MANAGEMENT OF OCCUPATIONAL STRESS AMONG DOCTORS AND NURSES OF FEDERAL MEDICAL CENTRE (FMC), YENAGOA, BAYELSA STATE

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ABSTRACT
The study investigated the management of occupational stress among medical doctors and nurses in the Federal Medical Centre Yenagoa, Bayelsa State, Nigeria. The research design adopted was descriptive research design. The population of the study was 996 medical doctors and nurses from all the departments. A sample of 285 health workers (125 doctors and 160 nurses) was drawn by means of non-proportionate stratified random sampling and convenience sampling techniques. Self-designed Sources of Occupational stress Questionnaire (SOSQ) and Job Stress Coping Strategies Questionnaire (JSCSQ) were used for data collection.The research questions were answered by mean and standard deviation, while t-test was used to test the null hypotheses at 0.05 level of significance. It was found that doctors and nurses differ significantly in their use of problem-focused and emotion-focused coping strategies for occupational stress. The researchers recommended that administrators of hospitals should provide more stress coping programmes for nurses that would encourage them to use more problem and emotion-oriented coping strategies for work-related stress.

Keywords: Occupational stress, stress management, emotion-focused coping, problem-focused coping.

INTRODUCTION
One form of stress that affects people is occupational stress. Having a job or a job of interest can improve an individual's physical and psychological health (Mental Health Foundation, 2022). However, a high level of stress in the workplace may outweigh any such benefits and threaten both the physical and psychological health of the person.

Economic hardship and threats to loss of job and lives due to the covid-19 pandemic have created not only anxiety now but also an uncertain future. Besides this, an interaction of some individual employee issues, work relationship issues, factors intrinsic to the job, career development issues, organizational issues, and environmental issues may cause employees a lot of work-related stress.

The American Psychological Association, APA (2022) defines occupational stress as a physiological and psychological response to events or conditions in the workplace that is detrimental to health and well-being. A similar definition by Narban, Narban, and Singh (2016) shows that occupational stress is ''a physical or psychological disorder associated with an occupational environment and manifested in symptoms such as extreme anxiety, tension, cramps, headaches, or digestive problems''. The National Institute for Occupational Safety and Health (NIOSH) (2014, para. 1) defines occupational stress as ''the harmful physical and emotional responses that occur when the requirements of the job do not match the

capabilities, resources, or needs of the worker''. One deduction from this definition is that occupational stress occurs when job requirements exceed the adaptive resources of a worker.
On a global scale, the year 2020 has been regarded as the most stressful year in the history of the world workforce, with the effects of the COVID pandemic affecting the mental health of 78% of workers the world over (Vault Platform, 2022). The same source reported that study findings by Oracle and Research House Workplace Intelligence show that majority of employees have one or more mental challenges such as more stress (38%), lack of work-life balance (35%), burnout (25%), depression (25%), and loneliness (14%). Similarly, Armstrong (2021) wrote that the state of the Global Workplace 2021 Report conducted by Gallup in 116 countries shows that workers daily stress reached a record high in 2020 and that 43% of respondents claimed to have experienced stress, an increase from 38% in 2019.

National Institute for Occupational Safety and Health (NIOSH) (2014) identified occupations most at risk of experiencing job stress which include police and prison officers, medical and paramedical professionals, banking staff, and community care workers. The prevalence of stress among healthcare workers in Africa is on the increase - as high as 28% among medical doctors in public hospitals in South Africa (Osifo, 2017). The source above also reported 26.2% among healthcare workers in Oyo State, Nigeria.

In a comparative study of occupational health and infection control practices in Federal Medical Centre (FMC) Owerri and Yenagoa, Allen, Nwaogazie, and Douglas (2019) reported, among other findings, that healthcare workers at FMC Yenagoa had higher exposure to all five categories of hazards than FMC Owerri. The categories are ergonomic hazards, physical hazards, biological hazards, chemical hazards, and psychosocial hazards. All the above-mentioned hazards can contribute to job stress. However, it is worth noting that psychosocial hazards are “factors in the design or management of work that increase the risk of work-related stress and can lead to psychological or physical harm'' (Work Safe Victoria, 2021, para. 1).
Etim, Bassey, Ndep, Ekpenyong, and Otung (2018) opined that hospital work usually requires coping with some of the most stressful situations found in any workplace. Giving reasons for this, Etim et al. wrote that hospital workers have to deal with patients with life-threatening injuries and illnesses which could be further complicated by tight work schedules, disproportionate staff-patient ratio as well as emergencies. In this era of covid-19, the high infection rate and hospitalization, and Nigeria's doctors-to-patient ratio of 4: 10,000 (which is below the global recommendation of 1:600 (Kareem, 2021) are factors that might have created feeling of being overwhelmed and the constant struggle to cope with pressure by doctors and nurses.

