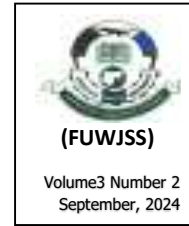


**DETERMINANTS OF OCCUPATIONAL  
STRESS AMONG HEALTH PROFESSIONALS  
DURING COVID-19 PANDEMIC IN BENIN  
CITY, NIGERIA**



**MUSTAFA-SHAIBU, Maryam**

Department of Sociology and Anthropology  
University of Benin, Benin City, Edo State, Nigeria  
*maryam.mustafa-shaibu@uniben.edu; maryamustafa.m@gmail.com*

**Abstract**

Occupational stress is a global health phenomenon that affects all workers, particularly health professionals. The overarching purpose of this research was to ascertain the various determinants of occupational stress among health professionals during the COVID-19 pandemic in Benin City. The study adopted the survey design within the context of the one-time cross-sectional design and the target groups were health professionals, male and female doctors and nurses in the COVID-19-approved facilities in Benin City who had worked for at least two years before the COVID era and had sufficient time to comprehend the concerns under investigation. The Multi-stage sampling technique was adopted. The estimated sample size was 1,141 healthcare workers using Krejcie and Morgan's formula. Analyses were based on 1056 administered questionnaires that were successfully retrieved. The study's results showed that health professionals experienced occupational stress during the COVID-19 pandemic. Importantly, individual factors such as gender, age and marital status of health professionals were determinants of occupational stress among health professionals in COVID-19-approved centres in Benin-city. Also, apart from these socio-economic determinants, fear and being in contact with COVID-19 patients were contributing factors to occupational stress during the pandemic. The study concludes that health professionals in Benin City experienced occupational stress during the COVID-19 pandemic. Thus, the study recommends that health professionals must prioritize their psychological wellbeing during pandemics.

**Keywords:** Occupational stress, health professionals, psychological wellbeing, COVID-19

## Introduction

Occupational stress is a global health phenomenon that affects all workers, particularly health professionals (Girma, Nigussie, Molla, & Mareg, 2021). Prior to the nineteenth century, there was little stress in the healthcare industry globally, and occupational stress has increased at an alarming rate during the last 50 years (Capasso, Zurlo & Smith 2016) Dacosta & Pinto (2017) assert that it is a natural phenomenon that occurs in all walks of life, and that it may have a negative impact on a person's quality of life. A worker's physical and emotional responses to a job's needs that are not in accordance with their skills, resources or expectations are referred to as occupational stress (Mohajan, 2012). A person's physical or mental state might be altered as a result of occupational stress, which is described as events at work that are viewed as a danger or a challenging by the employee (Hashmi, 2015). Stress in the medical field has always been a hot topic. One of the most demanding vocations has been classified as healthcare. According to several studies, medical professionals' physical and psychological well-being is negatively impacted by stress. Healthcare professionals have long been recognised to face significant stress and are considered to be a highly stressful group, with greater rates of psychological discomfort than many other workers in many industries. (Lua & Imilia, 2011; Kakunje, 2011).

Medical specialists are seeing an increase in stress and stress-related disorders. Doctors' well-being and patient treatment quality are at stake here. While some work-related stress is normal, excessive stress can negatively affect one's health. Within their clinical practice, all health professionals experience several stressors, including time constraints, workload, multiple tasks, and emotional concerns (Kakunje, 2011). Occupational stress can negatively impact health workers' physical and emotional wellness, which can lead to exhaustion, and even in certain circumstances, Trauma-inducing symptoms. The outcomes may have a detrimental impact on the health and performance of healthcare employees. A variety of variables contribute to a heightened state of anxiety by medical professionals. Research has found that "career and reward potential" were among the most important determinants. Researchers found that young doctors often staged strikes to protest against the lack of service, job stability, and safety. poor compensation in their profession. Due to inadequate planning and governance, there aren't even enough openings in public sector hospitals to accommodate all the residency trainees on the payroll. In order to complete their

residency training, they are forced to labour without compensation. Not only would the quality of medical treatment suffer, but it is possible that doctors may leave the field if they have few chances for advancement and are paid insufficiently. The inability of the government to deliver on stated promises, such as work structures, employment chances and incentive systems, is causing the present unhappiness among healthcare professionals.

