Nursing

# WORK RELATED STRESS PERCEPTION \& HYPERTENSION AMONG NURSES WORKING AT SELECTED ICUS IN SGPGIMS, LUCKNOW, INDIA 

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ABSTRACT 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 $87.4 \%$. 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, because hypertension, cardiac problems, reduces immunity, contribute to substance abuse, lead to frustration, irritability and reduce the overall status of mental and physical wellbeing
METHOD: The descriptive research approach was used and the study comprises of 60 staff nurses from various ICU's in SGPGIMS Lucknow India. The convenient sampling technique was used to select the sample subject
RESULT: Pre work blood pressure mean score is 103.86 and Standard deviation is 8.13 similarly mid work blood pressure mean score is 108.2 and Standard deviation is 6.82 . The mean difference obtained from the pre and mid work BP was-4.33.The " $t$ 'value was -17.9 . It Showed that there is significant association between hypertension and work related stress.
CONCLUSION: The study reveals that there is a significant association between hypertension and work related stress.

## KEYWORDS :

## INTRODUCTION:

High work stress has repeatedly been associated with increased risk for cardiovascular diseases. According to a World Health Organization publication, hypertension and other cardiovascular diseases are amongst the main chronic disease in the developed and developing countries. It is estimated to affect about $20 \%$ of the adult population in most countries of the world and accounts for $20 \%-50 \%$ of all deaths. 1

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 ${ }^{(2)}$.

The presence of workplace stress imposes a cost factor on any work setting. Costs, directly related to workplace stress, can involve absenteeism, employee turnovers, 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

## METHOD

A descriptive cross-sectional study to assess the work related stress perception \& hypertension among nurses working in selected ICUs at SGPGIMS, Lucknow .In this convenient sampling technique was used and total 60 samples were included, before requiting the sample fulfilled the sample criteria, researcher had obtained permission from
competitive authority and consent from samples before process the data collection

Based on the objectives of the study and the target population, Expanded Nursing Stress Scale developed by French et al. (2000) ${ }^{4}$ to measure job stress.ENSS is used to measure the sources and frequency of job stress perceived by nurses in the changing health care delivery and nursing work environments. For collecting Blood pressure profile inflatable cuff with sphygmomanometer was used. Categorization of subjects also been done based on the classification of hypertension in adults as given by Seventh Report of Joint National Committee on Prevention, Detection, and Treatment of High Blood Pressure (JNC7). ${ }^{5}$ There are two tool are used for gathered the data,section-1 or tool-1 Consists of 12 items of demographic variables such as age, marital status ,gender educational qualification ,occupation, years of experience, type of ICU, Income ,Number of dependants ,place of residence, family type and history of hypertension or any chronic illness. Section 2 or tool 2 researcher modified the expanded nursing stress scale to assess the level of stress among the ICU nurses. Includes the 8 areas related to stress, consisting of 37 items.

## RESULT

The analysis of the data was a process by which quantitative information is reduced, organized, summarized, evaluated, interpreted and communicated in a meaningful way.

The analysis and the interpretation of the data of this study were based on data collected by self-administered Structured knowledge questionnaire ( $\mathrm{N}=60$ ). The results were computed using both the descriptive and inferential statistics based on the objectives of the study. The analysis of data was organized and finalized, according to the plan for data analysis and presented in the form of tables.

Table: 1 To determine the association between hypertension and Work related stress. Mean, Standard deviation ,mean difference and $t$ value of pre and mid work blood pressure.

| Aspects | Mean | Standard deviation | Mean difference | t value |
| :---: | :---: | :---: | :---: | :---: |
| Pre work <br> Blood <br> pressure | 103.86 | 8.13 | -4.33 | -17.906 <br> $\mathrm{df}=59$ |


| Mid <br> workBlood <br> pressure | 108.2 | 6.82 |  |  |
| :---: | :---: | :---: | :---: | :--- |

Table: 1 Indicates that the pre work blood pressure mean score is
103.86,the Standard deviation is 8.13 and mid work blood pressure mean score is 108.2 ,Standard deviation is 6.82 . The mean difference obtained from the pre and mid work BP was-4.33.The" $t$ 'value obtained was -17.9. It Showed that there is significant association between hypertension and work related stress.

