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SYSTEMATIC REVIEW OF ASSESSMENT OF OCCUPATIOAL STRESS, ANXIETY, DEPRESSION AND METABOLIC SYNDROME AMONG OPERATING THEATRE PERSONNEL IN TERTIARY HEALTHCARE INSTITUTIONS EKITI STATE

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Abstract

This study systematically reviewed occupational stress, anxiety, depression, and metabolic syndrome among operating theatre personnel in tertiary institutions in Ekiti State. A search of MEDLINE, PubMed, Scopus, CINHL, and AJOL was conducted for studies published in English between 2016 and 2022, using keywords such as occupational stress, anxiety, depression, metabolic syndrome, coping strategies, and prevalence. Eighteen out of 40 studies met the quality assessment criteria, comprising 17 quantitative and one qualitative study. Findings revealed a high prevalence of occupational stress, anxiety, and depression among operating theatre personnel in both developed and developing countries, with increased rates during the COVID-19 pandemic. Metabolic syndrome and its components were also highly prevalent among theatre personnel and other professionals. Common coping strategies included planning ahead, prioritizing, and problem-solving. Occupational stress led to psychological and physical health issues such as anxiety, depression, fatigue, headaches, and musculoskeletal problems, ultimately reducing productivity. Solutions include increasing staff numbers to manage workload, providing education on stress management and coping strategies, conducting regular health assessments, and fostering a supportive work environment. Despite efforts to mitigate these challenges, many operating theatre personnel continue to experience occupational stress, anxiety, depression, and metabolic syndrome due to high job demands and limited resources, necessitating comprehensive interventions to safeguard their well-being.

Keywords: Occupational stress, Anxiety, Depression, Metabolic syndrome, Coping strategies, Healthcare personnel

Introduction

Occupational stress is a complex phenomenon that affects professionals across various industries. According to Nielsen and Abildgaard (2019), it encompasses physiological, psychological, and behavioral responses to work-related demands that exceed an individual's coping capacity. Their model of occupational stress identifies five core components: job demands, job resources, personal resources, strain reactions, and work-related outcomes. In the United States, over 60% of professionals identify job designation as a primary predictor of occupational stress, while more than 40% report experiencing burnout and anxiety at work (Roche, 2021). Environmental and socio-demographic factors such as mental health, diet, smoking, gender, and age also contribute to stress levels (Stone et al., 2020; Park et al., 2017). Furthermore, genetic predispositions influence lipid levels and overall susceptibility to stress (Yang et al., 2021). Du Plessis (2020) describes occupational stress as a transactional process involving coping strategies, emotional responses, and evaluations of workplace challenges. Stress significantly affects job performance, well-being, and health (Akpor et al., 2023).

The American Institute of Stress (AIS, 2023) highlights common occupational stressors, including lack of recognition, job insecurity, long working hours, workplace politics, and inadequate authority or resources. Similarly, the National Institute for Occupational Safety and Health (NIOSH, 2022) identifies factors such as unfair management practices, work-family conflicts, poor interpersonal relationships, low wages, excessive workload, and role ambiguity. Theatre personnel, particularly those in surgical settings, operate in high-stress environments characterized by demanding schedules, life-threatening situations, and prolonged concentration

requirements (Li et al., 2020; Shanafelt et al., 2015). Long hours, unpredictable work shifts, and emotional strain contribute to their occupational stress (Dickmetas et al., 2021; Shanafelt et al., 2016). The high-pressure nature of their responsibilities, including surgical procedures and emergency interventions, exposes them to significant mental and physical health risks (Belayneh et al., 2022).