Doctors' well-being and patient care are both negatively impacted by extended workdays, which contribute to occupational stress. Despite the fact that physicians' work schedules are not controlled, many doctors work longer than their allocated hours. Working hours have long been a matter of discussion among healthcare professionals and patients alike because of the potential damage sleep deprivation may inflict both . Many physicians took the government and hospitals to court to get them to regulate or manage their illegal laws and regulations relating to doctors' working hours. There are several factors that contribute to stress in the workplace, such as a lack of pay, a perception of being undervalued by the employer or a patient's compliance with COVID-19 guidelines, a lack of suitable office facilities and time pressure and overtime labour.

According to studies, up to one-third of workers throughout the world suffer from some kind of work-related stress (Salilih, & Abajobir, 2014). Occupational stress affects many professions, but healthcare workers are particularly vulnerable because of the unique nature of their work environment (Pisljar Lippe, & Dulk, 2011). This may have a detrimental influence on patient treatment, as well as a substantial impact on health issues that can cause employees to leave their present job and profession, disrupt their relationships with their colleagues (Omar, 2003). According to several researches, workplace stress has been linked to various health and performance problems in recent years.

Healthcare employees in Bosnia and Herzegovina are exposed to a broad variety of occupational stressors, according to a research by Trifunovic, Jatic, and Kulna (2017). Study participants' mental health was negatively affected by pressures linked to work structure, finances, and communication. The research recommends a set of remedies for all health care providers, although specific stresses were shown to be more frequent in study groups, leading to a separate set of interventions more in line with the hierarchy of care. Physicians who work in palliative care are more likely to suffer from stress and mental health difficulties than other physicians. Similar findings were found in a research conducted in the UK (World Health Organization, 2013).

Stress levels among primary and secondary health practitioners differed considerably due to job-related characteristics such as on-call duty shifts, an uncomfortable work environment, and an assessment of administrative task overload. Nurses in primary and secondary care in Saudi Arabia were found to have a satisfaction rating of 45.5 percent, whereas the satisfaction rating in primary care was 43.1 percent and the satisfaction rating in secondary care was 46.2 percent. Those who work in public institutions with limited financial, material, and physical resources such as doctors experience increased levels of stress as a result of budgetary constraints. Musa, Pendi, Hashemi, Warbasse, Kouyoumjian, Yousif, Blodget, Stevens, Aly & Baron, (2020) found that the majority of healthcare employees found their jobs very difficult and that their stress levels were quite high. Assessing the factors that contribute to stress in the workplace is more crucial than ever before. Further, research has shown that stressed and burned-out health professionals are more likely to have job dissatisfaction, absences from work, increased turnover, and early retirement (Salilih & Abajobir, 2014; Portero de la Cruz, Cebrino, Herruzo, & Vaquero-Abellán, 2020). Evidence-based approaches are hampered by the fact that study results vary and are not definitive throughout the nation. Therefore, this study investigates the determinants of occupational stress among health professionals during the COVID-19 Pandemic in Benin City

### **Theoretical Framework**

Palmer, Cooper, and Thomas (2003) proposed the Allostatic model of stress as a central theory appropriate for understanding the relationship between main stress hazards, symptoms and outcomes of stress and characterizing individuals' occupational stress events and mental health. Stress exposure was associated with worse health effects, according to the notion (Ganster & Rosen, 2013). Allostasis is the process of altering a person's physical systems to cope with actual, illusory, or expected threats to their homeostatic (stable) physiological systems. According to this notion, chronic over stimulation causes dysregulation, which results in poor tertiary health consequences. This theory underpins the long-term effects of occupational stress and its symptoms, causes, and individual traits that are linked to it. This theory also has a relationship with the review of literature discussed and applies to stress and mental disorders during outbreaks of diseases. It is associated with exposure to particular work-related stress scenarios and its consequences. In light of this, the medical professionals, for instance, are the warriors fighting COVID-19;

working out tirelessly and attending to patients with or without PPE. Just like other workers, health professionals sometimes have fear, feel anxious and feel pressured by stress which may result in illness; such as Neurotic disorders- depression, anxiety, sleep disorders and even loss of interest in the job: in other words, prolonged overstimulation of occupational stress may lead to serious health outcomes.

