

## Effect of Type of Hospitals and Gender on the Occupational Stress Level among Hospital Nurses

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### Abstract:

*The aim of the present study was designed to find out the differences in occupational stress among hospital nurses in relation to type of hospitals and gender. The sample comprised of 160 hospital nurses selected by stratified randomization from various hospitals in Meerut city. A scale measure of occupational stress index (OSI) developed by Dr. A. K. Srivastava and Dr. A. P. Singh (Varanasi), was used 46 items was administered with the help of research assistants and the unit matrons. 2 x 2 factorial design was used in this study. The results show that the effect of type of hospitals and gender has a significant effect on nurses occupational stress level at  $P. < 0.05$  while interaction of type of hospitals and gender has non- significant effect.*

**Key words:** Hospital nurses, Type of hospital, Gender and Occupational Stress Index (OSI).

**Introduction:** Shinde, M., & Anjum, S.P. (2014) nursing is generally perceived as demanding profession. Along with the increased demand and progress in the nursing profession, stress among the nurses has also increased. Stress is experienced when demands made on us outweigh our resources.

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Antigoni et al, (2011) nurses are particularly at risk from Stress-related problems, with high rates of turnover, absenteeism, and burnout. Stress is recognized as an inherent feature of the work life of nurses, and growing evidence suggest that it may be increasing in severity. Numerous studies have indicated that job stress is significant in nursing. Nurse's high job stress is well documented. In particular, the job stress of nurses working on acute and specialized care units has been widely studied. 'Stress' began life as a variant on 'distress' in the 14<sup>th</sup> century. Kane PP. (2009) a moderate level of stress or "Eustress" is an important motivating factor and is considered normal and necessary. If stress is intense, continuous, and repeated, it becomes a negative phenomenon or "Distress," which can lead to physical illness and psychological disorders. Kawano (2008) nursing is a highly stressful occupation. Konstantin's N. et.al.(2008) research studies on stress in nursing have identified a variety of stressors include poor working relationships between nurses and doctors and other health care professionals, demanding communication and relationships with patients and relatives, emergency cases, high workload, understaffing and lack of support or positive feedback from senior nursing staff, role conflict, home-work imbalance. Stress has a cost for individuals in terms of health, wellbeing and job dissatisfaction, as well as for organizations in terms of absenteeism and turnover, which in turn may impact upon the quality of patient care. Lazarus R.S. (2006) argued, "Stress has become a household word, and we are flooded with messages about how it can be prevented, eliminated, managed, or just lived with". Lazarus R.S. (2006) said that stress is related to an unwelcome response or reaction that people have in response to demanding pressures or other types of demands placed upon them. In other words, stress and its consequences contribute to a reduction in the health status of individuals, and may include physical, psychological and social aspects as a result of a variety of difficulties or problems (stressors) which

can be from inside or outside. However, one thing that should be remembered that the degree of stress experienced by every individual is not the same as every individual has a different way to manage his or her stress. The degree of stress can range from low to mild or to high. Additionally, an individual may face stressors (source of difficulties) from many too few as a result of varying experiences. Mohanty K. (2006) it is usually observed that nursing profession undergoes tremendous stress which effect on work performances of nurses and ultimately affects the patient care.

Akinboye et al., (2002) stress is an unavoidable characteristic of life and work. In any job, there are wide variety of potential causes of stress, some of which are common to both men and women, and others are specific to each group. Occupational stress describes physical, mental and emotional wear and tear brought about by incongruence between the requirement of job and capabilities, resources and needs of the employee to cope with job demands. Akinboye et al., (2002) stress may be acute or chronic in nature. Stress is the process by which environmental events (stressors or challenges) threaten us, how these threats are interpreted, and how they make us feel. Olaleye (2002) in her study among nurses working in government (state-owned) hospitals found that job stress and burnout syndrome had greater effect on their health and coping ability at work. Mojinyinola, (1984); and Olaleye, (2002) stress is an important psychological concept that can affect health, well-being and job performance in negative dimensions. Stress according to Arnold et al (1995) stress is a word derived from Latin word "Stingere" meaning to draw tight. It is regarded as a force that pushes a physical or psychological factor beyond its range of stability, producing a strain within the individual. Lazarus R. S. et. al. (1984) a number of concepts of stress have been proposed. For example, the term is defined as the force, pressure, tension, anxiety, conflict, frustration, emotional disturbance, trauma, alienation,