Occupational stress affects workers and the organizations they work for. It adversely affects employees' health and wellbeing which in turn affect the organization. This highlights the need to manage occupational stress effectively.
Stress management refers to strategies or techniques and psychotherapies employed to cope with and reduce stress. For Kenny (2017, p.1), stress management interventions are designed to assist people to cope with stressors and with the negative emotions, psychological arousal and/or health consequences that arise from these stressors by changing the cognitive and emotional responses to the trigger events.

According to Harvard Medical School (2015), the first step towards reducing stress is learning

what your triggers are. This knowledge is important for us to avoid those triggers of stress or accept them and change our reaction to them. Different people react differently to stress based on the stressful event itself, and life experience among other factors. These reactions could be physical reactions (sweating, heavy breathing), cognitive thinking reactions (concentration difficulty, nightmares), behavioural reactions and spiritual reactions (difficulty praying). In the light of diverse stress reactions individuals display which affect their well-being, learning, and health, learning healthy ways to cope to reduce stressful feelings and symptoms becomes important.

Coping can be defined as cognitive, emotional, and behavioural efforts that individuals make to manage stressful situations or conditions appraised as potentially harmful. It is a psychological strategy that people use to manage stress. Coping, according to Litt and Tennen (2015), entails intentional efforts to mitigate the effects of stressors, and not any miscellaneous response that occurs.

There are different coping dimensions. They are problem-focused versus emotion-focused, active versus passive, cognitive versus behavioural, and approach versus avoidant. In this work, the researchers favour a common categorisation of coping skills into problem-focused and emotion-focused strategies (Henry, Shorter, Charkoudian, Heemstra, Le, & Corwin, 2022). Problem-based coping strategies are activities and attempts aimed at reducing or eliminating the source of stress while emotion-based coping refers to all the kinds of coping aimed at regulating the negative emotional responses associated with stress. Schoenmakers, Tilburg, and Fokkema (2015, p.154) differentiated the two coping strategies as follows:

Problem-focused coping includes all the active efforts to manage stressful situations and alter a troubled person-environment relationship to modify or eliminate the sources of stress via individual behaviour. Emotion-focused coping includes all the regulative efforts to diminish the emotional consequences of stressful events.

Stress, whether acute or chronic, is bad and needs to be managed. A study of the management of job stress among doctors and nurses - key members of healthcare personnel who expend both physical and emotional energies in saving lives - is imperative. The researchers observed that there are little or no studies on the management of job stress in the Federal Medical Centre, Bayelsa State. Thus, the researchers wish to bridge this research gap by embarking on this study.

STATEMENT OF THE PROBLEM

Occupational stress can have a significant negative impact on employees physically, mentally, emotionally, behaviourally, socially, and economically. Specifically, occupational stress can amount to employees' low motivation. It can hinder performance, cause a decrease in productivity and efficiency. It can increase the risk of physical injuries at work, cardiovascular disease, hypertension, sleep disorders, musculoskeletal disorders, memory problems, poor judgement, and suicide. Economically, occupational stress has cost implications for workers, organisations, and nations the world over.

In view of the negative effect of occupational stress on the physical, psychological, and economic well-being of employees, a study of stress management is important. This could partly help to prevent the adverse effect of job stress. To the best of the researchers' knowledge, there is little or no research work on occupational stress management among doctors and nurses in the Federal Medical Centre, Bayelsa State. This study, therefore, seeks to bridge this research gap by examining the management of occupational stress among

respondents.

AIM AND OBJECTIVES OF THE STUDY

The aim of the study is to ascertain the measures employed by doctors and nurses in managing occupational stress. Specifically, the study is designed to:

1. Identify the sources of occupational stress among doctors and nurses in FMC, Bayelsa State.
2. Determine whether respondents differ significantly in their use of problem-focused and emotion-focused coping strategies for occupational stress.

RESEARCH QUESTIONS

The following research questions guided the study:

1. What are the sources of occupational stress among doctors and nurses?
2. Do doctors and nurses differ in their use of problem-focused coping strategies for occupational stress?
3. Do doctors and nurses differ in their use of emotion-focused coping strategies for occupational stress?

RESEARCH HYPOTHESES

The following null hypotheses were formulated by the researchers to guide the study.