### **Research Methodology**

This study which was conducted in Benin City of Edo State, located at the South-south region of Nigeria adopted the cross-sectional survey research design. It is also known as a one-shot or status design. The one-shot cross-sectional design was used for this study, as it ensured the designing of suitable pattern of gaining foundational information on a particular phenomenon and also make for the provision of an opportunity to spell out *nouveau* concepts and espouse existing ones. The study population constituted Doctors and Nurses in the COVID-19-approved centres in Benin City. The total population of distribution of the Population of doctors and Nurses in the three (3) COVID 19 approved centres is as shown below; University Benin Teaching Hospital with a total population of 1509, Stella Obasanjo Hospital 293; Edo Specialist Hospital 156. Hence, the inclusion and exclusion criteria for the study were that Doctors and Nurses who have been employed for a period not less than two years and before the COVID-19 era, long enough to understand the issues under examination while other health professionals were excluded, the likes of pharmacists, chew, laboratories practitioners among others were not part of the population of this study. This is because other health professionals in this category do not necessarily deal with patients long enough as doctors and nurses care for patient safety. The population of this study (1,958 to the nearest value) falls within the 2000 margin in the Krejcie and Morgan table value, and on a 2.5% margin of error, the sample size for this study is 1141 (One thousand one hundred and forty-one). A Multi-stage sampling technique was adopted using the sampling frame generated from all three institutions namely; University of Benin Teaching Hospital (UBTH), Stella Obasanjo Hospital (SOH) and Edo Specialist Hospital (ESH).

### **Background Characteristics of the Respondents**

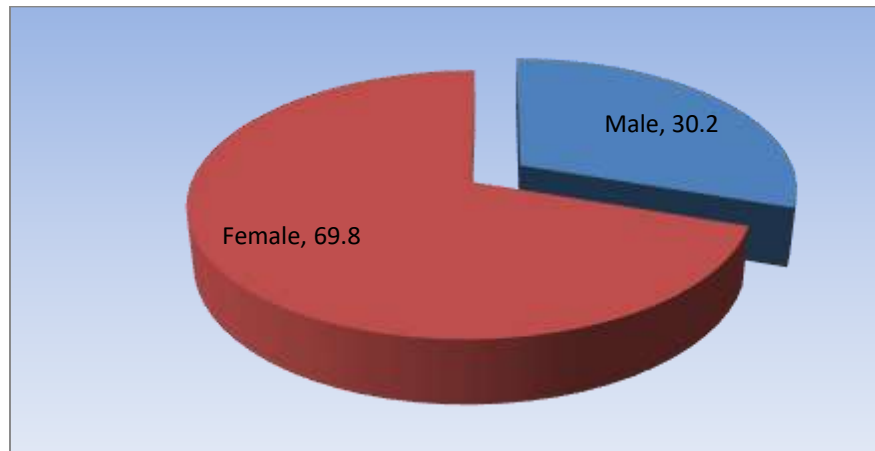
The presentation of data has been thematically arranged according to the study objectives. A total of 1141 copies of the questionnaire were administered to doctors and Nurses in COVID-19-approved centres in

Benin City. However, 1056 copies were retrieved and considered valid for analysis, making it a 92.5% retrieval rate. In most cases, a 50% or greater response rate is deemed appropriate in surveys (Baruch & Holtom, 2008).

**Table 1 Socio-Economic Characteristics of respondents (n= 1056)**

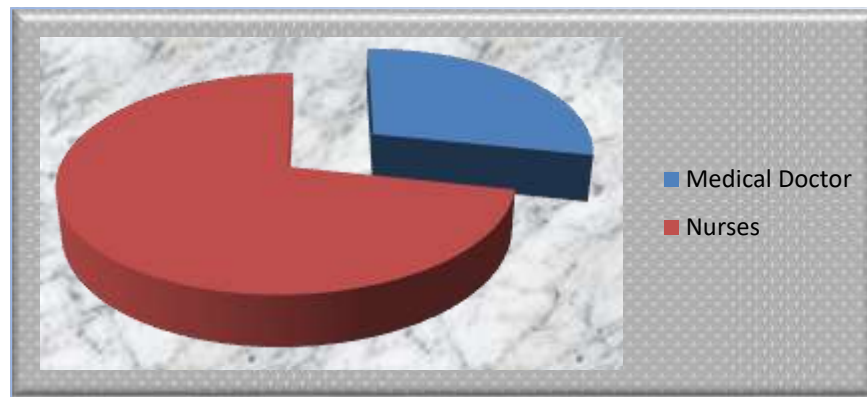
Variables		Frequency	Percent
What is your sex?	Male	319	30.2
	Female	737	69.8
What is your age interval	18-30 years	225	21.3
	31-43 years	584	55.3
	44-56 years	244	23.1
	57 years and above	3	.3
What is your marital status	Married	715	67.7
	Never married	136	12.9
	Divorced	78	7.4
	Others	127	12.0
What is your highest educational qualification	BSc/MBBS/ RN	945	89.5
	Masters	103	9.8
	PhD	8	.8
What is your profession	Medical Doctor	299	28.3
	Nurses	757	71.7
What is your religion	Christianity	1040	98.5
	Islam	9	.9
	African tradition	7	.7

