International Journal of Healthcare Sciences ISSN 2348-5728 (Online)
Vol. 10, Issue 1, pp: (100-115), Month: April 2022 - September 2022, Available at: www.researchpublish.com

THE PREVALENCE AND SOURCES OF OCCUPATIONAL STRESS AMONGST HEALTHCARE WORKERS IN RIVERS STATE

Onyiri, Chinenyenwa Jacqueline (PhD), Amadi, Kingsley Moses (PhD), Sunday, Barine Edwin (PhD), Chinda Samuel Chiburoma (PhD)

Human Kinetics, Health and Safety Department, Ignatius Ajuru University of Education.

DOI: https://doi.org/10.5281/zenodo.6786555

Published Date: 01-July-2022

Abstract: **This study investigated the prevalence and sources of occupational stress amongst healthcare workers in in Rivers State. The descriptive, cross-sectional design was used for the study. The population of the study comprised of 36,876 healthcare workers in Rivers State, with a sample size of 828 healthcare workers which was determined using the Borners's formulae, and selected using the multistagesampling technique. A structured questionnaire was used for data collection and analysis was done using frequency, percentages, mean and standard deviation for research questions and Z-test and one-way analysis of variance (ANOVA) for test of hypotheses. The finding of the study showed that there was no significant difference in the mean rating of the level of stress experienced by healthcare workers in Rivers State based on age [F (3, 727) = 0.477; p>0.05]; there was no significant difference in the mean rating of the level of stress experienced by healthcare workers in Rivers State based on marital status [F (3, 727) = 0.470; p>0.05]; amongst others. The study concluded that demographically, there was no significant difference in the level of stress among healthcare workers in Rivers Sate based on age and marital status. Based on the findings of the study, it was recommended that healthcare workers should identify the peculiar sources and causes of stress and utilize that knowledge to modify and adopt positive work-time behaviour that will assist in reducing the level of stress inherent among the healthcare workers, amongst others.**

Keywords: **Occupational stress, healthcare workers, Rivers State.**

1. INTRODUCTION

Background to the study

Occupational stress is a challenge to healthcare professional mostly healthcare workers because healthcare as a job that require full commitment without compromise even in most high profile specialist hospitals due to the large number of patients in daily attendance. Nursing have high level of prevalence of stress as compared to other health care professionals (Health and Safety Executive, 2014). Global Emotions Report (2019), estimated that about 2/3rd of 143 countries experienced a lot of stress at work of which Phillipine, Tanzania, Uganda, and Nigeria is at the highest pick accounted for 58%. 57%, 56%, and 55.5% respectively. Studies of Kaburi, Bio, Kubio, Ameme, Kenu, Sackey and Afari, (2019) reported that occupational stress among health care professional varies between 9.2% to 68.2% in recent times. However, occupational stress is the harmful physical and emotional responses that occurs when the requirement of the job do not match the capabilities, resources, or needs of workers (Zakarin, Wright, & Blake 2016). Healthcare profession is highly stressful occupation with high and complicated demands. The high job demands and high combination of too much responsibility and too little authority are likely to contribute to primary causes of stress in nursing occupation (Zakarin et al, 2016).

It is obviousthat the job of health care worker can be delivered with stress condition attach to it. However, the prevalence is the rate at which stress exists in all occupation including healthcare service. Studies have shown that health facility in Benin City, Edo State, indicated over 50.7% increase in the prevalence of occupational stress among medical personnel (Onowhakpor, 2018). Of which the major stressors were workload, sleep deprivation, inadequate resources, among others. Evidence shows that occupational stress is always present among healthcare workers irrespectively of their ward or department at work. Al-Mazrouei, Al-Faisal, Hussein, El-Sawaf, and Wasfy (2015) revealed that 47.2% (mean stress score) of prevalence of job stress is high due to factors such as overload disruption at home life, feeling poorly managed, dealing with blame and anger from patients and relatives, working with difficult staff/colleagues among others contribute to work stress.

Another crucial aspect of occupational stress is that is come with several negative consequences on the economy, social, mental and physical dimensions of life. For example, in a cross sectional study to identify the status of occupational stress and its effect among Iranian hospital workers, high level of occupational stress positively correlated with increased risk of physical injuries, cardiovascular disease, high blood pressure, depression and increases in negative personal behaviours such as anger, anxiety and irritability. As well as increased employees' turnover intentions (Mohammad, 2014). Similarly, Azizi, Ismail, Peter, Sharon, and Joki (2019) reported that occupational stress does not have a direct effect on the intention to leave and absenteeism. But has a direct negative effect on job satisfaction. Furthermore, job satisfaction has negative effects on the intention to leave and absenteeism. In conclusion, the authors noted that increasing job satisfaction reduces employee occupational stress and that by reducing stress, organization can reduce the levels of intention to leave and absenteeism among employees. Thus, occupational stress is a thorn on every organization's stakeholders: employees, employers, shareholders and the government as no one is exempted from the pains caused by occupational stress. Since International Labour Organization (2016) defined occupational stress as the harmful physical and emotional response caused by an imbalance between the perceived demands and the perceived resources and abilities of individuals to cope with those demands. Work stress is determined by work organization (health facility), work design (responsibility, conflict between motives, among others), and labour relations (Human relation both patient and colleagues, all which is symptomatic tenderly to occupational stress among health care workers.

Occupational stress is likely to occur at high prevalence if the healthcare workers in the hospital setting have low working experience. Years of experience contribute to increase level of awareness concerning the occupation and how to combat the ever present stressful condition. In the light of this, healthcare workers with as low as 0-4 years of experience may be at the risk of facing occupational stress more than workers who have at least 5-10 years of experience in the healthcare service. Studies revealed that an average of 40.8% of hospital workers have worked for more than 10 years indicating a low level of significance with work stress ($r = -5.8$, $P = 0.05$) (Okita et al 2017). Most workers with the minimum of 10 years have low chances of suffering for occupational stress because a lot of strategies had been put in place to alleviate stress related factors with regard to their hospital workers. Studies of MaHeT, Fiasca, Mazzei, Necozione and Bianchini (2017) reported that the menace of burnout stress was significantly high among doctors (25.9%), and nurses (22.54%) who work in hospitals with age variation; the average years of working experience was 16.95 ± 11.73 indicating that healthcare workers have more than 10 years experience and over 60.95% of them worked more than 5 overtime weekly. However, work overtime contributes to occupational stress and burnout condition is symptomatic to stress outcome as a result of work experience. The working experience of healthcare workers may directly or indirectly contribute to occupational stress as could be seen among workers in hospitals.