One major consequence of occupational stress among theatre personnel is anxiety. The Journal of Louisiana State Medical Society (LSMS, 2023) reports that anxiety manifests as excessive worry, fear, and restlessness. Studies indicate that 30.7% of theatre personnel in Nigeria and 35% in China experience anxiety symptoms (Ajayi et al., 2020; Deng et al., 2018). Factors contributing to this include high job demands, low social support, poor working conditions, and work-family conflicts (NIOSH, 2021; Deng et al., 2018). Ajayi et al. (2020) found that work-related stressors significantly predict anxiety levels among Nigerian theatre personnel. A systematic review covering Europe, Asia, and North America found burnout prevalence among healthcare professionals ranging from 10% to 70%, with operating room personnel being at higher risk (Belayneh et al., 2022). Li et al. (2020) reported a 42.8% stress prevalence among Chinese operating room nurses, with emotional exhaustion being the most common symptom. Depression is another consequence of occupational stress among theatre personnel, often leading to persistent sadness, hopelessness, and loss of interest in daily activities. Deng et al. (2020) reported that 35.9% of theatre personnel experienced symptoms of depression. Similarly, Ajayi et al. (2020) found that 35% of Nigerian theatre personnel suffered from both anxiety and depression, increasing the likelihood of burnout.

Metabolic syndrome, a cluster of conditions including abnormal cholesterol levels, obesity, hypertension, and insulin resistance, is also linked to occupational stress (Kaya et al., 2021). Globally, its prevalence is estimated at 30.4% (Kaya et al., 2021). Olatona et al. (2021) found that theatre personnel with high job demands and low job control were at greater risk. Factors such as long working hours, high-pressure environments, and irregular meal patterns contribute to these metabolic abnormalities (Wang et al., 2020; Kayat et al., 2021).

Assessing the prevalence of occupational stress, anxiety, depression, and metabolic syndrome among theatre personnel in Ekiti State is essential for identifying the extent of the issue and formulating interventions. Olayinka et al. (2021) found that 66.7% of theatre personnel experienced moderate to severe occupational stress, 56.7% reported moderate to severe anxiety, and 31.7% suffered from moderate to severe depression. Sources of stress in theatre environments include long working hours, high workloads, emergency cases, unpredictable schedules, and work-family conflicts (Olatona et al., 2021; Vishwanathan et al., 2020). Exposure to high-risk situations and prolonged concentration requirements further exacerbate stress levels (Olatona, 2021). Additionally, work demands and low social support significantly predict anxiety and depression among theatre personnel (Ajayi et al., 2020).

Coping strategies play a crucial role in managing occupational stress. Zucca et al. (2021) define coping as an individual's approach to handling stressors while maintaining emotional equilibrium. Problem-focused coping strategies, which involve actively addressing stressors, have been found to reduce stress more effectively than emotion-focused coping, which primarily involves managing emotional reactions (Okechukwu et al., 2021). Occupational stress also impacts productivity, job satisfaction, and health. Akpor et al. (2023) found that stress negatively affects work quality, leading to reduced efficiency, increased workplace accidents, and frequent

health complaints. Ajayi et al. (2020) noted that occupational stress impairs both professional and personal functioning, increasing the risk of cardiovascular disease, stroke, and type 2 diabetes. Additionally, research indicates that the liver, cardiovascular system, and pancreas are particularly vulnerable to stress-induced damage (Ajayi et al., 2020; Tariq et al., 2016).

This study is crucial in addressing the existing knowledge gap regarding the correlation between occupational stress, anxiety, depression, and metabolic syndrome among theatre personnel. It will assess these factors in selected healthcare facilities in Ekiti State, providing insights for targeted interventions and improved well-being among healthcare workers. This study aims to determine the factors associated with occupational stress, anxiety, and depression among operating theatre personnel. It seeks to ascertain the contributors to metabolic syndrome, identify sources and coping strategies for occupational stress, and examine its consequences on quality of life. Additionally, the study explores the effects of occupational stress on participants' caring behaviour, providing insights into the broader impact on healthcare delivery.

Methodology

This study is a seven-year systematic review assessing occupational stress, anxiety, depression, and metabolic syndrome among theatre personnel in Ekiti State. Conducted between 2016 and 2022, it adheres to the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocol (PRISMA) (Liberati et al., 2009). The review protocol was registered on PROSPERO under registration number 322965, ensuring a structured approach to screening, inclusion, and exclusion criteria. The checklist guiding this review comprises four key components: the study's background (literature review, research questions, and objectives), methodology (quality criteria and data synthesis), results (study characteristics and flow), and discussion. Data extracted from each study included authorship, publication details, study location, participant demographics, objectives, methodology, and key findings. The results were synthesized narratively and presented in a table.