**Source: Researchers' Fieldwork, 2022**



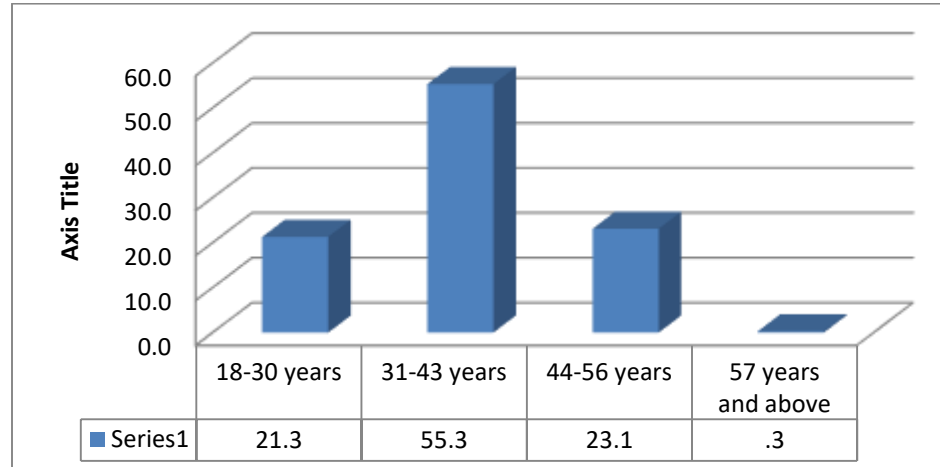
**Figure 1: A pie chart showing the Gender distribution of respondents**

This research takes gender into account because it is an independent variable that provides a solid foundation for gauging other independent factors related to the study's aims. The gender of the respondent is an essential socio-economic characteristic that might impact respondents' dispositions and, in this instance, may be a factor of occupational stress and neurotic disorders among health professionals in Benin -city during the COVID-19 pandemic. Table 4.1 and Figure 4.1 show the results of an analysis of the respondents' genders. The percentage of female respondents (69.8%) is much higher than that of male respondents (30.2%). This indicates that women predominated in COVID-19-approved institutions in Benin City, Nigeria, indicating the existence of gender disparity. Alternatively, there were more female nurses generally. Gender disparity is not new in the field of nursing. Traditionally, nurses have been women (Kouta & Kaite, 2011; Acosta-Ramos et al., 2021).



**Figure 2: A bar chart showing the Profession of respondents**

Health Professionals have been operationally defined as medical doctors and nurses working in the hospital and COVID-19 approved centres in Benin City. The two primary professions in this study were nursing and Medical doctors. The research, conducted at Sheffield's Northern General Hospital and published in *The Lancet*, revealed that nurses were more accurate in documenting patients' medical histories and that their patients required less follow-up counselling. In Table 4.1 and Figure 4.2, nurses made up a more significant percentage than doctors (71.7 percent compared to 28.3 percent). Each patient received more attention from the nurses than from doctors (Browne, 1999). Therefore, it could be implied that more respondents work efficiently and make fewer errors at COVID-19-approved centres. They are also likely to be prone to more occupational stress.



**Figure 3: A bar chart showing the Age distribution of respondents**

Age is another essential variable in this study. Researchers commonly use people's ages as a stand-in for other factors, such as their cognitive and physical capacities, their capacity to take on specific social and occupational roles, and their chance of developing a particular disorder, in this case, neurotic disorder (Cosic & Steuerle, 2018). Age can also predict the possibility of burnout, anxiety and occupational stress. Research shows that older workers report less occupational stress than younger colleagues (Mauno, Minkkinen, Tsupari, Huhtala, & Feldt, 2019). In addition, research indicates that stress may occur later in one's career or that stress is unrelated to age (Merklein, 2014). While only some definitive and comparable studies may produce contradictory findings, some show that younger employees do not feel higher occupational stress than their older colleagues. Further research is required before taking a position.