Some demographic variables such as age of workers may likely predict the occupational stress among healthcare workers i.e the frequency of occupational stress level in different age groups. Najimiet'al. (2012) reported that the age group (25-29, and 31-39years) are more at risk of stress induced, there is no significant indication between job stress and marriage status among healthcare workers. This may be related to greater consistency and increase in their skills and work experience due to increasing age. Studies of Sasikala and Rami (2018) showed that Stress became more severe as workers grow older and a statistically significant to each other. That older healthcare workers may likely experience occupational stress more than the younger adult points to the fact that tends to exist some level relationship between age and prevalence of occupational stress. Furthermore, working experience of nurses seems to predict and provide occupational stress tendencies as may be observed among nurses especially those who work in specialist hospitals. In a study of Sasikalaet'al. (2018), that majority of (66.9%) of nurses have work experience up to 10years whereas the overall working experience ranged from 1-30 years. contradictory studies asserted that nursing with a total nursing experience of 11-20years feel more stress which could be due to age distribution 27.9, (Daggat, Molla, &Belachew, 2016). Healthcare workers who

work at Outpatient Department and Emergency department or is at duty, may have higher Stress tendencies than those who work in the wards which could be due to random and frequent rotation, or shifting of duty of workers within the outpatient unit in short intervals. Job satisfaction and stress may likely be related. Besides satisfaction and occupational stress affect healthcare workers and their clinical performance which is the fundamental factors for good quality of health care providers. Ministry of Health in Malaysia (2013) reported that healthcare workers consist 2-5% of woman human resources and they are the largest part of the health care personnel whilst two third of nurses' work in the governmental sector, public hospitals and clinics, with a few numbers of male counterparts. Job satisfaction depicts the attitudinal characteristics which without have a positive effort on job performance. The more a health worker improve her/his job performance the chances of encountering Stress at the workers. Studies of Samiei, Abdul-Manaf, Ismail, and Kandasamy (2016), asserted that occupational stress among nurses in the work place increases when the workload pressure is high especially when attending to clients/patients. Therefore, the higher the job performance, the higher the chances increased of stress. Also lack of communication skills could contribute to occupational stress especially in a professional job like nursing. Communication skills may likely enhances their performance and coordination during clinical practice and reduce the risk of stress (Samieietal, 2016).

The health care workers (HCW) with marital status may have high level of family demand couple with the job. Marital status could be one of the factors that may determine occupational stress among health care workers especially among those with family demand. Similar of Birhanu et al (2018) indicated that 56.1% of married healthcare workers with the mean age of 31.33 $\pm$ 7 years encounter more family demand that induce stress on the persons and over 68.2% rate of prevalence of work-related stress (Occupational stress). Ability to cope with family/spousal need and health care service that could be acquired both day and night will likely induce occupational stress among them. Also, the study of Alosaimi, Alawad, Alamri, Saeed, Aljunydi, Alotaibi, Alotaibi and Alfaris (2018) buttress that over 93% male health care workers (consultant inclusive) are married and about 77% of them had three or more children and 68% of the HCW- slept $\leq$ 6 hours per day ($P = 0.005$) are significant associated with stress thereby seek for professional psychological help to manage the ample state of affairs. Married healthcare workers with stress conditions are likely to suffer hypertension, depression, anxiety, heart illness among others, all which is symptomatic tendency to occupational stress among healthcare workers (Alosaimi et al, 2018). Several evidence illustrated that marital states remain significantly associated with stress regarding combine high workload (job and family) ($p<0.005$) with an indication that about 43.2% are married (Dagget, Moda, &Belachew, 2016). Therefore, workload and family demand could be determine occupational stress among healthcare workers based on their marital status.

As quite troubling as occupational stress is, there is a cushioning counterbalancing organizational process that sustains employees' commitment and productivity. This is regarded as job satisfaction. Several studies: Mullings (2005), George and Jones (2008), Aziri (2008) to mention but a few, agree that job satisfaction is the antidote of occupational stress. It can be regarded as the opposite pole of the occupational stress. Job satisfaction positively associated with individual's behaviour in the work place (Davis &Nestrom, 1985). Job satisfaction is a worker's sense of achievement and success on the job. It is generally perceived to be directly linked to productivity as well as to personal well-being. Job satisfaction implies doing a job one enjoys, doing it well and being rewarded for one's efforts. Job satisfaction further implies enthusiasm and happiness with one's work. According Kaliski (2007), Job satisfaction is the key ingredient that leads to recognition, income, promotion, and the achievement of other goals that lead to a feeling of fulfillment. The understanding behind job satisfaction is that it motivates employees to commit to the efficiency of their productivity and offers other positive advantages to the both the organization and employees themselves.

Considering the inherent nature of occupational stress and the dynamic responses accruing from individual difference, alongside the established linkages between work stress and human health in all dimensions, several scholars have forward different models exemplifying the mechanisms, sources and effects of stress. Notably, in the field of health education, some of the popularly used stress models include; person-environment fit model, Job Demand-Control Support (JDCS) Model, Effort – Reward Imbalance Model (Interactional stress theories) and Transactional Model. Thus, the deployment of theories such as, Cooper and Marshall's model of work-related stress, and Conservation of Resource Model and Job Demand-Resource Model were modeled into the study to underscore the objectives of the study. These theories and model functioned as apt theoretical frame. It was against this background that the researcher deemed it necessary to carry out this work to investigate the prevalence and sources aof occupational stress among health care workers in Rivers Sate.

Statement of the Problem.

The medical institutions cannot record huge success without the quality service of healthcare workers. Higher standards for the healthcare profession resulted in increasing the level of occupational stress among clinical healthcare workers and currently a healthcare job is regarded as one of the stressful occupations. There has been a report of excessive occupational stress which contributes to job dropouts/burnout, absenteeism, higher job dissatisfaction and consequent reduction in occupational productivity. Especially Stress incurs economic costs on the society, and influences physical and psychological health of workers and can lead to burnout among healthcare workers. Evidence showed that higher level of occupational Stress and physical and psychological burnout in healthcare workers have led to escape from job, the clashes between personnel and intense displacement, impaired health and inability to perform medical task, predisposition to professional negligence and commission, and ultimately reducing the quality of health care provided and dissatisfaction and leaving the profession or resignation.

Moreover, it is obvious that health centers and hospitals have large number of clients, with no shift of duty, work overload, poor social services, and lack of interpersonal skills, physical abuse, sexual harassment, working with aggressive patients, no promotion among others had imposed stress upon healthcare workers. In the light of this, workers with sensitive job who deals with the health of human and their duties influences both personal health and health of others in the society even residence of Rivers State. It was in view of these problems the study investigated the prevalence and sources of occupational stress among healthcare workers in Rivers State.

Aim and Objectives of the study.

The aim of this study is to investigate the prevalence and sources of occupational stress amongst healthcare workers in in Rivers State. In specific terms, the study seeks to:

1. determine the prevalence of occupational stress among healthcare workers in Rivers State.
2. ascertain the sources of occupational stress amongst Healthcare workers in Rivers State.
3. determine the level of occupational stress among healthcare workers based on age in Rivers State.
4. determine the level of occupational stress based on marital status among healthcare workers in Rivers State.

Research Questions.

The following questions were formulated to guide this study.

1. What is the prevalence of occupational stress among health care workers in Rivers State?
2. What are the sources of occupational stress amongst Health care workers in Rivers State?
3. What is the level of occupational stress among health care workers in Rivers State based on age?
4. What is the level of occupational stress based on marital status among health care workers in Rivers State?

Hypotheses.

The following five null hypotheses were postulated and tested at 0.05 alpha level.

1 There is no significant difference in the level of occupational stress among health care workers in Rivers State based on age.

2 There is no significant difference in the level of occupational stress among health care workers in Rivers State based on marital status.

2. LITERATURE REVIEW

Concept of Occupational Stress

Occupational stress is stress related to one's job. Occupational stress often stems from unexpected responsibilities and pressures that do not align with a person's knowledge, skills, or expectations, inhibiting one's ability to cope. Occupational stress can increase when workers do not feel supported by supervisors or colleagues, or feel as if they have little control over work processes (World Health Organization, 2015).Occupational stress otherwise referred as work stress can be defined as the physiological or psychological response to psychosocial or environmental factors at work perceived as

demanding, taxing, threatening and exceeding the workers ability and resources to cope effectively with the situation which when prolonged results in physical, mental and behavioural disorders. It is important to note that what is considered stressful by a person may not be stressful to another. Thus, the key to the experience of stress is the perception and interpretation of the situation and ability of the person to cope.