The data search was conducted using predefined selection criteria, focusing on studies published in English between 2016 and 2022 in peer-reviewed journals. These studies employed qualitative, quantitative, or mixed-method approaches to assess the prevalence, predictors, and impact of occupational stress, anxiety, depression, metabolic syndrome, and coping strategies among theatre personnel. Electronic databases such as Web of Science, Google Scholar, PubMed, Medline, and EMBASE were searched comprehensively, while additional sources were identified through reference scanning of selected articles. The search strategy involved MeSH terms and specific keywords related to occupational stress, anxiety, depression, metabolic syndrome, and coping strategies, ensuring a focused and relevant literature selection.

The inclusion criteria required empirical studies reporting on occupational stress, anxiety, depression, and metabolic syndrome among theatre personnel in tertiary healthcare institutions in Ekiti State. Articles were limited to publications in English between 2016 and 2022, incorporating qualitative, quantitative, or mixed-method research designs. Qualitative studies included those employing focus group discussions and in-depth interviews, while quantitative studies were restricted to descriptive research designs. Excluded from the review were case reports, letters to the editor, non-English publications, studies on irrelevant personnel, and patient-focused articles. The screening process involved title and abstract reviews, ensuring alignment with the inclusion and exclusion criteria, followed by grouping key findings based on common themes.

Quality assessment of selected studies was performed using the Critical Appraisal Skills Programme (CASP) checklist, evaluating methodological rigor across study design, sampling methods, participant recruitment, data analysis, and instrumentation. Data extraction was systematically recorded using Microsoft Excel, with headings such as author, publication year, study setting, location, objectives, sample size, research design, and key findings. The lead reviewer conducted data screening and quality assessments, while a second reviewer cross-checked extracted data, resolving inconsistencies with a third author. The extracted data underwent methodological scrutiny to ensure alignment with the study's research objectives. Findings were synthesized narratively and presented in a structured results table and discussion

Following the selection of eligible studies, the articles that met the selection criteria were also screened using PRISMA-P guidelines and SPIDER framework for systematic review was further used inclusion criteria based on the following concepts; sample (S), phenomenon of interest (PI), Design (D), Evaluation (E) and Research Type (R).

Table 1: Summary of Systematic Review

References	Counntry/Setting	Aim (Objective)	Methods	Sample	Findings
1) Yosef et al., 2022	North west Ethiopian Universities hospital	Determine the prevalence and factors associated with occupational stress among operating room clinicians	Cross sectional study	388 operation room clinicians.	The prevalence of occupational stress was 78.4% . Rotating work shifts (AOR:4.0,CL: 1.7 – 9.7),working more than 80 hours per week (AOR: 3.3,Cl:1.5-3.8), being an anaesthetist (AOR: 4.1,Cl:1.7 – 10.0), and being a nurse (AOR:4.0,Cl: 1.7 -9.7) were found significantly associated with occupational stress.
2). Falade et-al (2022)	Ekiti state, Nigeria.	To assess the prevalence and factors associated with anxiety and depression among essential workers during the COVID-19 pandemic and lockdown	A cross-sectional study	A total of 588 essential workers were sampled. Online socio-demographic variables and the Hospital Anxiety and Depression Scale, a 14 item self-reported questionnaire were used.	The prevalence of anxiety and depression among the respondents was 93.4% (CI = 91.2–95.2) and 64.3% (CI = 60.4–68.4) respectively. Among the health workers, the prevalence of anxiety and depression were 96.5% (CI =94.8–98.1) and 66.5% (CI = 60.5–69.8) respectively while the prevalence of anxiety and depressive symptoms among non- health workers were 84.6% (CI = 78.7–90.1) and 61.5% (CI = 54.2–69.4) respectively.
3) Shafei et al., 2019	A Teaching hospital in North Eastern	Determine the prevalence of metabolic	Cross sectional study	404 female nurses	The prevalence of metabolic syndrome was 24.3%. There was a high prevalence of