1. Doctors and nurses do not differ significantly in their perceived sources of occupational stress.
2. There is no significant difference between doctors and nurses in their use of problem-focused coping strategies for occupational stress.
3. There is no significant difference between doctors and nurses in their use of emotion-focused coping strategies for occupational stress.

METHODOLOGY

The researchers adopted a descriptive research design. The population of the study consisted of medical doctors and nurses from different departments in the Federal Medical Centre, Yenagoa. The total population of doctors and nurses obtained in 2022 was 996 – that is 436 medical doctors and 560 nurses.

The sample of 285 which represents 28.61% of the population was drawn by non-proportionate stratified random sampling and convenience sampling techniques. Two self-designed instruments were used for data collection. They are the Sources of Occupational Stress Questionnaire (SOSQ) for the measure of sources of occupational stress, and the Job Stress Coping Strategies Questionnaire (JSCSQ) for the measure of coping strategies. Face and content validities were ensured for the instruments.The reliability of each of the two instruments was determined with the Cronbach alpha technique as a measure of internal consistency. The Cronbach alpha values are 0.71 for SOSQ and 0.74 for JSCSQ. The data of the study was analysed by means of mean, standard deviation, and t-test. Mean and standard deviation were used to answer research questions 1, 2, and 3 and t-test was employed to analyse hypotheses 1, 2, and 3. The analyses were done using SPSS version 23. The criterion

mean or cut-off point is 2.5. Statistical decision was made at 0.05 level of significance.

RESULTS

Research Question 1: What are the sources of occupational stress among doctors and nurses?

S/N	Items	X	Sd	Decision
1	Confronting life threatening a cute emergencies and patients with unstable conditions.	3.0596	.83915	Accepted
2	Difficult patient's caregiver	2.7474	.92655	Accepted
3	Heavy workload	2.9088	.86730	Accepted
4	Lack of opportunity for career advancement	2.4526	.97253	Not Accepted
5	Lack of personal protective equipment	3.0632	.89769	Accepted
6	Under staffing	3.1053	.86570	Accepted
7	Lack of appreciation for work done	2.5158	.91000	Accepted
8	Subordinate-superior face-off	2.5263	.98769	Accepted
9	Role conflict	2.2526	.88773	Not Accepted
10	Unclear expectations	2.5018	.79446	Accepted
11	Fear of infection	2.6702	1.06974	Accepted
12	Family-work conflict	2.5088	1.05355	Accepted
13	Poor ventilation of work environment	2.6421	.97413	Accepted
14	Noisy work environment	2.2035	.88850	Not Accepted

*** The criterion mean or mean cut-off point is 2.5**

Table 1a shows that respondents considered the following factors (with the mean score of each factor enclosed) as sources of occupational stress: Understaffing (3.1053), lack of personal protective equipment (3.0632), confronting life threatening acute emergencies and patients with unstable conditions (3.0596), heavy workload (2.9088), difficult patient's caregiver (2.7474), fear of infection (2.6702), poor ventilation of work environment (2.6421), subordinate-superior face-off (2.5263), lack of appreciation for work done (2.5158), family-work conflict (2.5088), and unclear expectations (2.5018).

Hypothesis 1: Doctors and nurses do not differ significantly in their perceived sources of occupational stress.

Table 1b: Summary of t-test analysis on perceived sources of occupational stress

	N	X	Sd	Df	t	Sig.	Decision
Doctors	125	38.06	7.89	230.072	12.330	.000	Significant
Nurses	160	18.62	17.84				

Table 1b shows that the t-value of 12.330 is significant at .000 for a two-tailed test [t (230.072) = 12.330, $p < 0.05$]. The null hypothesis one is not accepted. This implies that doctors and nurses differ significantly in their perceived sources of occupational stress.

Research Question 2: Do doctors and nurses differ in their use of problem-focused coping strategies for occupational stress?

Table 2a: Mean and Standard Deviation of use of problem-focused coping strategies for occupational stress

	N	X	Sd
Doctors	125	14.8480	3.13682
Nurses	160	8.6563	7.01575

Table 2a shows that doctors had a mean score of 14.85 while nurses scored a lower mean of 8.66. The magnitude of the mean difference (6.19) shows that doctors and nurses differ in their use of problem-focused coping strategies for occupational stress.

Hypothesis 2: There is no significant difference between doctors and nurses in their use of problem-focused coping strategies for occupational stress.

