

Work-Related Stress and Stress-Related Risk Factors Among Nurses in West Africa: A Review



Ayoola Awosika¹ and Adeniyi MJ² *

¹College of Medicine, Ohio State University, USA

²Department of Physiology, Federal University of Health Sciences Otuokpo, Nigeria

Submission: February 14, 2023; **Published:** February 28, 2023

***Corresponding author:** Adeniyi MJ, Stress and Exercise Physiology Unit, Department of Physiology, Federal University of Health Sciences Otuokpo, Nigeria

Abstract

Work-related stress has for many decades remained a major concern Worldwide. In the West Africa region, it is an amplified discussion owing to technological deficit, deficiency of work-relieving physical and social amenities, unemployment and underemployment and corruption. Nurses are health workers involved in the healthcare and management of people. The review was designed to examine various stress-relating risk factors among nurses in West Africa. A literature search was done using Web-based databases like Google Scholar, PubMed, Scopus, and Web of Science. The search was done using several terms and text words. Increased workload, hazard exposure, shortage of staff, poor incentives, poor patient attitude, increased length and frequency of duty, shortage of resources and equipment, work environment, high energy involvement and limited opportunity for professional advancement were risk factors for work-related stress among nurses in West Africa. The most predominant risk factor was increased workload followed by shortage of equipment and resources.

Keywords: Work-related stress; West Africa; Stress-related risk factors; Stress; Nurses

Introduction

Virtually every organization contains a service delivery component. At individual level, personal goals elicit conduct of extra efforts. When demand for service is greater than the natural ability of employees, sensations of physical, psychological, and physico-psychological discomforts ensue and this is known as work-related stress or occupational stress [1,2]. Occupational stress is a form of stress associated to occupations, engagements, and activities. Like in general stress, it represents homeostatic deviation and hence elicits responses such as activation of sympatho-adrenal and hypothalamo-hypophyseal-adrenal axes. Increase in blood pressure, high blood glucose, heart rate, respiratory rate, pupillary dilation and increased cortisol discharge occurs when axes are activated [3]. Moreover, work-related stress leads to burnout, low productivity, absenteeism, accidents, and death [4,5]. Around 1.1 million people were reported to die of job stress and job stress-related diseases [6]. Work-related stress is an avoidable stress. Apart from absenteeism and opting out, barrages of coping strategies avail for managing stress. Pharmacological management requires the use of drugs for the treatments of stress related symptoms. Non-pharmacological coping strategy such as problem-focused strategy has been used for stress management. It primarily aims at solving a problem to change the source of the stress [7].

Apart from problem-focussed strategy, positive attitude is another influential strategy for reducing stress [2,8]. Adaptive stress management involves several strategies like

positive coping; planning; anticipation; positive reframing and instrumental support [9]. Nurses are a group of health workers who are involved in taking care of individuals and the entire community. They are one of the largest care-related health professionals. The continuous, all-round nature of nursing service necessitates a shift working pattern [10,11]. A typical healthcare related nursing job involves physical, mental, and emotional energies. For instance, nurses are bound to be sympathetic and emotional owing to their proximity to patients. However, rather than alleviating stress, uncontrolled emotions about patient could orchestrate or worsen stress. For this reason, there is a standard ratio for nurses and patients [12]. Implementation of nurses and patient's ratio is necessary to reduce work overload and stress. Work-related stress among nurses is high generally. In United Kingdom, 42% of nurses reported to be burn out [10,11]. A study by Anigbogu and Banerjee [13] indicated that prevalence of psychosocial stress among healthcare workers in Nigeria was 61.97% with work overload and poor communication and staff attitude being the two most prevalent risk factors. The aim of the review was to determine the risk factors for work-related stress among nurses in West Africa.