Table 2. Level of stress among different socio demographic variables

| Demographic variables | Category | Stress level |  |  |  | Chi-square value | df | Remark Significant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | 20-30 | Mild | Moderate | Severe | Total | 24.99 | 6 | Significant |
|  |  | 5 | 14 | 0 | 19 |  |  |  |
|  | 31-40 | 0 | 16 | 11 | 27 |  |  |  |
|  | 41-50 | 0 | 5 | 7 | 12 |  |  |  |
|  | 51-60 | 0 | 0 | 2 | 2 |  |  |  |
| Gender | Male | 5 | 15 | 0 | 20 | 21.42 | 2 | Significant |
|  | Female | 0 | 20 | 20 | 40 |  |  |  |
| Education | GNM | 5 | 18 | 0 | 23 | 27.51 | 4 | Significant |
|  | BSc | 0 | 14 | 20 | 34 |  |  |  |
|  | MSc | 0 | 3 | 0 | 3 |  |  |  |
| Marital Status | Married | 5 | 29 | 0 | 34 | 41.6 | 6 | Significant |
|  | Unmarried | 0 | 3 | 15 | 18 |  |  |  |
|  | Divorce | 0 | 3 | 4 | 7 |  |  |  |
|  | Widow | 0 | 0 | 1 | 1 |  |  |  |
| Year of Experience | 1-2 years | 2 | 4 | 0 | 6 | 28.09 | 6 | Significant |
|  | 3-5 year | 3 | 13 | 0 | 16 |  |  |  |
|  | 6-10 years | 0 | 6 | 13 | 19 |  |  |  |
|  | More than 10 years | 0 | 12 | 7 | 19 |  |  |  |

Table 2 shows that the Stress level with socio demographic variable such as age,gender,education ,marital status year of experience.The Chi square value is more than the value of table value at 0.05 levels.Hence there is a significant association between stress and socio demographic variables.

## DISCUSSION

The study was concluded that nurses who works in ICU and wards are equally burdened with work pressure. Nurses have stress at different levels due to different factors ,they are exhibiting it in their working places. So stress impact the physical domain of the nurses. This study concluded that hypertension is significantly associated with work stress.Though Nurses are providing comprehensive nursing care with their full enthusiastically rather than forcefully.

Supportive cohort study was conducted in French university hospitals among 2307 nurses and 1530 nursing assistants. The result showed that there is poor relationship between high blood pressure and working stress.So it is recommended that further investigation is needed to find the risk factors of hyprtension and cardiovascular diseases ${ }^{7}$

Similar study was conducted in 2013 at a tertiary care Medical College in Tamil Nadu.

250 nurses were selected using a stratified random sampling technique to analyze the data. Prevalence of hypertension was found to be 21.6\% while that of pre-hypertension was found to be $37.6 \%$.of those with hypertension $18.8 \%$ were known hypertensive on treatment. ${ }^{8}$

Another similar study was conducted to assess the occurrence of hypertension diagnosis and treatment of hypertension 494 nursing staffs of an emergency hospital at Salvador ,Brazil. 494. Interviews and blood pressure measurements were used to collect data. Result showed that prevalence of hypertension was $36.4 \%$, , $18.3 \%$ of individuals ignore their hypertensive condition and $64.2 \%$ admitted but has not been having regular treatment. Of those individuals who were having treatment $69.4 \%$ had elevated blood pressure on examination. From the result it concluded that occupational stress have potential impact on physical health as well.. ${ }^{9}$

## CONCLUSION:

Nursing is a noble and most satisfying profession but at the same time it is very stressful job also.Nurses are working round the clock to provide comprehensive effective quality care. They are responsible for the treatment, safety of rhe patient, outcome of the treatment, and in emergency also.These multiple role kinds leads to significant amount
of work related stress to the nurses. This study concluded that there is no stress related hypertension found in nurses working in ICUs .The significance of the relationship between blood pressure and stressful conditions at work place is still not clear

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