Among the four age group categorizations used in this study, the 18-30 age group was the lowest in terms of age value, while the 57 and older age groups were the highest. In terms of the percentage composition of the different age groups, the results shown in Table 4.1 and Figure 4.2 indicate that most respondents were in the 31-43-year age range, as they made up more than half of the sample population (55.3 percent). The 44-56 age group had the second-highest proportion at 23,1 percent, followed by the 18-30 age group at 21,3 percent. The age group of 57 and older had the lowest proportion of respondents, with just 0.3% of the total sampled population. This statistic indicates that a cumulative proportion of respondents, representing a majority, are of advanced age. It has been



shown that older nurses and physicians contribute substantially to the medical field (Francis, Chapman, & Drury, 2009). Therefore, the participants in this research contribute considerably to the Health sector.

### **Determinants of occupational stress among health professionals during the COVID-19 Pandemic in Benin City**

The term "occupational stress" refers to a range of adverse reactions in a worker, including physiological, psychological, and behavioural symptoms (Chaudhari, Mazumdar, Motwani & Ramadas, 2018). As a psychiatric condition, occupational stress develops as a sustained reaction to persistent interpersonal pressures in the workplace. It is characterised by emotional tiredness, powerlessness, depersonalisation, perspectives regarding work and life, and diminished personal achievements (Dubale et al., 2019). Exhaustion, burnout, anxiety, and depression are mental and behavioural illnesses linked to workplace stress (Selamu, Thornicroft, Fekadu, & Hanlon, 2017). Professional exhaustion is a worldwide problem (Schaufeli, Leiter, & Maslach, 2010).

Scheiner (1984) was the first to analyse work-related stress in the medical field; he found that nurses were most worried about four things: patient care, making decisions, accepting responsibility, and dealing with change. The physical demands, exposure to human suffering, long hours, limited resources, and interpersonal nature of a nurse's job have all contributed to the profession's stigma. Since the 1980s, the use of technology in the workplace, steadily rising healthcare expenses, and job instability have all contributed to rising stress levels among nurses (Jennings, 2007). Anxiety, impatience, mood swings, melancholy, aches, digestive disturbances, musculoskeletal diseases, and cardiovascular risks are only some of the mental and physical manifestations that job-related stress may cause (Portero de la Cruz, Cebrino, Herruzo, & Vaquero-Abellán, 2020). Everyone is susceptible to occupational stress and burnout, but those in the healthcare industry are especially vulnerable (Salilih & Abajobir, 2014).

Stress in the healthcare industry was discovered to have deleterious effects on health workers' health and resilience to pressures at work. Numerous studies have shown that healthcare and medicine are very demanding professions (Bailey, 1985). Because of this, it is much more difficult to provide high-quality health care and maximize the benefits of health services (Davey et al., 2014). Individuals pay the price in terms of their health, happiness, and work satisfaction; businesses pay the price in

terms of absenteeism and turnover, which may hurt the quality of patient treatment (Lefevor, Boyd-Rogers, Sprague, & Janis, 2019).

Different perspectives on stress have been developed, including its role as a cause, an effect, and a mediator. Different theoretical perspectives have been used to analyze it. For example, Jennings (2008) suggested a physiological evaluation that lends credence to thinking about how stress might lead to health problems. As an alternative, Lazarus & Folkman (1984) promoted a psychological perspective that defined *stress* as "a specific interaction between the individual and the environment that the person judges as straining or surpassing his or her resources and jeopardizing his or her welfare. Stress may have adverse effects, but that is not all it does. Events have significance and are seen as either dangerous or good based on each person's cognitive assessment, perceptions, and interpretations.

Most individuals can handle stress for brief durations, but chronic exposure to stress causes physiological changes. The stress equation is also affected by a person's personality since what is hard on one person might be stimulating to another (Salilih & Abajobir, 2014). Management and administration in the healthcare field should be concerned about the prevalence of stress, coping, and burnout among nurses and doctors (Lefevor, Boyd-Rogers, Sprague, & Janis, 2019). Effective stress management techniques may ameliorate all of these strains.