	state of Malaysia.	syndrome among female nursing personnel and its associated factors.			metabolic syndrome among nurses working In a Teaching hospital in North eastern state of Malaysia. Occupational factors such as total duration of employment and one way commuting time to work are associated with metabolic syndrome.
4) Vizmaos et al., 2019	Latin America	To assess the overall prevalence of metabolic syndrome and its components among health professionals and students from five Latin American countries.	Cross sectional multicenter study	1,032 volunteers.Mexico = 316,Colombia =285 Brazil=223, Paraguay=132 Argentina=76	Majority (59,3) presented at least one MS component mainly abdominal obesity and low HDL and HDL-C levels. MS components were positively associated with being overweight or obese
5) Bolade et-al (2021)	Ekiti state, Nigeria.	**To** determine the association between metabolic syndrome and healthcare work status in Ekiti State, Nigeria.	A cross-sectional study	105 healthcare workers and 143 non-healthcare workers	The prevalence of metabolic syndrome was similar in both groups (HCWs-29.5% vs non-HCWs- 28.0%, p-value=0.789); overall prevalence was 28.6%. Abdominal obesity, elevated total cholesterol and elevated LDL-cholesterol occurred more frequently in HCWs than in non-HCWs: (68.6% vs 55.2%, p-value=0.034; 65.7% vs 39.2%, p-value= < 0.001 and 50.5 vs 28.7%; p-value < 0.001) respectively. Female sex (aOR: 3.67, 95% CI: 1.74-7.45; p < 0.001) and obesity (aOR: 4.39, 95% CI: 2.31-8.37; p < 0.001) were associated with metabolic syndrome. A similar prevalence of metabolic syndrome was observed in the healthcare workers and the non- healthcare workers.
6) Oyediran and faremi (2022)	Ogun State, Nigeria	assessed the influence of occupational stress on perceived quality of life among clinical	Cross sectional descriptive research design	**425** clinical nurses	Findings revealed that the mean age of the respondents is 36.37±8.90 years and majority of the respondents were between 30-49 years. Almost half of the respondents (48.0%) reported

		nurses in selected hospitals.			high occupational stress while 44.2% and 7.8% reported low & fair occupational stress respectively. High workload (83.9%), long hours of night shift (71.1%), lack of resources and equipment (67.8%), frequency night shift (67.5%), emotional load of dealing with aggressive and demanding patients (62.6%), poor salary (61.6%), and prolong standing with no time for break (58.5%) are factors responsible for stress among nurses.
7) Bundi et al., 2022	Jaramogi oginga odinga teaching and referral hospital, Kisumu county, Kenya.	To assess the health care providers psychological responses and related demographic and socioeconomic factors during the covid 19 pandemic	Descriptiv e cross sectional study.	Stratified sampling method in the selection of 202 health care providers	There was a relatively high prevalence of anxiety and depression among JOOTRH health care providers during the pandemic. It was revealed that age, living income, living with partner and children, living with parent and employment terms were related with symptoms of anxiety. Concerning depressive symptoms those living with someone else and having a chronic medical condition were related with depressive symptoms.
8) Koksal et al., 2020	Operating theatre in various health care institutions in Turkey.	To examine the anxiety and depression levels and related factors among health care professionals working in operating theatre during the corona virus disease 2019 pandemic.	Online collection of data using a survey monkey questionna ire	702 health care professionals working in operating theatre.	The study showed that anxiety and depression symptoms were high among health care professionals working in operating theatres.
9) Wang et al., 2020	Shandong hospital	Explore the relationship between occupational stress and metabolic syndrome among operating room nurses.	Cross sectional study	179 nurses	The overall occupational stress level of nurses in operating room was significantly lower than the norm score compared with non – MS group. The overall occupational stress level, work nature, workload and patient related factors in MS group were