and anomie. Lazarus R.S. (1966), Conceived stress to be a threat of anticipation of future harm, either physical or psychological events that lower an individual self-esteem. It is an affective behaviour and physical response to aversive stimuli in the environment. According to Selye (1976) stress is a state within the organism characterized by general adaptation syndrome. In other word, it is the nonspecific response of the body to the demand Made upon it. It suggests excessive demands that produce disturbance of physiological, sociological and psychological systems. Stress experienced by workers at work is called job stress. It may be due to a number of factors such as poor working condition, excessive work load, shift work, long hours of work, role ambiguity, role conflicts, poor relationships, with the boss, colleagues or subordinate officers, risk and danger, to mention a few. Tankha (2006) this study was conducted with the aim of investigating the effect of role stress in a sample of 120 nursing professionals of government hospitals. They were administered organizational role stress scale by Perak (1981) in order to assess the level of stress experienced by them. The obtained results revealed that female nurses experienced significantly higher stress level as compared to males. Some factors of the occupational stress include; working conditions, relationships at work, role conflict and ambiguity, organization structure and climate, work-home interface, career development and nature of the job. As per study conducted by Nizami A, et. al. (2006) it appears that the nurses 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 factors. Raval and Raval (2014) also supported these findings. They found that Gender has stronger association with stress; hence, male can observe less stress than of a female nursing staff due to physiological and psychological factor. Kamal S., Al- Dhshan M.*et al.* (2012) found that staff nurses in KSA were exposed to many kinds of job

related stressors and from the most stressful categories for staff nurses in Taif governmental hospitals were patient's demands, their families' complaints and nurse's workload. Hawajreh KA.(2011) found that the organizational commitment is statistically Significantly negatively correlated to occupational stress among nurses. Nabirye R.C.et.al (2011) study on occupational stress among hospital nurses in Uganda found differences in occupational stress, job satisfaction and job performance between public and private not-for-profit hospital. Nurses in the public hospital reported higher levels of occupational stress and lower levels of job satisfaction and performance. Ana Maria Cavalheo ; et.al. (2008) results show that women having to balance home and work as a source of stress, causing a double shift, which may wear away their marital and social life, causing depression, fatigue and work dissatisfaction. Mojoyinola J.K. (2008) on effects of job stress on health of nurses in public hospitals in Nigeria revealed that there was a significant effect of job stress on physical and mental health of nurses in public hospital.

Zillur Rnahman, M.N. Qureshi (2008) found that in this study the Indian hospital sector consists of private “nursing homes” and government and charitable missionary hospitals. Governmental and missionary hospitals determine their charges according to patient’s income levels and treat poor patients freely. Nursing homes charged higher, market-determined rates. That large Government hospital generally has better facilities than nursing homes, but they were widely believed to provide poor quality care. Kamla-Raj (2008) less stressed nurses in public hospital. Tyson,P.D. Rana (2008) a sample of 200 nurses was compared to 147 nurses sampled from the same hospital wards after 5 years and revealed a significant increase in nurses workload, involvement with life & death situation & pressure from being required to perform tasks outside of their compliance although nurses working in private hospital generally reported more stress