Healthcare workers (HCWs) in both low- and high-income nations have disproportionately high rates of occupational stress. According to systematic research conducted in the Middle East, 40% and 60% of HCWs suffer from burnout (Selamu, Thornicroft, Fekadu, & Hanlon, 2017). Work overload, negative relationships with coworkers, a top-down management style, poor patient outcomes, and the inevitable passing of patients are just a few of the many causes of stress in the healthcare workforce. Occupational stress among HCWs is a significant problem in Ethiopia's healthcare system since the country's ratio of healthcare workers to population is substantially lower than the World Health Organization (WHO) recommendation. Poor patient outcomes are directly linked to high levels of occupational stress and burnout, affecting the quality of healthcare providers' work (Salilih & Abajobir, 2014).

Assessing the factors that contribute to stress in the workplace is more crucial than ever before. Further, research has shown that stressed and burned-out health professionals are more likely to have job dissatisfaction, absences from work, increased turnover, and early retirement (Salilih & Abajobir, 2014; Portero de la Cruz, Cebrino,

Herruzo, & Vaquero-Abellán, 2020). Evidence-based approaches are hampered by the fact that study results vary and are not definitive throughout the nation. Therefore, this section investigates the determinants of occupational stress among health professionals during the COVID-19 Pandemic in Benin City.

**Table 2: Existence of Occupational Stress and Experiences of Health Professionals during COVID-19 (n= 1056)**

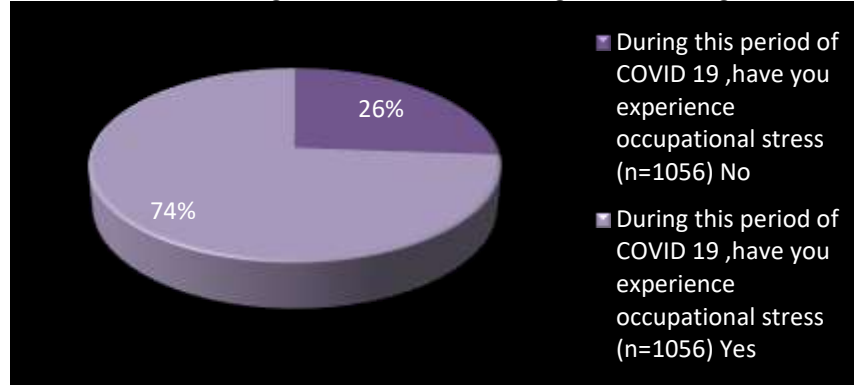
Variables		Frequency	Percent
During this period of COVID-19 ,have you experience occupational stress (n=1056)	No	276	26.1
	Yes	780	73.9
If Yes, describe your experience (n=821)	Long work hours	458	43.4
	Being over- cautious/ careful	48	4.5
	Inadequate working tools and safety gadgets	8	.8
	Attending to many patients/ clients/ Work overload	229	21.7
	Transportation stress	61	5.8
	Hunger and poverty	17	1.6

**Source: Researchers' Fieldwork, 2022**

Due to the widespread effects of the COVID-19 virus, hospitals, doctors, nurses, and other healthcare personnel have all been overwhelmed (Okedirán et al., 2020). In the fight against viral pandemics, health workers have been proven to be active change agents (Belfroid et al., 2017). Health professionals and the general public alike have experienced increased levels of anxiety and hopelessness due to COVID-19 due to the virus's unparalleled media attention (Wong, Pacella-LaBarbara, Ray, Ranney, & Chang, 2020).

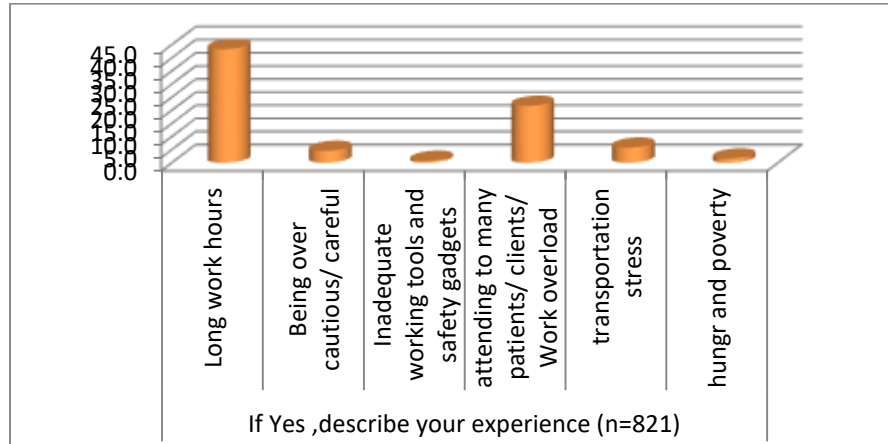
While healthcare providers may have encountered comparable situations in the past, COVID-19 is a novel illness whose idiosyncrasies need investigation via well-planned investigations. Attempts have been made to investigate how health professionals have dealt with COVID-19 management. However, most of these studies have been conducted out in China during the outbreak's first stages (Liu et al., 2020). Accordingly, it is unlikely that health professionals in Nigeria would have similar experiences to those reported in this research regarding caring for people with COVID-19. Knowing the whole range of these professionals' experiences, including potential antecedents, is essential. In order to improve overall productivity during the COVID-19 epidemic and future