Sources of Occupational Stress

The major sources of occupational stress is well documented in the literature and they include factors intrinsic or unique to the job such as work overload and underload, physical work condition, shift work, lack of autonomy; role in the organization such as role conflict and role ambiguity conflicting job demands; interpersonal relationship with management, subordinates and co-workers career development issues such as overpromotion and under-promotion, job insecurity, job dissatisfaction, organizational structure and climate such management style, lack of participation in decision-making, poor communication (Cooper & Marshall, 2004).

Working Environment

The workplace environment is a potential cause of stress among workers especially healthcare workers. Zoecklers (2017) asserted that stress related to the workplaces is includes job strain, work stress, and load. The risk or hazards associated with work environment can predispose to psycho-social. Stress in the workplace upon the workers. Factors associated with stress in the work environment are temperature level, ventilation or air quality, lighting, noise condition among others have a significant effect on the productivity of workers quality care giving by the healthcare workers as it affects their health and behaviour. Stress is seen as a perceived imbalance between the demands made on people, and their resources or ability to cope with those demands (Leka, Sp Jain, 2010). Studies of Vischer (2007) depicts that workplace stress tend to focus on psychosocial aspects of the work environment as antecedents of psychological health.

Work Load

Occupational stress is stress related to healthcare worker's job which often stems from unexpected responsibilities and pressure that misalign with person's knowledge, capacity, skills, expectations, inhibiting the workers' ability to cope. The major aspect of workload as a stressor includes:

Quantitative workload or overload: Having more work to do than can be accomplished comfortably; that healthcare workers or nurses could attend more patients at a time which may cause discomfort. In the third world countries and the developing countries, most healthcare workers are faced with the challenges of having numerous patients to attend to because of overpopulations and lack of adequate health resource persons.

Qualitative workload: Having work that is too especially when a health worker/personnel discover severe complication or unknown ailment on the client beyond the scope of duty can tend to inflict stress. This is a problem associated with poor job selection and placement. Some people are given task beyond their mental capabilities. As such found themselves in a battle ground of confusion and frustration.

Underload: just as work overload constitute a stress to workers, same is applicable to work underload, especially when it comes to innovative workers and goal driven individuals. Having work that fails to use a worker's skills and abilities. Workload is a work which demand a major component of the demand – control model of stress when the job do not meet up the demand of the workers can affect the behaviour of workers.

Worker's Status

The personal status in the workplace can also affect level of stress. Working without promotion, delegation can result to neglect which causes stress. However, workplace stress has the potential to affect employees of all categories; those who have very little influence to those who make major decisions for the health facility. Jacobs and Gerson (2004) assert that less powerful workers are more likely to suffer stress than powerful workers. Therefore, health personnel such as doctors, nurses, lab scientist, healthcare workers, dentist, record officers, among others are more vulnerable to work overload.

Coping Strategies to occupational Stress

Coping is the process of spending mental, conscious energy on dealing with problems in life. Mechanisms used to cope with stress attempt to overcome or diminish the amount of stress experienced. Coping is the process of spending conscious effort and energy to solve personal and interpersonal problems. Coping with stressful activities especially the job of healthcare workers is always a complex one and highly dynamic which influence the physical, social, and

emotional well-being of the individual. Good working environment and social support tend to reduce stress among workers. Generally, research into coping has focused on internal and external resources for coping with stress, which deal with work and general life stresses (Roberts et al., 2012).

Some of the coping strategies used to reduce occupational stress including;

i. Relaxation, maintain healthy lifestyle through eating good diet and engage in physical activities such as playing games, avoid unnecessary stress, rest and sleep, among others will reduce the prevalence of stress in any occupation.

ii. Good social support system is important in maintaining motivation and managing stress. Surrounding oneself with family and friends can provide encouragement and support through stressful times.

iii. Positive thinking and hope help a person maintain high levels of motivation, even when stressful events occur. Elevated excitement and anticipation can also lower the perception of stressors through increases in mental strength and resilience. By focusing on the good and working toward positive goals, a nurse can become more impervious to life's little problems.

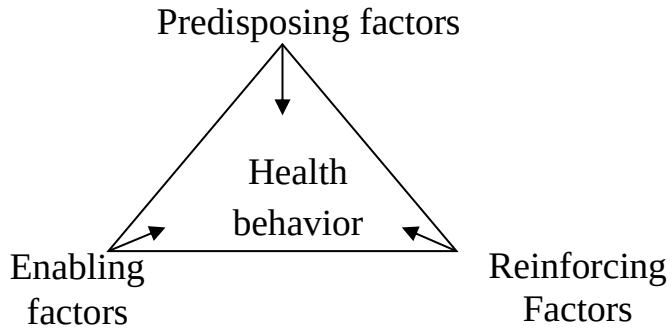
Job Satisfaction

Hoppock defined job satisfaction as any combination of psychological, physiological and environmental circumstances that cause a person truthfully to say I am satisfied with my job (Hoppock, 1935). According to this approach although job satisfaction is under the influence of many external factors, it remains something internal that has to do with the way how the employee feels. That is job satisfaction presents a set of factors that cause a feeling of satisfaction.

Vroom in his definition on job satisfaction focuses on the role of the employee in the workplace. Thus, he defines job satisfaction as affective orientations on the part of individuals toward work roles which they are presently occupying (Vroom, 1964). One of the most often cited definitions on job satisfaction is the one given by Spector according to whom job satisfaction has to do with the way how people feel about their job and its various aspects. It has to do with the extent to which people like or dislike their job.

Theoretical Framework

The framework PRECEDE was developed firstly and proposed by Green in the 1970s which was based on the fact that medical diagnosis precedes a treatment plan, an educational diagnosis of the problem is very essential before developing and implementing the intervention plan. In 1997, PROCEED was included to formed the PRECEDE – PROCEED MODEL in 1992 by Green and Kreuter. However, Green classification of behaviour diagnosis is called PRECEDE model which stand for P = Predisposing, R = Reinforcing, E = Enabling, C = Constructs, E = Educational, D = Diagnosis, and E = Evaluation. According to the modelist, the factors affecting health behavour are presented as Predisposing factors, Enabling factors and Reinforcing factors.



(**Source:**Achalu, 2019)

This model was adopted for this current finding because occupational stress management involves an increase in an individual's self-control ability when facing situations, people, or patient/clients, events, and excursive demand. Since health care service delivered by healthcare workers is a stressful job that need experimental intervention. PRECEDE – PROCEED model affect the healthcare workers through time management, problem-solving, and relaxation.

Empirical Framework

In a study carried out by Adzakpah, Lema and Fiadjoe (2018) on occupational stress among nurses in a hospital setting in Ghana. The result noted that the nurses of the facility were found to experience above average levels of occupation stress with the means score and individual score of 3.01 and 2.47. furthermore, the result revealed that, handling a large number of patients alone (3.51), inadequate staffing level (3.44), lack of break period during shift (3.15), frequent night duty (3.12), nursing patients without relatives (3.07), lack of opportunity for growth/promotion (2.78), and nursing difficulty patients (2.44). In the top, five management and coping strategies of stress the result showed that; I resort to my hobbies (1.23), Identify the sources of stress, and avoid unnecessary stress (1.40) I manage my time better (1.44), I adjust my standards and attitudes (1.66), and I express my feelings (1.85).