Methodology

A literature search was done using Web-based databases like Google Scholar, Pubmed, Scopus, and Web of Science. The search was done using several terms and text words such as occupational stress, work-related stress, job stress, West Africa,

stress management and nurses. Text words such as job stress in Nigerian nurses, job stress in Ghanaian nurses, job stress in Gambian nurses, job stress in Ivorian nurses, job stress in nurses in Benin Republic, job stress in nurses in Sierra Leone, job stress in Liberian nurses, among others were specifically used as inclusion criteria to obtain articles on causes of occupational stress in West African nurses. Only studies on nurses and those whose participants were predominantly nurses (>50% of sample size) were selected. Articles that examined stress in other health professionals were excluded. The percentage of each cause was calculated as number of articles that reported the cause divided by total number of the articles that examined the causes of occupational stress in West African nurses.

West Africa

West Africa is the westernmost geopolitical region in Africa. It contains 16 sovereign countries; six of which are Anglophone countries while others are Francophone nations. The region has over 380 million people as at 2017 with female fold occupying 49.7% of the entire population. As of 2022, the unemployment

rate in West Africa was 6.8% according to Statista [14]. According to IMF [15], the total gross domestic product stood at 752, 982 billion USD. The total nominal gross domestic product of the region as of 2013 was US\$655.93485 billion. There was inconsistency in GDP growth rate in the regions. For instance, real GDP growth rate decreased from 6.2% in 2011 to 2.8% in 2015 [16]. The inconsistency has significantly marred West Africa economic development. Inconsistent governmental policies, natural disaster, technological deficit, deficiency of work-relieving physical and social amenities, unemployment and underemployment and corruption are among the factors that have bedeviled the region over the years and culminated in occupational stress (Figure 1). West Africa is a victim of intense colonial administration in years past. Hence, the structure of labor force has history and resemblance with the pattern adopted by colonial countries. For instance, like in the West, Nurses in West Africa do shift duty. However, they differ from their counterparts in the developed world in terms of workload, access to technology, standard of living and ease of work.



Figure 1: Map of West Africa.

Non-Pharmacological Stress Coping Strategies

Stress is sensation that indicates physical, psychological, or physical-psychological discomforts [17]. Stress relating to one's job is known as occupational stress. Responses to stress involve activation of symphatho-adrenal axis triggering flight and fight reactions and causing rise in heart rate, blood pressure, blood glucose and pupillary dilation. Virtually, all workers experience stress relating to their jobs in varying degrees and the effects vary ranging from physical symptoms like headache to absenteeism, injury, and death. Obvious coping strategies exist to mitigate

stress. They include pharmacological management such as the use of drugs for the treatments of stress related symptoms and non-pharmacological coping strategies.

Problem-Focused/ Emotion-Focused Coping Strategies

Problem-focused coping strategy aims at solving a problem to change the source of the stress. Emotion-focused coping aims at reducing, or managing emotional distress associated with (or caused by) the situation [18]. Problem-focused coping may involve several different activities such as planning, direct action, asking for help, organizing other activities.

Positive Stress-Coping Strategy

Positive attitude inversely correlates with distress. This finding was consistent with previous studies that found positive attitudes at work to be the most influential strategy for reducing stress [2,8]. This factor is related to functional coping strategies that enable individuals to reframe negative situations in positive ways. This is because it is associated with increased self-efficacy, improved psychological well-being, and improved quality of life [5]. One study reported that the most common coping strategies used by health care workers were accepting crisis situations and adopting a positive attitude while at work [4]. Similarly, Khalid [2] found that a positive attitude in the workplace had the greatest impact on reducing staff stress.

Adaptive Coping Strategies

Adaptive stress management involves several strategies like positive coping; planning; anticipation; positive reframing; instrumental support; while some of the maladaptive coping strategy demonstrated by frontline workers in response to stress includes denial; distraction; self-blame; substance use; and venting [9]. Interestingly, these individual responses were also modified by their personality traits such as neuroticism, affectivity, openness, agreeableness, and conscientiousness [19].