pandemics, it will be necessary to gain insight into health experiences and use that knowledge to build stress-management strategies.



**Figure 4.8:** A pie-chart showing responses on the existence of occupational stress among health professionals during the pandemic

First, respondents were asked if they experienced occupational stress during the COVID-19 pandemic in Nigeria. 73.9 percent of respondents claimed they experienced occupational stress during the COVID-19 pandemic, while 26.1 percent felt otherwise. This further confirms Salilih and Abajobir's (2014) study, which found that not everyone experiences "occupational stress." To them, personality also plays a role in the stress equation, as what is stressful for one person may be revitalising for another. Some people can endure stress for short periods, but prolonged stress has adverse physiological effects (Salilih & Abajobir, 2014). This could mean that the 73.9 percent of health professionals who said they experience occupational stress consider stress is not seen by the 26.1 percent who said they do not experience stress. However, all ten interview participants affirmed that they experience occupational stress. Thus, further investigations will reveal the nature of occupational stress respondents encountered.



**Figure 4.9: A bar chart showing occupational stress experienced by respondents**

In an open-ended question, the respondents who affirmed that they did encounter occupational stress were asked to describe their experiences. Their response was coded and grouped into six themes: long work hours, over-cautious/ careful, Inadequate working tools and safety gadgets, attending to many patients/ clients/ Work overload, transportation stress and hunger and poverty. As indicated in Figure 4.9 and Table 4.2, the most prevalent occupational stress respondents reported was long work hours (43.4%), while the least was Inadequate working tools and safety gadgets (0.8%). This finding disagrees with that of Okediran et al. (2020). They found that health workers' access to limited resources constituted occupational stress to them during the pandemic. It is possible that most respondents in the present study did not consider inadequate resources as stress as they may have managed by using the resources at hand. However, more empirical data will be analysed to prove this claim.

**Table 3: Evidence of the presence of occupational stress among health professionals (n= 1056)**

Variables	Frequency	Percent	Mean	St.D	Decision	
Rate burnout during COVID 19	Not at all	125	11.8	2.62	.931	Somewhat
	Somewhat	355	33.6			
	Moderately	368	34.8			
	To a great extent	208	19.7			
	Not at all	98	9.3	3.05	1.047	Moderately
	Somewhat	260	24.6			

rate stress levels	Moderately	190	18.0			
during COVID-19	To a great extent	508	48.1			
During the period of COVID 19 do you feel like your occupation is more tasking	Not at all	259	24.5	2.84	1.269	Somewhat
	Somewhat	169	16.0			
	Moderately	107	10.1			
	To a great extent	521	49.3			

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**Decision rule:** *To a great extent* - 3.50-4.00, *Moderately* - 3.00-3.49, *Somewhat* -2.00-2.99, *Not at all* - 1.00-1.99

Defining occupational stress and its attributes may take time and effort. However, concepts like burnout, long work hours, work overload and work stress have been associated with occupational stress (Acosta-Ramos et al., 2021; Bailey, 1985; Kulkarni, Khasne, Dhakulkar & Mahajan, 2020; Davey et al., 2014). Table 4.3 and Figures 4.10 to 4.13 show this in detail. As shown in Table 4.3, burnout, long work hours, work overload, and work stress are evident as most respondents attested that they faced these forms of occupational stress, although to different degrees.