Table 2b: Summary of t-test analysis on the use of problem-focused among doctors and nurses

	N	X	Sd	df	t	Sig.	Decision
Doctors	125	14.85	3.14	241.357	9.962	.000	Significant
Nurses	160	8.66	7.02				

Table 2b shows that the t-value of 9.962 is significant at .000 for a two-tailed test [t (241.357) = 9.962, $p < 0.05$]. The null hypothesis two is not accepted. This means that there is significant difference between doctors and nurses in their use of problem-focused coping strategies for occupational stress.

Research Question 3: Do doctors and nurses differ in their use of emotion-focused coping strategies for occupational stress?

Table 3a: Mean and Standard Deviation of use of emotion-focused coping strategies for occupational stress

	N	X	Sd
Doctors	125	15.2640	4.30143
Nurses	160	8.5563	7.11960

Table 3a shows that doctors had a mean score of 15.26 while nurses scored a lower mean of 8.56. The size of the mean difference (6.70) shows that doctors and nurses differ in their use of emotion-focused coping strategies for occupational stress.

Hypothesis 3: There is no significant difference between doctors and nurses in their use of emotion-focused coping strategies for occupational stress.

Table 3b: Summary of t-test analysis on the use of emotion-focused among doctors and nurses

	N	X	Sd	Df	t	Sig.	Decision
Doctors	125	15.26	4.30	267.429	9.839	.000	Significant
Nurses	160	8.56	7.12				

Table 3b shows that the t-value of 9.839 is significant at .000 for a two-tailed test [t (267.429) = 9.839, $p < 0.05$]. Thus, hypothesis three is not accepted. This means that there is significant difference between doctors and nurses in their use of emotion-focused coping strategies for occupational stress.

DISCUSSION OF FINDINGS

Sources of Occupational Stress

In this study, the researchers found that understaffing, lack of personal protective equipment, confronting life threatening acute emergencies and patients with unstable conditions, heavy workload, difficult patient's caregiver, fear of infection, poor ventilation of work environment, subordinate-superior face-off, lack of appreciation for work done, family-work conflict, and unclear expectations are the sources of occupational stress among doctors and nurses. The present study finding on understaffing as a source of occupational stress agreed with Arrman and Bjork (2017). The following findings also agreed with these studies: insufficient equipment, and emergency situations (Etim et al., 2018); heavy workload (Lenah, 2020; Arman & Bjork, 2017; Shabana et al., 2017; Makie, 2006); poor ventilation of work environment or work environment, and lack of appreciation for work done (Lenah, 2017), and subordinate-superior face-off or poor work relationship (Lenah, 2020; Johari, 2020; Chukwuma, 2019; Makie, 2006). However, one of the findings did not agree with that of Johari (2020) who reported role ambiguity as a source of job stress.

It was found that doctors and nurses differ significantly in their perceived sources of occupational stress. Doctors perceived more work-related stressors than nurses. One plausible reason for the study outcome is the difference in the nature of job of doctors and nurses.

Use of Problem-focused Coping Strategies by Doctors and Nurses

The researchers found that doctors and nurses differ in their use of problem-focused coping strategies for occupational stress. Doctors had a higher mean score on problem-focused coping than nurses. When faced with stressful work conditions, doctors are more likely to use problem oriented approach to coping with stress than nurses.

There was significant difference between doctors and nurses in their use of problem-focused coping strategies for occupational stress. This difference in the use of problem-focused coping strategies between doctors and nurses cannot be attributed to chance.

Use of Emotion-focused Coping Strategies by Doctors and Nurses

The researchers found that doctors and nurses differ in their use of emotion-focused coping strategies for occupational stress. Once again, doctors had a higher mean score on emotion-focused coping strategies than nurses. When faced with stressful conditions at work, doctors are more likely to employ more of emotion-oriented approach to coping with stress than nurses.

There was significant difference between doctors and nurses in their use of emotion-focused coping strategies for occupational stress.

CONCLUSIONS

Based on the findings of the study, it was concluded as follows:

1. Occupational stress among doctors and nurses is caused by individual, group, organizational, and work-related factors.
2. Doctors used problem-focused and emotion-focused coping strategies for occupational stress more than nurses.

RECOMMENDATIONS

Based on the findings of the study, the researchers made the following recommendations:

1. Government employs more doctors and nurses to address the issue of understaffing and heavy workload. Government should increase the acquisition and distribution of

personal protective equipment (PPP) to doctors and nurses.

2. Occupational stress management programmes or training should be tailored towards the nature of work and the needs of employees. Nurses should be encouraged to use more problem-focused coping for job stress.
3. Administrators of hospitals should provide more stress coping programmes for nurses that would encourage them to use more emotion-oriented coping strategies for work-related stress.

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