Healthy Coping Strategies

It was observed that frontline workers in particularly stressful situations used healthy coping strategies to maintain a normal life, manage the situation, and seek information. It has been suggested that religion and social support represent adaptive coping strategies among the resources used for coping [20,21]. Religious coping was one of the key themes that were predominantly reported amongst West African frontline healthcare worker given the cultural and religious diversity that exist in this region. Faith/belief-based practices and belief systems are held in high esteem, and these were believed to have played an integral role in coping with the COVID-19 pandemic thus building resilience in the face of an unknown solution. Studies from the Middle East nations like Saudi Arabia also alluded to religious involvement shown to correlate with better overall psychological functioning and better social support [22].

Work-Related Stress and Stress-Related Risk Factors Among Nurses in Nigeria

In Nigeria, a study conducted by Ella [23] was designed to investigate the effect of job stress on employees' satisfaction in Calabar in the Southern region of Nigeria using 115 randomly selected respondents. In the study, the authors schemed respondents based on gender (male or female), marital status (single or married) and educational levels (diploma, first degrees or postgraduate qualifications) through self-developed questionnaire. Job stress was demonstrated to be related to job satisfaction. Job satisfaction was significantly marred by increased workload, confusing multiple roles demands, work

hazards. A study conducted by Okpua and Orji-Ifeanyi [24], 226 nurses that were randomly selected were administered questionnaire to determine the degree at which nurses in the teaching hospital were stressed. 10.62% percent of the respondent reported severe stress moderate stress was reported by 80.5%. Principal underlying factors for stress included long working hours, increased workload, shortage of staff and equipment, working environment, poor incentives, hazard exposure, and patient attitude.

In Ogun State, 425 respondents were selected in a study that examined the impact of occupational stress on perceived life quality and a structured questionnaire was devised to collect information among Nurses [25]. 48% of the respondents claimed to experience high job stress. 7.8% reported to be moderately stressed. Long night shift hour, inadequacy of equipment, increased workload, poor remuneration, long orthostasis, high emotional energy required to deal with troublesome patients and attitude of patient (demanding and aggressive) were the stress-related risk factors. Burnout is one the cardinal symptoms of occupation stress. An investigation was conducted by Alabi [26] to determine burnout and life quality in Nurses. 259 nursing officers from two mental health hospitals in Nigeria were recruited and data collection was done using questionnaire, Short-Form Health Survey and Maslach Burnout Inventory. Emotional burnout was shown to have a prevalence of 44.4%. Among the likely predisposing factors for burnout included role conflict and poor funding from authority. Lasebikan and Oyetunde [27] examined the prevalence and factors associated with nurses in hospital. Maslach Burnout Inventory was utilized in the quantification of burnout. The prevalence of emotional burnout was 39.1%. Inter-professional conflict, shortage of nursing staff and increased night shift frequency, were reported to be responsible for the emotional burnout.

Iyiola [28] investigated the effect of stress on healthcare delivery in nurses. 137 nursing officers were recruited. In the study, occupational stress was demonstrated to be related to decreased job performance. Abayomi [29] investigated the prevalence of occupational stress in nursing officers in Adeoyo Maternity Hospital, Ibadan. 142 respondents were adopted for the study and data was collected through self-administered semi structured questionnaire. The study revealed there was occupational stress in nurses. The authors identified the stress-related risk factors as staff and equipment deficiency, sleep deprivation, work environment, number of years in nursing service, and poor adaptation to work. A study was conducted between August and November 2017 by Okoye [30] to examine whether there was job stress in nursing staff of National Hospital Trauma Center, Abuja. 80 nursing officers were recruited for the study and data collection was done through a structured self-administered questionnaire. The nursing officer reported to be stressed and increased workload and deficiency of consumables were identified as stress-related risk factors.

Anigbogu [31] investigated the sources of occupational stress in nurses in Nnamdi Azikiwe University Teaching Hospital. 234 nursing officers were recruited through convenient sampling. Underlying risk factors for occupational stress in the nurses were long working hours, increased workload, and weak problem-solving system. However, task design, job role, harassment and physical violence and psychological discomfort were identified as the types of occupational stress they experienced in descending order of prevalence. Ojekou [32] investigated the impact of work environment on stress level and burnout extent in Nigerian nurses working in a tertiary teaching hospital. 100 participants were selected through purposive sampling and a self-developed questionnaire was developed to examine the impact of work environment on the degree of occupational stress and burnout in nurses. Stress level was shown to be higher in nurses with low work experience (0 to 3 years). Work environment was also demonstrated to relate with stress level and burnout extent.