than public hospitals. Tyson, P. D. and Pongruengphant, R. (2004) with regard to differences in public hospitals versus private hospitals reported that there was a significant increase in nurses' workload, involvement with life and death situations, and stress from Thai nurses being required to perform tasks outside of their competence. These authors mentioned that although nurses working in public hospitals generally reported more stress than private hospitals, Sheikh, AM. (2004) the higher job stress in nurses is accounted for their low job satisfaction. This directly reflects the poor quality of nursing care provided to the patients in public as well as private sectors. Al-Omar (2003) on sources of work stress among hospital-staff at the Saudi MOH, he found that work stress was not influenced by the educational level, the gender, the marital status, the language of the employee. In similar study by Al-Aameri, (2003) aimed at assessing the most and least perceived sources of stress for nurses in Saudi public hospitals. The results show that organizational structure and climate, job itself, and managerial role are the most stressors for nurses in Saudi public hospitals. Wong et al. (2001) the public health nurses experienced high level of stress at work. This is due to work overload, lack of promotion, inadequate staffing, poor working and salary conditions, job dissatisfaction and frustration of all kinds. The effects of the stress on their health were manifested in form of headache, back or neck pain, muscular aches, worry, high blood pressure, lack of concentration or attention, mental chatter, and difficulty in making decision. This implies that both their physical and mental health was adversely affected by job stress. Orpen (1996) examined the moderating effects of cognitive failure on the relationship between work stress and personal strain. He compared the work stress among 136 nurses and 12 college lecturers. The results found that nurses experienced more stress than the lecturers. Hipewell A., Tyler P. A. et al. (1989) found that conflict with doctors was an important stressor for

highly trained nurses in the private sector. In a number of studies, it was revealed that work overload was the most significant predictor of poor mental health outcome. Singh V.K. (1989) found that employees who experienced high role stress manifested more symptoms of free floating anxiety, obsessive neurotic depression, hysterical neurosis, phobic anxiety, and somatic concomitants of anxiety. Wilson-Barnett, Jenifer (1986) shows the ways in which public health nurses promote mental health. It noted that the large numbers of persons needing costly care for mental illness indicate that public health nursing should be utilized more effectively in the community mental health program.

## **Objective**

To Study the difference in Occupational Stress as related to type of hospitals and gender of hospital nurses.

## **Hypotheses**

1. There will be no significant difference in occupational stress of the nurses in two type of hospital i.e. private and government.
2. There will be no significant difference in occupational stress of the nurses of two gender groups; male and female.
3. There will be no significant interaction between type of hospitals and gender on occupational stress of the nurses.

## **Method**

**Participants:** This study was conducted on a sample comprising of 160 hospital nurses of Meerut city (U.P.). The sample consisted of male (80) and female (80) hospital nurses. From two types of hospitals private and government.

**Tool Used:** The following tests was used Occupational Stress Index (O.S.I) developed by Dr. A. K. Srivastava and Dr. A.P.Singh (1981).The scale consisted of 46 items with 12 dimensions. Out of these, 28 are ‘true keyed’ items whereas 18 are ‘false keyed’ items. The respondents were required to give their responses on a five-point scale.

**Statistical Analysis:-**The obtained score data were analyzed by using 2 x 2 analyses of Variance (ANOVA), Mean and Standard Deviation were also calculated.

### Analysis of results and discussion:

The obtained data after tabulation were statistically analyzed with the help of Analysis of Variance(ANOVA).The obtained data result are shown in the following tables, ANOVA is shown in table – 1; Mean scores and Standard deviation test are shown in table -2,3

**Table No 1: Summary of the Analysis of Variance for Occupational Stress Scores (N = 160)**

Source of variance	Sum of squares	Degree of freedom	Mean square	F- ratio
Type of Hospitals (A)	1870.06	1	1870.06	4.60 *
Gender (B)	1842.81	1	1842.81	4.53*
A x B	71.55	1	71.55	0.17**
Error	63365.82	156	406.19	
<b>Total</b>	67150.24	159		