Similar studies of Gheshlagh et al., (2017), on the prevalence of job stress among nurses in Iran, a meta-analysis study. The aims of the study were to evaluate the prevalence of job stress among Iranian nurses through meta-analysis. Result of the revealed that the highest stress level was accounted by Shahraki (97.4%), MortaglicGhaseme (97.4%) and Rehimi (98.2%), and lowest stress level reported by Bahrami (4.7%) and Khaghanizadeh (10%). The prevalence of job stress among Iranian nurses was high 69% (CI 95%: 0.58 – 0.79), in region 1, the prevalence rate of job stress was 90% (CI 95%: 85% - 96%) and lowest rate include in region 4 as 46% (CI 95%: 37% - 56%). The result also showed that there was no relationship between the prevalence of job stress of nurses and the sample size (p = 0.921).

Studies conducted by Onowhakpor (2018) on the occupational stress; prevalence, sources and coping mechanisms among medical doctors in a tertiary institution. The result indicated that the prevalence of occupational stress was 50.7%, the main sources of occupational identified by the participants includes workload 216 (94.3%), sleep deprivation 205(89.5%), and inadequacy of resources 204(89.1%). However, the occupational coping strategies mentioned frequently are prioritizing and solving problem orderly 187(81.7%), reorganizing my work 179(78.2%), planning ahead 177(77.3%) among others.

Studies of Deguchi, Iwasaki, Kanchika, Nitta, Mitake, Nogi and Inoue (2018), on gender differences in the relationships between perceived individual-level occupational stress and hazardous alcohol consumption among Japanese teachers. The result revealed that those with a moderate level of stress, social support for supervisors was significantly associated with males (OR = 0.43, 95% cl = 0.23-0.8), whereas female with a high level of stress due to variance in workload (OR = 2.09, 95% cl = 1.04 – 4.24).

Sharma, Davey, Davey, Shukla, Shrivastava and Bansal (2014) conducted a study on the occupational stress among staff nurses controlling the risk to health. It was found that there was no significant association between professional stress and age, marital status and gender of the staff nurses. The risk for professional stress due to poor satisfactory was as a result of doctor's attitude was found about 3-4 times more than with excellent attitudes of doctors. There was statistically significant association between department of posting and level of stress ($p<0.024$). Nurses who reported that they had no time to rest (42%) were coming down with moderate to severe stress while 45% said their job tiring.

3. METHODOLOGY

The research design employed for this study was descriptive cross-sectional survey design. The area of this study was Rivers State and the population of the study was 36,876 healthcare workers in Rivers (Rivers State Hospital Management Board, 2019). The sample size for this study was 828healthcare workers in Rivers State and the sample was drawn using multistage sampling procedure comprising of Borners's formulae, systematic random sampling technique non-proportionate stratified random sampling technique and accidental sampling technique. The instrument for data collection was a researcher-constructed instrument titled "Health Care Workers Occupational Stress Questionnaire (HCWOSQ) and the instrument for the study was validated by two professionals in the department of Human Kinetics and Safety studies. To ascertain the consistency in result of the instrument (reliability), a test retest method was applied and a reliability coefficient of 0.89 (89%) was derived. The data collected were analyzed using statistical package for social science (SPSS) version 20.0. Data analysis was done using statistical tools such as percentages (%), mean and Standard deviation was deployed in analyzing the research questions while Z-test and ANOVA were used to analyze the hypotheses at 0.05 alpha level.

4. RESULT AND DISCUSSION

This chapter was dedicated to the presentation of data analyses of the research questions and hypotheses. Tables and graphs were employed to summarize and interpret the results of the data analysis.

Figure 1 demographic Characteristics of the Respondents

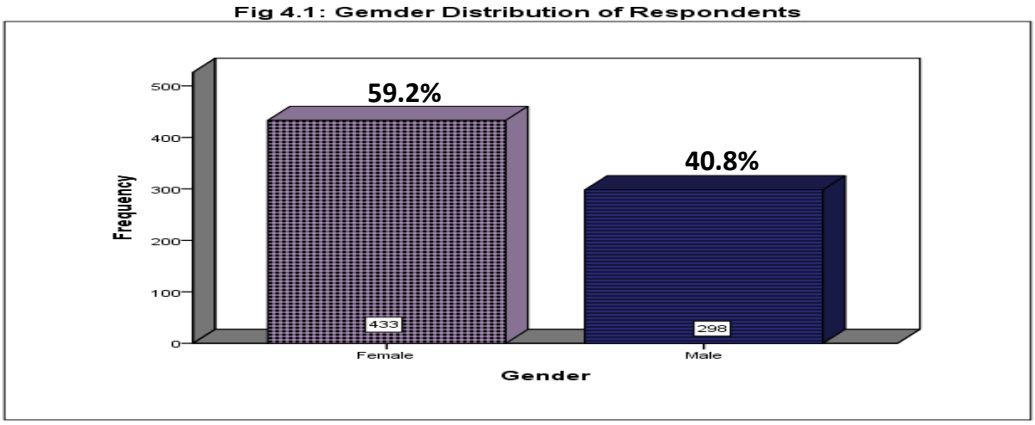
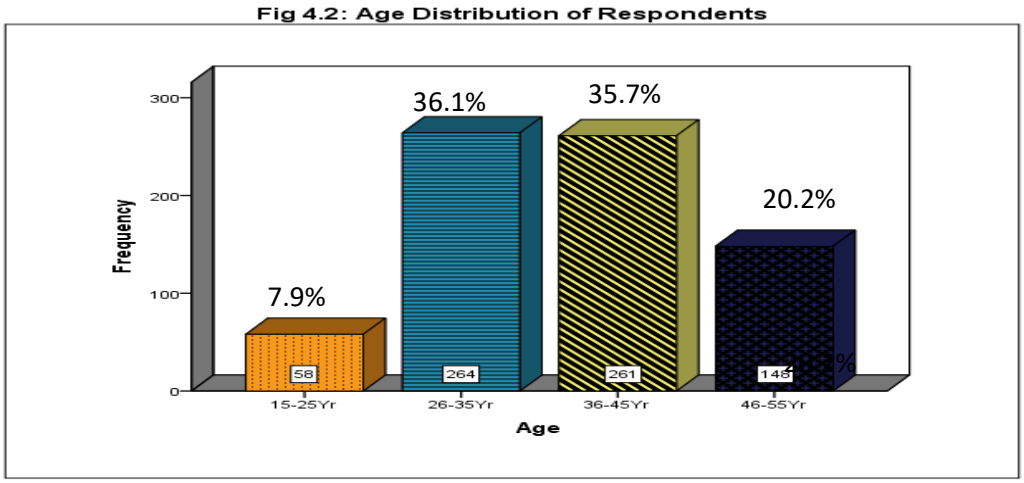


Figure 1, shows some of the gender distribution of the respondents, the statistics shows that: 433(59.2%) of the respondents were female while 298(40.8%) of the respondents were male



In Fig2, it was showed that: 58 (7.9%) of the respondents are within the age bracket of 15-25, 364 (36.1%) are within the age bracket of 26-35, 261 (35.7%) are within the age bracket of 36-45, while 148 (20.2%) of the respondents are within the age bracket of 46 and above;