					significantly higher and the difference were statistically significant.. The prevalence of abdominal obesity ,hypertriglyceridemia, hyperglycemia and hypertension were significantly different among the groups with different occupational stress levels . It was concluded that occupational stress level of nurses in operating room is related to the prevalence of metabolic syndrome (MS).
10) Anigbogu et al.,(2016	Nnamdi Azikwe university teaching hospital, Anambra, state, Nigeria	Investigate the sources, patterns and coping strategies for occupational stress among nurses.	Cross sectional descriptive survey.	234 nurses	Major sources of occupational stress include poor problem solving system,(52.99%), excessive workload (51,28%) and long hours of work (49.54%). Type of occupational stress experienced by nurses include task design related stress (52.99%), work role stress (47.01%), physical violence and harassment (45.72%) and psychological stress (42.73%). The common coping strategies adopted by nurses include, ventilation of feelings (47.01%, effective time management and avoidance of unnecessary stress.
11) Michalak et al., 2022	Faculty of health sciences medical university of Wroclaw, Poland.	To Determine the level of stress and coping strategies among operating theatre staff.	Cross sectional study	100 operating theatre employees were surveyed.	The highest level of stress were mainly experienced by young women not in a relationship with short working experience. Almost half of the subjects (47%) reported high level of stress and 35 subjects (35%) reported medium level of stress. The most common stress coping strategies used to manage were: active coping, planning, positive reevaluation, acceptance and seeking emotional support. 41% of the respondents demonstrated a type D personality. Negative emotionality was strongly indicated than social inhibition.
12)	Benin city,	Assess the	Descriptiv	238 medical	The prevalence of occupational

Omowhakpor et al, 2018	Nigeria	prevalence sources and coping strategy among medical doctors in a tertiary health faculty in benin city, edo state.	e cross-sectional design	doctors-2 stages sampling technique	stress was 50.78, the main occupational stressors mentioned by respondent were workload (94.7) sleep deprivation (89.5%) and in adequency of resources (89.1), occupational coping strategy frequently used by the respondents were priortizing and solving problem accordingly, reorganizing work and planning ahead.
13) Sarafis et al., 2016	Greece (public and private hospital	Investigate and explore the correlation amidst occupational stress, caring behaviors and their quality of life in association to health.	Correlational study	246 nurses	A significant negative correlation was observed amidst total stress. Conflicts with co workers was revealed as an independent predicting factor for affirmation of human presence, professional knowledge and skills and patient respectfulness dimensions, conflicts with doctors for respect for patient while conflicts with supervisors and uncertainty concerning treatment dimensions were an independent predictor for positive connectedness. Discrimination stress factor was revealed as an independent predictor of quality of life related to physical health while stress resulting from conflicts with supervisors was independently associated with mental health.
14) Faremi et al., 2019	two selected hospitals in Southwestern Nigeria	Assessment of frequency of stressful event among nurses and how stressful they perceived those events to be.	Descriptive design	183 nurses	Frequently stressful aspect of nurses work include inadequate staff to cover ward workload, lack of drugs and equipment required for nursing care.
15) Oshifo ,2017	selected tertiary hospital, Ibadan, Oyo state, Nigeria	Determine and compare job stress and psychological health of female doctors and nurses/ midwives .	Comparative cross sectional study.	274 female nurses/midwives and 236 doctors	Evidence showed that female health workers bear the brunt of negative effect of job stress as a result of dual roles of child rearing and secular work. There is still lack of awareness of job stress as a significant social