### Discussion of Results

This study focused on determinants of occupational stress among health professionals during the COVID-19 Pandemic in Benin City. The result from different individual factors such as gender, age, marital status and number of children of health professionals. Gender was a determinant of occupational stress among health professionals in COVID-19-approved centres in Benin-city. This finding aligns with that of D'Ettoire, Pellicano, & Vullo (2019), which revealed that considerably more females than men (18.5 percent vs 9.8 percent,  $p=0.05$ ) were experiencing work-related stress and strain. This study's findings on gender show that traditionally, nurses have been women (Kouta & Kaite, 2011; Acosta-Ramos et al., 2021).

This suggests that there may still be a gender gap in the healthcare industry. The inability to advance in one's career has been identified as a critical cause of stress for women in the workplace, with detrimental effects on mental health, including neurotic disorders and lower job satisfaction. The term "glass ceiling" refers to a "subtle but significant barrier that inhibits women's career development to top management positions in large companies" (D'Ettoire, Pellicano, & Vullo, 2019), and there is evidence that women still confront this issue in the workplace.

Age was also revealed to be a determinant of occupational stress in this study. Older health workers aged 57 years and above were more susceptible to occupational stress than others. In this way, one's age is a factor in the degree to which one experiences stress on the job. Some research suggests that older workers are at a greater risk of experiencing stress on the job (Blazer, Burchett, Service, & George, 1991; Dunkle, Roberts, & Haug, 2001; Rönnlund, ström, Adolfsson, & Carelli, 2018), while other research suggests that younger workers are more stressed (Voki & Bogdani, 2007). Age is a significant predictor of work or occupational stress in some research (Blazer, Burchett, Service, & George, 1991; Wiwanitkit, 2010; Dunkle, Roberts, & Haug, 2001; Rönnlund, ström, Adolfsson, & Carelli, 2018; Voki & Bogdani, 2007; Lee, Joo, & Choi, 2012). Nevertheless, their results are not consistent with one another.

The majority of respondents at COVID-19-approved facilities in Benin City have BSc/MBBS/RN degrees in nursing and medicine. The results showed that 89.5% of respondents had a bachelor's degree or above from an accredited institution, 9.8% held a master's degree, and 0.8% held a doctoral degree. This result demonstrates that all individuals have received enough training to handle their workplace stress and their health-related behaviours. The findings correlate with Cutler & Lleras-Muney, (2010) who theorized that one's health-related activities are affected by their level of education. The level of education one has achieved, as shown by the credibility of their academic credentials, is also considered when defining educational qualification (Leganger & Kraft, 2003). The term "educational qualification" encompasses a wide range of credentials, including but not limited to degrees, diplomas, and professional certificates, earned through full-time, part-time, or private study in either the student's home country or abroad, and administered by school administrators, unique examination bodies, or professional associations (Nwosu, 2020).

Furthermore, marital status and the number of children were also determinants of occupational stress. Health professionals who had encountered occupational stress were either divorced or never married. The minority of those who said they experienced work-related stress were married. This means that marriage has a way of reducing occupational stress.

Apart from the socio-economic variables of the health professionals, fear and being in contact with COVID-19 patients further contributed to occupational stress during the pandemic. Health professionals have little

fear of isolation (2.1%). Unsurprisingly, concern and fear may emerge among healthcare personnel responding to the COVID-19 pandemic (Khanal et al., 2021). Fear can lead to depression and anxiety. Therefore, it was not surprising that some health professionals reported symptoms of depression and anxiety, including frustration. Most health professionals did not report experiencing irritability and anxiety. However, the eating disorder was reported among them.

### **Conclusions and Recommendations**

Having explored the determinant of occupational stress among health professionals during the COVID-19 pandemic in Benin City. It is evidenced that health professionals experienced occupational stress during the COVID-19 pandemic. The result from different individual factors such as gender, age, and marital status of health professional are determinant of occupational stress among health professionals in COVID-19-approved centres in Benin-city. Apart from the socio-economic variables of the health professionals, fear and being in contact with COVID-19 patients were also contributing factors to occupational stress during the pandemic. The finding of the Allostatic Load Model of the Stress Process contributed to the literature by adding new insights that continuous overstimulation due to occupational stress may have negative health consequences especially applies to stress and mental disorders during outbreaks of diseases.

The study recommends that health professionals must prioritise their psychological state. The study also recommends management and governments should take steps to address the widespread impact of diseases such as COVID-19 on the industry's personnel. Government and Healthcare institutions should take the appropriate measures and adjust the working circumstances, create standard facility and a conducive environment to avoid adverse outcomes connected with occupational stressors

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