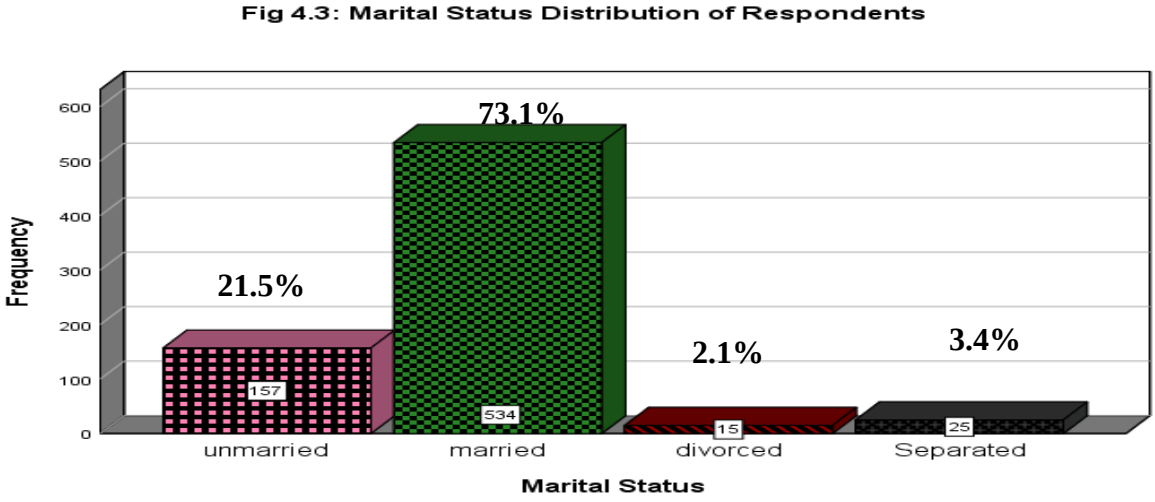


Fig3 discloses that;157 (21.5%) of the respondents are unmarried, 534(73.1%) are married, 15 (2.1%) are divorced while 25 (3.4%) have separated from their spouse;

Fig 4.4: Distribution of Respondents based on Location of hospital

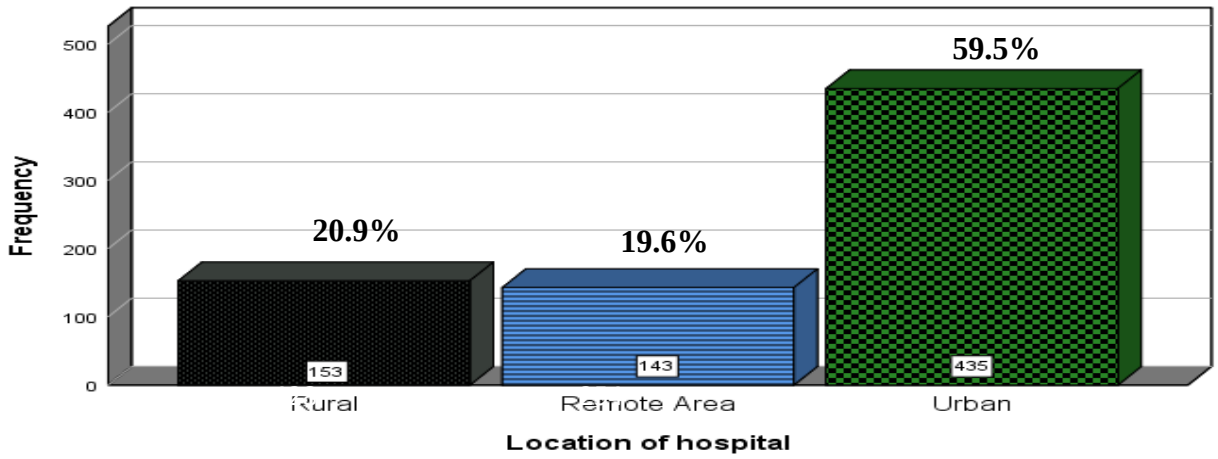


Fig 4 indicated that;153 (20.9%) of the respondents are working in health centers in rural areas, 143 (19.6%) of the respondents are working in health centers located in remote areas while majority 435 (59.5%) are working in health centers located in the urban areas.

Fig 4.5: Distribution of Respondents based on Working Experience

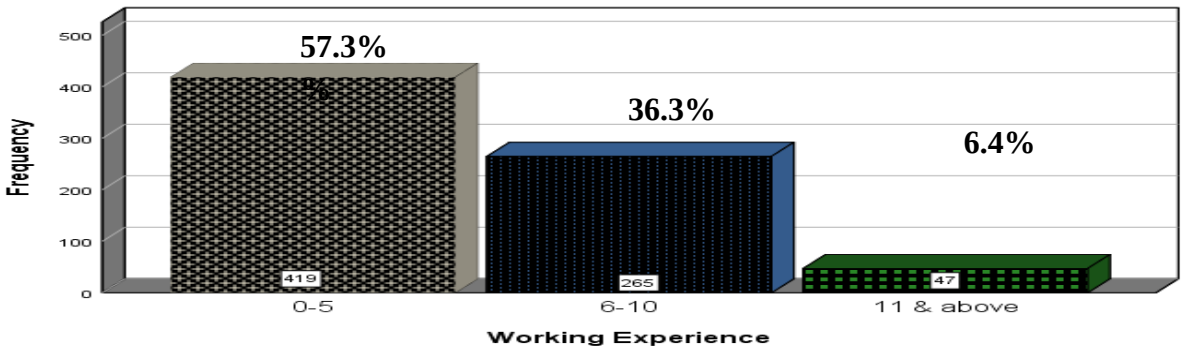


Fig5 shows that;419 (57.3%) have had a working experience between the scale of 0-5 years, 265 (36.3%) have worked between 6-10 years while only 47 (6.4%) have 11 years and above working experience.

Analysis of Research Questions

Research question 1: What is the prevalence of occupational stress among healthcare workers in general hospitals in Rivers State?

Table 1: Analysis of the Prevalence of Occupational Stress among Healthcare Workers

Ever experience stress in your workplace	f	%
No	7	.9
Yes	724	99.1
Total	**731**	**100.0**

Table 1and Fig4.6 show % analysis of respondents' responses to the question "Do you experience stress in your workplace". The result indicated that 724 (99.1%) of the respondents said Yes while on 7 (0,9%) said No. this implies that 99.1% of healthcare workers experience occupational stress. Therefore, there is a very high prevalence of occupational stress among healthcare workers.

Research Question 2: What are the sources of occupational stress amongst Healthcare workers in general hospitals in Rivers State?

Table 2: Summary of Mean Analysis of the Sources of Occupational Stress among Healthcare Workers.