					problem in our environment and its effect on the psychological health
16) Soltanmoradi et al., 2017	Hospitals affliated to universities of medical sciences in Kerman, Iran.	Determine the sources of occupational stress among operating room nurses.	Cross sectional study	250 operating room nurses with at least one year of work experience subjects were selected using Randomized cluster sampling.	Operating room nurses rated situations of the" death and dying" subscale as the most stressful, whereas situations of discrimination were described as less stressful. Uncertainty concerning treatment was significantly affected by gender ; women had higher scores in this subscale (p=0.019). Moreover, general operating room nurses had significantly higher mean scores regarding the perception of the stressfulness of inadequate preparation, conflict with physicians and discrimination subscales.
17) Adekunle and Juliet 2023	Southeast Nigeria	To investigate the psychological impact of occupation stress of workload on job satisfaction among university staff in Ekiti state university	Descriptiv e survey	350 respondents through a Simple random sampling technique	Revealed that occupational stress and workload are major drivers of job satisfaction, the most common psychological impact of occupational stress identified by the study is continuous headache, apettite loss, lack of energy, anxiety and depression. The study further found a negative relationship between stress related to working conditions and job satisfactions.
18) Gopalan, et-al (2021)	University College Hospital (UCH), Ibadan, Nigeria	Assess the level of occupational stress experienced by doctors and impact on their quality of life	Cross-sectional method	**232** eligible and consenting resident doctors	The result showed that 144 (62.1%) of the resident doctors experienced workplace stress and 108 (46.6%) resident doctors perceived their health as poor. Workplace stress, years in residency program, designation, and work hours on least busy day at work were all significantly associated with perceived health status of the resident doctors, however, only workplace stress could independently predict poor perceived health status of the resident doctors.

Results

Characteristics of the study

Out of the 18 articles reviewed, seventeen were quantitative studies while only one was qualitative using cross sectional design. The study aim, context, methodology and findings are summarized in Table 1. Majority of the studies (90%) were carried out among healthcare professionals while the minority (10%) were examined among non healthcare professionals. Nine studies were conducted in Nigeria while 9 were conducted in foreign countries. Seven studies examined the prevalence and factors associated with occupational stress, anxiety, and depression . Four studies examined prevalence of metabolic syndrome and its associated factors and three studies examined both prevalence and coping strategies for occupational stress. One study examined the psychological impact of occupational stress among university staff while three studies assessed the prevalence and factors associated with anxiety and depression during covid 19- pandemic.

Prevalence of occupational stress and factors associated with it

Yosef et al., 2022. found a high (78%) prevalence of occupational stress among the operating theatre personnel. Prolong working hours, rotating shift, being an anesthetist and nurse were found significantly associated with occupational stress. This is in agreement with studies by Oyediran and Faremi 2022 who found almost half (48%) of the respondents having high occupational stress and 44 .2% having high occupational stress. Sources of the stress were found to be high workload, long hours, lack of resources and equipment, prolong standing with no time for break and emotional load of dealing with aggressive and demanding patients .Others were poor salary, physical violence and harassment, emotional load of dealing with aggressive and demanding patients.

Prevalence and factors associated with anxiety and depression during covid – 19 pandemic

Falade et al., 2022 found a very high (96.5%) prevalence of anxiety and depression among the health workers while the symptoms among non health workers were 84.6%. This is in line with the study with Koksal et al.,2020 who found higher prevalence of anxiety and depression symptoms among health care professionals working in operating theatres. The psychological responses and related demographic and socio economic factors during covid -19 pandemic were also assessed by Bundi et al., 2022. Result also showed high prevalence of anxiety and depression among JOOTRH healthcare professionals. Associated factors of anxiety and depression were :age, living income, employment terms, living with partner, parent, children and having a chronic medical condition.

Relationship between occupational stress and metabolic syndrome

The relationship between occupational stress and metabolic syndrome were explored among operating theatre personnel by Wang et al., 2020. Result showed that the overall occupational stress level, work nature, workload and patient related factors in metabolic syndrome group were significantly higher and the difference were statistically significant. The prevalence of abdominal obesity, hypertriglyceridemia, hyperglycemia and hypertension were also higher. It was

concluded that occupational stress level of nurses in operating room is related to the prevalence of metabolic syndrome. The findings of Vizmaos et al., on the assessment of overall prevalence of metabolic syndrome and its components among healthcare professionals and students from five Latin American countries revealed that Majority (59.3%) presented at least one Metabolic syndrome component majorly, abdominal obesity, low HDL and HDL-C levels. Metabolic syndrome (MS) components were positively associated with being over weight or obese. This study agrees with the findings of Bolade et al., 2021 who discovered high prevalence of metabolic syndrome among both healthcare and non healthcare workers.

