relations have a significant effect on stress is accepted.

Table 3: Effect of Interpersonal Relations – Results of Linear Regression

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.175	.090		24.097	.000
	Interpersonalrelations	.035	.036	.095	-.988	.025

a. Dependent Variable: Stress

The study conducted ANOVA test to assess the effect of stress on job performance and job satisfaction among the nurses. The results ANOVA test found that the effect of stress on job performance is significance as p= 0.035 which is less than 0.05 and where as the result of the effect of stress on job

satisfaction was found no significant as p=0.057 which is more than 0.05 (Table 4). Hence, the hypothesis H₃- stress has a significant effect on job performance was accepted and the hypothesis H₄ - stress has a significant effect on job satisfaction was not accepted.

Table 4: Effect of Stress on Job Performance and Job Satisfaction

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Job Performance	Between Groups	4.945	3	1.648	2.975	.035
	Within Groups	58.727	106	.554		
	Total	63.673	109			
Job Satisfaction	Between Groups	5.452	3	1.817	2.585	.057
	Within Groups	74.512	106	.703		
	Total	79.964	109			

The Chi-Square test was applied to identify whether there is a significant association between the two variables i.e. type of staff (Staff, General and Midwifery) and stress. The result of the Chi-Square test showed no significant as p=0.865 which is more than 0.05 (Table 5). Hence, the hypothesis H₅ - there is a significance association between the type of nursing staff and stress was not accepted.

Table 5: Association between the type of Nursing Staff and Stress

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.281 ^a	4	.865
Continuity Correction			
Likelihood Ratio	1.653	4	.799
Linear-by-Linear Association	.087	1	.768
N of Valid Cases	220		

DISCUSSION

The results of the study showed that job related factors and interpersonal relations have a significant effect on stress among nursing staff working in the select corporate hospitals. The study identified the work related stress is due to the insufficient personal time (e.g. Lunch and Coffee break), dealing with emergency cases, frequent interruptions, excessive paperwork and lack of opportunity for career advancement. The study also identified that the interpersonal relations such as difficulty in getting along with supervisor, criticism by a supervisor, lack of support from colleagues and conflicting demands of work and home are causing the stress among the nursing staff.

The study found that the Stress has a significant effect on job performance. This finding is consistent with the study conducted by Nabirye RC at.al, [15] but not in line with the study conducted by Arbabisarjou A at. al. [16]

Further, the hypothesis H₄ i.e. the stress has a significant effect on job satisfaction is not accepted in the present study. This result is in line with the various studies conducted by Healy CM, McKay MF, [18] Ahsan N at. Al, [19] Flanagan NA, Flanagan TJ [20] and Packard JS and Motowidlo SJ. [21] However, it is not consistent with the study conducted by Gray-Toft P, Anderson JG [17]

The study also found that there is no significance association between the Staff, General and Midwifery nursing staff with regard to stress. Therefore, the stress management strategies such as cognitive behavioral interventions and relaxation/meditation are to be designed separately based on types of the staff rather than treating all staff under one umbrella.

However, the result of the study are based on the sample of nurses from the three select corporate hospitals, hence the results may not be generalized to nursing staff working in different types of hospitals. The future research can study the relationship among the stress, job performance and job satisfaction with the advanced statistical techniques such as Structural Equation Modeling.

CONCLUSION

The present work tried to study the stress and its effect on job performance and job satisfaction among the nurses working in corporate hospitals. Stress among the nursing staff is one of the important issues that the modern hospitals are required to understand, focus and manage. It also important that nurses should be aware of factors that cause stress so that they can develop effective ways of coping. Since, the job related factors and interpersonal relations have a significant effect on stress, the study recommends that the hospital

administration need to focus on both aspects in order to manage stress among the nursing staff. The study also recommends that the management must prepare effective organizational plans to reduce the stress among nurses in the hospitals.

The results of study may be useful for the hospital management to understand the stress among the nursing staff and its effect on job performance and job satisfaction. The study recommends that the top management of hospitals must provide an appropriate environment, supervision, guidance and training programs in order to reduce stress among nursing staff.

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