S/No	Source of occupational stress	$\bar{X}$	SD	Remark
	Intrinsic Factors			
14	Too much work to be done in the health unit	3.33	.763	VS
15	Fear of syringe pricking	3.28	.794	VS
16	Poor functioning medical diagnostic equipment	2.67	1.159	MLS
17	Attending to patients with virulent communicable diseases	3.17	.772	VS
18	Physical danger and poor physical working environment	3.03	.756	VS
19	Lack of adequate health care workers in one's unit	2.98	.908	MS
20	Shift work	3.47	.831	VS
21	The death of patient in the ward/unit	2.71	1.039	MLS
22	Poor Person-environment fit	2.91	.901	MS
23	Physical attack by patients/patients' relation	2.80	1.156	MS
24	Prolonged standing	3.55	.604	VS
25	Too many patients to attend to within a short time	3.45	.653	VS
	Grand mean	**3.03**	**0.87**	**VS**
	Organizational role Factors			
26	Conflicting job demand or role	3.46	.707	VS
27	Role ambiguity or unclear job description	3.18	.644	VS
28	Too many responsibilities for people	3.26	.669	VS
	Grand Mean	**3.27**	**.673**	**VS**
	Workplace Relationship Factors			
29	The attitude of patient/relatives	3.41	.661	VS
30	Poor relationship among fellow healthcare workers	3.59	.742	VS
31	Poor relationship with boss/superiors	2.75	.912	MLS
32	Lack of social support among workers	3.12	.809	VS
33	Problem in communication with patients and patients' relations	3.09	1.007	VS
	Grand Mean	**3.19**	**.826**	**VS**
	Organizational Structure and Climate Factors			
34	Lack of effective consultation	3.45	.639	VS
35	Office politicking	3.48	.730	VS
36	Lack of participation in decision making process	3.22	.663	VS
37	Restrictive behavior/autocratic leadership style	3.01	.771	VS
	Grand Mean	**3.29**	**.701**	**VS**
	Home-work Interface factors			
38	Family problems affecting my job	3.20	.653	VS
39	Competing family demands	3.17	.862	VS
40	Conflict between personal belief and organizational belief	3.11	.746	VS
	Grand Mean	**3.16**	**.754**	VS
	Career Development Factors			
41	Poor remuneration	3.12	.772	VS
42	Lack of job security	3.25	.626	VS
43	Under-promotion	2.82	1.102	MS
44	Over-promotion	2.38	1.152	NS
45	Lack of insurance coverage	2.86	1.140	MD
46	Lack of staff development programmes and sponsorship of conferences and workshops	2.41	.977	NS
	Grand Mean	**2.81**	**.966**	**MS**
	Aggregate Mean	**3.12**	**.785**	**VS**

Table 2 show the mean and standard deviation analysis of the level occupational stress among healthcare workers in Rivers State. The result revealed that the highest sources of stress among health care workers in Rivers State were poor

relationship among coworkers (3.59), which ranks first followed by office political (3.48), death of patients (3.47) conflicting job demand (3.46) prolonged standing (3.45**)**, and too many patients to attend to (3.45). on the lower ebb, over promotion was the least source of stress for healthcare workers (2.38), followed by lack of staff development programmes and sponsorship of conferences and workshops (2.41). Collectively, organizational structure and climate factors constituted the highest source of stress for healthcare workers (3.29). This was followed by organizational role factors (3.27), workplace relationship factors (3.19). The least sources of stress were career development factors (2.81). Followed by intrinsic factors and home-work interface factors (3.09).

Research Question 3: What is the level of occupational stress among healthcare workers based on age in Rivers State?

Table 3: Analysis of the level of occupational stress among healthcare workers based on age in Rivers state

Key:
VS=Very Stressful, MD= Moderately Stressful
MLS=Mildly Stressful; NS= Not Stressful

		AGE									
		26-35		15-25		36-45		46 & above			
S/No	Sources of Stress	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD	G $\overline{X}$	RMK
14	Too much work to be done in the health unit	3.27	.871	3.19	.767	3.45	.718	3.41	.763	3.33	VS
15	Fear of syringe pricking	3.24	.830	3.22	.867	3.27	.723	3.41	.755	3.28	VS
16	Poor functioning medical diagnostic equipment	2.59	1.189	2.51	1.139	2.80	1.132	2.77	1.208	2.67	MLS
17	Attending to a patient with virulent communicablediseases	3.05	.880	3.04	.870	3.27	.676	3.29	.652	3.17	VS
18	Physical danger and poor physical working environment	3.05	.705	2,94	.813	3.09	.689	3.09	.775	3.03	VS
19	Lack of adequate health care workers in one's unit	2.86	.887	2.89	.930	3.07	.816	3.05	1.015	2.98	MD
20	Shift work	3.43	.899	3.33	.963	3.59	.673	3.54	.670	3.47	VS
21	The death of patient in the ward/unit	2.57	1.119	2.74	1.071	2.69	1.039	2,73	.957	2.71	MLS
22	Poor Person-environment fit	2.86	.855	2.92	.979	2.89	.861	2.95	.852	2.91	MS
23	Physical attack by patients/patients' relation	2.46	1.145	2,73	1.158	2.98	1.130	2.75	1.167	2.80	MS
24	Prolonged standing	3.43	.647	3.56	.595	3.56	.610	3.58	.596	3.55	VS
25	Too many patients to attend to within a short time	3.46	.691	3.45	.663	3.42	.666	3.48	.602	3.45	VS
26	Conflicting job demand or role	3.46	.730	3.39	.739	3.50	.670	3.53	.701	3.46	VS
27	Role ambiguity or unclear job description	3.03	.730	3.12	.576	3.20	.649	3.30	.704	3.18	VS
28	Too many responsibilities for people	3.24	.683	3.29	.628	3.26	.646	3.22	.778	3.26	VS
29	The attitude of patient/relatives	3.46	.691	3.46	.587	3.35	.662	3.39	.767	3.41	VS
30	Poor relationship among fellow healthcare workers	3.41	.896	3.51	.754	3.67	.693	3.64	.720	3.59	VS
31	Poor relationship with boss/superiors	2.73	.962	2.67	.936	2.80	.890	2.81	.888	2.75	MLS
32	Lack of social support among workers	3,24	.796	3.10	.795	3.15	.782	3.05	.889	3.12	VS
33	Problem in communication with patients and patients' relations	3.00	1.179	3.10	.986	3.18	1.015	2.96	.955	3.09	VS
34	Lack of effective consultation	3.51	.507	3.50	.608	3.46	.661	3.32	.694	3.45	VS
	Aggregate Mean & SD	**3.10**	**0.842**	**3.08**	**0.835**	**3.11**	**.752**	**3.11**	**0.826**	**3.12**	VS

table 3 shows analysis of the level stress among healthcare workers based on age. The respondents within the age bracket of 15-25 had aggregate mean score of 3.10 ± 0.842, the aggregate mean and SD for the respondents within the age bracket of 26-35 years are 3.08 ± 0.835, that of respondents within the age brackets of 36-45 are 3.11 ± 0.752 while the respondents within the age brackets of 46 and above had aggregate mean and SD scores of 3.11 ± 0.826. The mean scores

and SD of each age bracket is closely related to one another. This implies that the elderly healthcare workers experience more stress that the younger workers. That is to say that as age increases, the level of stress by healthcare workers also increases. Thus, the result of the study above is implicative of the fact that healthcare workers between the age bracket of 36 and above experience more stress than those below 36 years old.

Research Question 4: What is the level of occupational stress based on marital status among healthcare workers in general hospitals in Rivers State?