Note:\* Significant at 0.05 level of confidence \*\*Non Significant

**Table No.2: Table showing mean and Standard Deviation (S D) of both the Independent Variables**

Type of hospitals (A)	Private (a1)		Government (a2)	
	Male (b1)	Female(b2)	Male (b1)	Female (b2)
Mean	142.42	150.55	136.92	142.37
SD	22.56	17.75	20.14	21.89

**Table No 3: Mean of Occupational Stress Score.**

Independent variables	Levels of Variables	Mean Scores
Type of hospitals (A)	Private	294.97
	Government	139.64
Gender (B)	Male	139.67
	Female	146.46

The objective of the present study was to find out the effect of in Occupational Stress as related to type of hospitals and gender of hospital nurses. In this study first independent variable was type of hospitals is designated as factor “A”, Second independent variable was gender designated as factor” B”.

The first hypothesis was that there was no significant difference in occupation stress level of type of hospitals (A) i.e. private and government nurses. The findings of the study show that there is significant difference in the occupational stress level of private and government hospital. So, null hypothesis is rejected. A close look of table of ANOVA (table no1) Clearly reveals that F value of factor A (Type of hospitals) is 4.60 that exceed the critical value of 0.05 levels. This significant F ratio indicates that Type of hospitals significantly affects the occupational stress. The mean values of occupational stress score of private hospital is 294.97, government hospital is 139.64. Which reveals the fact that private hospital have highest degree of occupational stress, while government hospital has lowest degree of occupational stress score. The findings of the present study are supported by Paul D, Tyson, Rana (2008) found that the nurses working in private hospital generally reported more stress than public hospitals. Same finding by Tankha (2006) on female nurses from private hospitals showed significantly higher level of stress level than the government nurses on eight out of the ten dimensions of organizational role stress scale. Mojinyinola J.K. (2008) reported effects of job stress on health of nurses in public hospitals in Nigeria also found a significant effect of job stress on physical and mental health of nurses in public hospital in Nigeria.

Second hypothesis that there would be no significant effect of gender i.e. male and female on occupational stress of the nurses also showed significant difference, this rejected the null hypothesis in this case too. Clearly reveals that value for factor B (gender) is 4.53 that exceed the critical value at 0.05 levels. This significant F ratio indicates that gender significantly affect the degree of occupational stress. The mean value of occupational stress score of male is 139.67 and for female is 146.46.

This reveals the fact that female nurses have highest degree of occupational stress, while male nurses has lowest degree of occupational stress score. The findings of the present study are in favour with the studies conducted by Raval and Raval (2014) also supported these findings. They found that Gender has stronger association with stress; hence, male can observe less stress than of a female nursing staff due to physiological and psychological factor. Tankha (2006) this study was conducted with the aim of investigating the effect of role stress in a sample of 120 nursing professionals of government & private hospitals .They were administered organizational role stress scale by Perak (1981) in order to assess the level of stress experienced by them. The obtained results revealed that female nurses experienced significantly higher stress level as compared to males. Al-Omar (2003) on sources of work stress among hospital-staff at the Saudi MOH, he found that work stress was not influenced by the educational level, the gender, the marital status, the language of the employee. The reasons for this significant difference according to Ana Maria et.al. (2008) Results show that women having to balance home and work as a source of stress, causing a double shift, which may wear away their marital and social life, causing depression, fatigue and work dissatisfaction.

F value for the interaction effect of is below the type of hospital and gender (A x B) is 0.17 that the critical value at 0.05 This is no significant F ratio indicates that occupational

stress is not significantly affected by interaction of type of hospitals and gender.

### **Conclusions**

1. There was statistically significant relationship between type of hospital; private and government nurses from Private hospital showed more occupational stress level than their counterparts.
2. There was statistically significant difference between male and female nurses, female nurses' show higher occupation stress level, while male have lower occupation stress level.
3. There was no significant interaction in occupation stress score between type of hospital and gender of nurses.

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