Sources and coping strategies for occupational stress

The level of stress and coping strategies among operating theatre personnel were assessed by Michalac et al., 2022. 100 operating theatre were surveyed, result found that almost half of the subjects (47%) reported high level of stress and 35% reported medium level of stress. The most common coping strategies used to manage stress were active coping, planning, positive reevaluation, acceptance and seeking emotional support. The assessment of Omowhakpor et al., 2018 on the prevalence, sources and coping strategy among medical doctors in a Tertiary health faculty in Edo State revealed 50.7%. Occupational stressors mentioned by the respondents were workload, inadequacy of resources and sleep deprivation. Coping strategy frequently used by the respondents were prioritizing and solving problem accordingly, reorganizing work and planning ahead. Anigbogu et al., 2016 also identified the similar sources of occupational stress to the above, but the common coping strategy adopted are ventilation of feelings, effective time planning and avoidance of unnecessary stress.

Impact of occupational stress on quality of life

Study by Adekunle and Juliet 2023 investigated the psychological impact of occupational stress of workload on job satisfaction among university staff in Ekiti State University. The result revealed that the most common psychological impact of occupational stress identified by the study is continuous headache, appetite loss, lack of energy, anxiety and depression. The study on the assessment of the level of occupational stress experienced by doctors and impact on their quality life revealed that more than half (62.1%) of the resident doctors experienced stress and 46.6% resident doctors perceived their health as poor. workplace stress, years in residency program, designation and work hours were all significantly associated with perceived health status of the resident doctors (Gopalan et al., 2021).

Implications of the Findings

The implications of this study for nursing practice highlight the importance of advocating for measures that promote both physical and mental well-being among healthcare professionals. Nurses should actively provide emotional support to colleagues by being available to offer guidance and encouragement when needed. Additionally, fostering the use of employee assistance programs or counselling services can help theatre personnel cope with stress, anxiety, and depression more effectively. Furthermore, nursing education should emphasise the significance of self-care and equip students with stress and anxiety management techniques, along with coping strategies, to prepare them for the demands of the profession.

In nursing research, this study underscores the need for developing evidence-based interventions aimed at preventing and mitigating occupational stress, anxiety, depression, and metabolic

syndrome among healthcare workers. Research should focus on identifying risk factors and evaluating the effectiveness of various interventions, with findings disseminated to inform best practices in the field. Additionally, implementing policies and workplace practices that prioritise the physical and mental well-being of healthcare professionals is essential in fostering a supportive and resilient workforce.

Gaps Identified

A significant gap identified in the literature is the lack of studies assessing occupational stress, anxiety, depression, and metabolic syndrome among theatre personnel in Ekiti State. Additionally, research on stress management interventions targeting theatre personnel in tertiary institutions within Ekiti State and Nigeria remains scarce, highlighting the need for further investigation in this area.

Conclusion

This study showed that healthcare workers still experience moderate to high level of occupational stress especially the operating theatre personnel. Various contributing factors are high workload, long hours, lack of resources and equipment, prolong standing with no time for break and emotional load of dealing with aggressive and demanding patients .Others were poor salary, physical violence and harassment, emotional load of dealing with aggressive and demanding patients. In addition, the anxiety and depressive level of operating theatre personnel tends to increase during covid-19 pandemic and when there is lack of social support. Nearly all the studies revealed high prevalence or at least one component of metabolic syndrome among the respondents. Moreover, the most common coping strategies identified were active coping, planning, acceptance and seeking emotional support, prioritizing and solving problem accordingly and reorganizing work . Common impact of occupational stress identified by the study is health complaints such as continuous headache, appetite loss, lack of energy, anxiety and depression which leads to low productivity.

Recommendations

To mitigate occupational stress, anxiety, and depression among theatre personnel, it is essential to ensure an adequate number of staff to effectively manage workload and prevent burnout. Providing education and training on stress management, coping strategies, and self-care techniques can enhance resilience and mental well-being. Additionally, promoting healthy behaviours such as regular exercise, balanced nutrition, and smoking cessation can contribute to overall physical and mental health. Regular medical check-ups should be conducted to assess the well-being of theatre personnel and identify potential health concerns early. Furthermore, fostering a supportive and respectful work environment is crucial in reducing workplace stress and improving job satisfaction.

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