Table 4: Analysis of level of occupational stress based on marital status among healthcare workers in Rivers State

Key:
VS=Very Stressful, MD= Moderately Stressful
MLS=Mildly Stressful; NS= Not Stressful

		MARITAL STATUS									
		Unmarried		Married		Divorced		Separated			
S/No	Sources of Stress	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD	G $\overline{X}$	RMK
14	Too much work to be done in the health unit	3.41	.764	3.33	.764	3.00	.500	2.94	.772	3.33	VS
15	Fear of syringe pricking	3.34	.682	3.25	1.225	3.00	1.225	3.56	.512	3.28	VS
16	Poor functioning medical diagnostic equipment	2.72	1.184	2.70	1.139	1.67	1.118	2.31	1.250	2.67	MLS
17	Attending to patients with virulent communicable diseases	3.28	.750	3.13	.740	3.11	1.269	3.44	.727	3.17	VS
18	Physical danger and poor physical working environment	3.17	.736	2.97	.740	3.22	1.093	3.19	.911	3.03	VS
19	Lack of adequate health care workers in one's unit	3.08	.921	2.94	.906	3.33	.707	3.37	.885	2.98	MD
20	Shift work	3.62	.614	3.42	.878	3.33	1.323	3.62	.619	3.47	VS
21	The death of patient in the ward/unit	2.66	.614	2.72	1.017	2.67	1.225	2.75	1.183	2.71	MLS
22	Poor Person-environment fit	2.99	.843	2.86	1.112	3.33	.500	3.19	.750	2.91	MS
23	Physical attack by patients/patients' relation	2.58	1.219	2.88	1.112	2.22	1.202	2.69	1.448	2.80	MS
24	Prolonged standing	3.51	.610	3.41	.673	3.44	.527	3.69	.479	3.55	VS
25	Too many patients to attend to within a short time	3.46	.691	3.45	.663	3.42	.666	3.48	.602	3.45	VS
26	Conflicting job demand or role	3.46	.730	3.39	.739	3.50	.670	3.53	.701	3.46	VS
27	Role ambiguity or unclear job description	3.03	.730	3.12	.576	3.20	.649	3.30	.704	3.18	VS
28	Too many responsibilities for people	3.24	.683	3.29	.628	3.26	.646	3.22	.778	3.26	VS
29	The attitude of patient/relatives	3.46	.691	3.46	.587	3.35	.662	3.39	.767	3.41	VS
30	Poor relationship among fellow healthcare workers	3.41	.896	3.51	.754	3.67	.693	3.64	.720	3.59	VS
	Aggregate Mean & SD	**3.13**	**0.823**	**3.09**	**0.839**	**3.02**	**0.865**	**3.09**	**0.832**	**3.12**	VS

table 4 illustrates the analysis of the sources and level of occupational stress among healthcare workers in Rivers State based marital status. The result uncovered that the unmarried healthcare workers had aggregate mean score and SD of 3.13 ± 0.823, the married healthcare workers had aggregate mean score and SD of 3.09 ± 0.839, the divorced ones had aggregate mean score and SD of 3.02 and 0.865 while the separated healthcare workers had an aggregate mean score of 3.09 ± 0.832. the unmarried healthcare workers had the highest aggregate mean score, followed by the married and separated healthcare workers, then the divorced healthcare workers. This validates that unmarried healthcare workers experience more stress than the married and separated ones.

Analysis of Hypotheses

Hypothesis 1: There is no significant difference in level of occupational stress experienced by healthcare workers in Rivers State based on age

Table 5: summary of one-way ANOVA of no significant difference in the mean scores on level of occupational stress among healthcare workers in Rivers State based on age

Level of occupational stress	Sum of squares	Mean square	F.cal	Df	P.val	Decision
Between group	0.313	0.104		3		
			0.477		0.688	Not significant (P>0.05)
Within group	159.025	0.219		727		
Total	**159.338**			**730**		**P>0.05**

Table 5 shows the summary of One-Way ANOVA on level of occupational stress experienced by healthcare workers in Rivers State based on age at 0.05 alpha level. The result shows that the F.calwas0.477 and the P.val is 0.698. Since the Pvalwas greater than the Alpha value of 0.05. Hence the null hypothesis which state that there is no significant difference in the level of stress experiences by health care woorkers in Rivers state Based on age was accepted. This means that there is no significant difference in the mean rating of the level of stress experienced by healthcare workers in Rivers State based on age.

Hypothesis 2: There is no significant difference on the level of occupational stress among healthcare workers in Rivers State based on marital status

Table 6: One-way ANOVA of no significant difference in the mean scores on level of occupational stress among healthcare workers in Rivers State based on Marital Status

Level of occupational stress	Sum of squares	Mean square	F.cal	Df	P.val	Decision
Between group	0.309	0.103		3		
			0.470		0.703	Not significant (P>0.05)
Within group	159.029	0.219		727		
Total	**159.338**			**730**		**P>0.05**

Table 6 shows the summary of One-Way ANOVA (P = 0.05) on level of occupational stress experienced by healthcare workers in Rivers State based on marital status. The result shows that the F.cal is 0.470 and the P.val is 0.703 The P.valvalue is greater than the Alpha value of 0.05. hence the null hypothesis was accepted. This means that there is no significant difference in the mean rating of the level of stress experienced by healthcare workers in Rivers State based on marital status.

4. DISCUSSION OF FINDINGS

The results are discussed below.

The result showed the prevalence of occupational stress among healthcare workers in Rivers State was very high with a prevalence rate of 99.1%. This is an indication that almost all the healthcare workers in Rivers state irrespective of gender, age, department, work experience, marital status, level of education among others do experience one form of occupational stressfrom time to time. Little wonder if the prevalence of occupational stress among healthcare workers should be grossly blamed for poor healthcare system in Nigeria. Comparing the occupational stress prevalent rate found in the present study with other studies, Gheshlaghet'al., (2017) uncovered a similar prevalence after surveying 4630 Iranian nurses of 90%. Though, the prevalent rate recorded was slightly lower, both rateswere conceptualized very high. Teixeira, Gherardi-Donato, Da Pereira, Cardiso, and Reisdorfer, (2016), documented 87% prevalence rate of stress among nurses working in university hospitals. The lowest prevalence rate in the extant literature reviewed so far was observed by Adzakpahet'al. (2018). These researchers recorded over 68.4% and concluded that work stress among nurses in Ghana is above average which suffice to underscore that majority of nurses in Ghana are being stress at the workplace (Adzakpah, 2018).

The study further showed thatthe mean and standard deviation analysis of the level occupational stress among healthcare workers in Rivers Staterevealed that the highest sources of stress among health care workers in Rivers State were poor relationship among coworkers (3.59), which ranks first followed by office political (3.48), death of patients (3.47) conflicting job demand (3.46) prolonged standing (3.45**)**, and too many patients to attend to (3.45). on the lower ebb, over promotion was the least source of stress for healthcare workers (2.38), followed by lack of staff development programmes and sponsorship of conferences and workshops (2.41). Collectively, organizational structure and climate factors

constituted the highest source of stress for healthcare workers (3.29). This was followed by organizational role factors (3.27), workplace relationship factors (3.19). The least sources of stress were career development factors (2.81). Followed by intrinsic factors and home-work interface factors (3.09). Coincidentally, this finding agreed with the discovery of Onowhakpor (2018) who found that organizational structure and climate alongside intrinsic factors constitute the major sources of occupational stress among health care workers in Ghana. Similarly, Collinganet'al. (2013) outlined the various sources of occupational stress to include; Work environment includes inadequate arrangement of hospitals equipment and materials, increase temperature, lighting problem, lack of space among others, negative workload such as attending to large number of patients at a time, lack of duty scope etc., Isolation, lack of competent staffs, financial pressures such as late payment of wages, poor remuneration. types of hours worked or prolong working time such as work overtime, no shifting, role conflict & role ambiguity, lack of autonomy, career development barriers, difficult relationships with administrators and/or coworkers, managerial bullying such as threat to personal status and employment status, excess work among others, and harassment includes sexual assault among male and female workers, abuse, indecent behaviour among others.

Moreso, Segalet'al. (2016) found that some of the major sources of occupational stress include: lack of job security and fear of being laid off; heavy work load and overtime due to staff cutbacks; pressure to perform to meet rising expectations with adequate reward or job satisfaction; role conflicts and unclear expectations; poor or uncomfortable working conditions; lack of control over one's job; inadequate wages/salary or benefits; lack of participation in decision company policies making; poor communication; poor relationships among main agent, coworker. Cooper and Marshall (2004) also identified: working environment; work load (quantitative workload or overload, qualitative workload, and underload); worker's Status and Conflict.