Although a study conducted by Olayinka [33] was designed to highlight strategies deployed by nurses in the management of occupational stress, stress characterization was taken into consideration. 100 nursing officers were adopted for the study using purposive sampling. A questionnaire that consists of 45 items was utilized in data collection. Headache was the most prominent stress symptom reported by the nurses. Others included anger, amnesia, and lack of concentration. Ella [34] highlighted the relationship between job stress and occupational performance in nurses in a Nigerian teaching hospital and the prevalence of stress-inducing events. 183 responders were recruited randomly, and Nursing Stress Scale was devised for data collection. The most stress-related risk factors were insufficiency of staff and increased workload. Others included shortage of resources (drugs and equipment) and death of affectionate patient. A study was carried out by Ogundeji [35] to sample the feelings of nurses concerning occupational stress and the strategies deployed. 50 nursing officers were selected randomly and standardized questionnaire was administered to collect data. The study reported that the highest source of stress in the nurses was increased workload.

Work-Related Stress and Stress-Related Risk Factors Among Nurses in Other West Africa Countries

Using purposive sampling and self-administered questionnaire, Adzakupah [36] recruited 73 Ghanaian nurses. The respondents reported they were stressed and highlighted stress-related risk factors as poor motivation, poor staffing, increased workload, absence of break during shift duty and poor patients' attitude. In Ghana, Adzakupah [37] investigated the level of occupational stress among Ghanaian nurses. 73 nurses working at St. Dominic Hospital at Akwatia were adopted through purposive sampling and self-administered questionnaire. The prevalence of stress as reported by the respondents was 37.01%. The authors also reported that stress-related risk factors included increased workload, inadequate equipment and resources, and conflicting

demands. In a study conducted by Kaburi [38] to identify the causes of stress among nurses, 167 nurses were selected from Salaga Government Hospital, Ghana. Likert type questionnaire and Nurse Stress Index were deployed in obtaining information from the respondents. The nurses reported to be stressed.

Moreover, stress-related risk factors were reported to include lifting of patients manually, lifting of equipment, fear of acquiring infection, impaired motivational system (e.g. receiving comment only during poor performance) and insufficient privilege for professional development. Opoku [39] evaluated the prevalence of stress among psychiatric nurses in Ghana. The study was conducted between March 2020 and May 2021. They also factored in the role of educational qualification in stress perception. 311 psychiatric nurses were selected randomly. Perceived Stress Scale was one of the instruments used in collection of data from the respondents. 42% claimed to experience mild to high stress. While respondents with diploma were reported to exhibit less likelihood (29.6%) of experiencing moderate stress when compared with master's degree holders, those with bachelor's degree had 7.1% lower likelihood of having moderate stress when compared with holders of Master's degree. Workplace violence is a form of occupational stress. Ebrima [40] evaluated the prevalence of workplace violence among nurses in Gambia. The study was conducted between July and September 2014 and 219 nurses were selected. A self-administered questionnaire used for collection of data. 62.1% claimed being exposed to workplace violence a year before the study.

The nature of violence the nurses were exposed to was verbal abuse, physical assault and sexual harassment and the violence was majorly executed by patient relatives and patients. Darboe [41] investigated whether there was an association between psychosocial job-related stress and self-rated health among health officers who were predominantly nurses in Gambia. A questionnaire that contained 22 items was utilized in data collection. There was a statistically significant association between work psychosocial job-related stress and self-rated health. Mikponhoue [42] assessed the prevalence of burnout, one of the symptoms of occupational stress among nurses and other staff in Benin Republic. The study was conducted between September and October 2019 Zone Hospital Cotonou. 173 respondents were selected and Malasch Nurnout Inventory was used to collect data. The prevalence of burnout was reported as 30.6%.