Source represents roots or points of origination. When it comes to occupational stress, different workers have diverse story to tell because stress alone is a relative term. Thus, what constitute stress for an individual or group may not be for another individual or group. This explains the dynamics of occupational stress sources among healthcare workers across the world as could be seen in the findings of the present study in relation to other empirical studies conducted in other parts of the world as well as target populations.

5. CONCLUSIONS

Stress is undoubtedly a part and parcel of life. At the same time, a huge impediment to success in several human endeavour. Occupational stress was very high and the level was more than just alarming for most healthcare workers in River State. If the level of stress among the healthcare workers is not mitigated, we might wake up one day to a stark reality of many healthcare workers being down and in need of healthcare due to stress. Organizational structure and climate was the highest sources of occupational stress among healthcare workers others sources of occupational stress among healthcare workers include; intrinsic sources, organizational role, workplace relationship, home-work interface and career development.

Demographically, there was no significant difference in the level of stress among healthcare workers in Rivers Sate based on age; and there was no significant difference in the level of stress among healthcare workers in Rivers Sate based on marital status.

6. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are forwarded;

1. Healthcare workers should identify the peculiar sources and causes of stress and utilize that knowledge to modify and adopt positive work-time behaviour that will assist in reducing the level of stress inherent among the healthcare workers.

2. Healthcare workers should refrain from negative and emotional stress coping strategies such as drug abuse, non-selective sexual intercourse and embrace problem-solving strategies such as time management, adequate diet, sleep and rest to help curb the negative consequences of stress.

3. Management and Healthcare Managers at all levels of the healthcare delivery system, and Employers should truly value the health and the productivity of their workers by documenting the causes/sources of stress affecting healthcare workers (recognized employees stressors) at least once in six months to be able to develop the best possible working programmes that reduces workplace stress.

REFERENCES

[1] Adzakpah, G., Laar, A.S. &Fiadjoe, H.S. (2016). Occupational stress and its management among nurses at St. Dominic Hospital. Akwaita Ghana. *Health service journal. 3(1):* 57

[2] Adzakpah, T., Lear, A.S. &Fiadjoe, H.S. (2016). *Occupational stress among nurses in a hospital setting in Gokana*. *European Scientific Journal. 4(5);* 95-104.

[3] Alosaimi, F.D., Alawad, H.S., Alamri, A.K., Saeed, A.I., Alguaydi, K.A., Alotaibi, A.S., Alotaibi, K.M. &Alfaris, E.A. (2018). Patter and determinants of stress among consultant physician working in Sandi Arabia. *Advances in medical education and practice. 9(4):* 165-174.

[4] Aziri, B (2011) Job satisfaction: A literature review. *Management Research and Practice 3(4),* 77-86

[5] Azizi, Y., Ismail, M., Peter V., Sharon, K. &Joki, P.S (2019). The effects of occupational stress on the management of an organization. *International Journal of Asian Social Science, Asian Economic and Social Society, 9(2),* 248-255.

[6] Collingan, T.W., Collingan, M.S.W. & Higgins, M. (2013). Workplace stress etiology and consequences. *Journal of workplace behavioural health.* 21(2): 89-97. Doi 10.13000.

[7] Daggat, T., Molla, A. &Belachard, T. (2016). Job-related stress among nurses working in Jimma Zone public hospitals, southwest Ethiopia. *A cross-sectional study. BMC nursing.* 15:39. Doi 10. 1186.

[8] Davis, K. and Nestrom, J.W. (1985*). Human Behavior at work: Organizational Behavior*, (7th ed.), McGraw Hill, New York.

[9] Deguchi, Y., Iwasaki, S., Kanchika, M., Nitta, T., Mitake, T., Nogi, Y., Inoue, K. (2018). Gender differences in the relationship between perceived individual – level occupational stress and hazardous alcohol consumption among teachers. A cross-sectional study. PLOS ONE 13(g) e 0204248.

[10] George, J.M. and Jones, G.R. (2008). *Understanding and Managing Organizational behavior* (5th ed.). Pearson/Prentice Hall, New Yersey.

[11] Gheshlagh, G.R., Parizad, N., Dalvand, S., Zarei, M.I., Farajzadeh, M., Karann, M. &Sayehmiri, (2017). The prevalence of job stress among stress in Iran: A meta-analysis study. *Nursing and midwifery studies*. 6(4). 143-148.

[12] Health and Safety Executive (2014). Nurses' views on workplace well-being programme. *British Journal of Nursing.* 10(1): 91-102.

[13] International Labour Organization (2013). Global deployment trends 2013. Recovering from a second jobs. Dip. *International Labour Organization Office publication.* Geneva. Switzerland.

[14] Kaliski, B.S. (2007). *Encyclopedia of Business and Finance*, (2nd ed.). Thompson Gale, Detroit.

[15] Kim, S.Y., Shin, D.W., Oh, K.S., Kime, E.J., Park, Y.R., Shin, Y.C. & Lim, S.W. (2018). Gender differences of occupational stress associated with suicidal ideation among South Korean employees. *The Kangbuk Samsung health study. Psychiatry investigation.* 15(2). 156-163.

[16] Maitei, M., Fiasca, F., Mazzei, M., Necozione, S. &Bianchini, V.O. (2017). Stress and burnout in health care workers after the 2009 L' Aquila Enothquarke: Across-sectional observational study. Frontiers in psychiatry. Doi: 10.3389.

[17] Mohammad M.A (2014). Occupational stress and its consequences: Implications for health policy and management", *Leadership in Health Services*, 27 (3), 224-239.

[18] Mullins, J.L. (2005). *Management and organizational behavior*, (7th ed.), Pearson Education Limited, Essex.

[19] Najimi, A., Goudrazi, M.A. &Sharifirad, G. (2012). Causes of job stress in Nurses. A cross sectional study. *Iranian Journal of Nursing and Midwifery Research.* 17(4): 301-305.

[20] Okita, S., Daitoki, S., Abe, N., Arimura, E., Setoyama, H., Koriyama, L. &Ushikai, M. (2017). Potential predictors of susceptibility to occupational stress in Japanese Novice Nurses. A pilot study environmental health and preventive medicine. 22(20).

[21] Onowhakpor, A. (2015). Occupational stress; prevalence, source, and coping mechanisms among medical doctors in a tertiary institution. *The Nigerian health journal:* 18(1): 53-59.

[22] Sasikala, R. &Ramu, G.I. (2018). Occupational Stress among nurses of tertiary care hospitals in Tiruvarur. *International journal of scientific research and management.* 6(3). 108-111;

[23] Seyle, H. (1983) 'The Stress Concept: Past, Present and Future'. *Cooper, CL*, 1-20

[24] Sharma, P., Davey, A., Davey, S., Shukia, A., Shrivasktara, K., &Barnsal, R. (2014). Occupational stress among staff nurses controlling the risk to health. *Indian Journal of Occupational and Environmental Medicine.* 18(2): 52-56.

[25] Teixeira, C.A.B., Gherardi-Donato, E.C., Da, S., Pereira, S.S., Cardoso, L. &Reisdorfer, E. (2016). Occupational stress and coping strategies among nursing professionals in hospital environment. *Entermeria global No 44.*

[26] Zakarin, M., Wright, N. & Blake, H. (2016). Nursing views on workplace well-being programme. *British Journal of Nursing.* 102-110.