Ouyi and Anagba [43] investigated the relationship between work-related stress and job satisfaction in a university center in Togo. 137 respondents that consisted principally of nursing officers were selected. A significant inverse correlation ($r = -0.335$) was established between stress and satisfaction with 94.9% reporting to be moderately stressed and 62.8% claiming to be dissatisfied (Table 1).

Table 1: Causes of occupational stress among West African nurses. 12 articles that centered on causes of occupational stress among West Africa nurses were filtered from a pool of 60 articles. Percentage was calculated as number of articles that reported a cause divided by the total number of articles.

s/n	Causes of occupational stress among West African nurses	Percentage
1	Increased workload	75.00%
2	Hazard exposure	16.67%
3	Shortage of staff	33.33%
4	Poor incentives	33.33%
5	Poor patients' attitude	25.00%
6	Increased length and frequency of duty	33.33%
7	Shortage of resources and equipment	50.00%
8	Work environment	16.67%
9	High energy involvement	25.00%
10	Work experience	25.00%
11	Limited opportunity for professional advancement	8.33%

Discussion

Work related stress is a global phenomenon. It is inimical to productivity, work force and employees' health causing physical and psychological trauma and death. About 1.1 million people worldwide die of occupational stress or occupation related ailment [6]. The review highlighted the risk factor for occupational stress among nurses in West Africa. The standard ratio of nurses to patients is 1 to 6 in general ward [12]. Increase in the number of patients leads to increase in workload. Among the stress-related risk factors in West African nurses in the study, increased workload was the most predominant occupying 75%. Out of 12 articles that were filtered, 9 reported increased workload. Some of the reasons for increased workload may include chronic exodus of nursing officers to regions of greener pasture, ambiguity regarding nursing responsibilities and infrequent commensurate replacement of exited nursing officers. Increase in workload does not only affect nurses. However, they have one of the closest proximities to patients. Despite the fact that staffing is related to workload, 33.33% of occupational stress in West African nurses was attributed to poor staffing. This indicated that there might be other subjective reasons underlying the increase in workload. Such may include work role conflict, job design and irrational job expectation. One of the consequences of increased workload is burnout. Some studies evaluated prevalence of burnout among nurses and the associated risk factors. Although they were not put into consideration in the estimation of the proportions of stress inducers in the study, they remain significant whenever occupational stress is discussed. Increased length and frequency of duty is also related to workload. Abnormal work pattern elicits psychological and physiological reactions causing injuries, accident, and increased absenteeism [13].

Health professionals are not trained martially in schools to carry loads, lift machine and patients. Therefore, job may become dissatisfying, discouraging, and stressful where manual lifting is

required. In a Ghanaian study, manual lifting of equipment and patients reported as a cause of work-related stress in nurses [38]. This kind of problem ensues where non-nursing staff that are saddled with this kind of responsibility are absent probably in a bid to cut down employment bill, lack of work scheme or corruption. Shortage of resources and equipment was the second most predominant cause of work-related stress in West Africa nurses. Work becomes boring and difficult where working equipment and resources are not available. It leads workers with no other option than improvisation, a mental energy-sapping task. In West Africa, shortage of equipment and resources may be a consequence of corruption and economic downturn. Work environment and exposure to various work related hazards potentiate stress. Hazards such as artificial light especially for nurses that are on night duty can cause discomfort and disability glare. It can also disrupt circadian rhythms, causing deranged melatonin secretion, altered leptin secretion, impaired hormonal secretions and altered sleep/wakefulness cycle [44-47]. Noise can cause headache, confusion, increase in blood pressure and heart rate [3,17,48].

Work experience is a risk factor for occupational stress. In most of articles analyzed, nurses with short work experience reported higher stress level than those who had long experience. This might be because older nursing officers have more administrative activities, and less core nursing functions than young ones. Another stunning observation was the role of educational qualifications in stress. Opoku [39] reported that nurses who had Master's degree experience more stress than those who had either diploma or first degree. Perhaps, if the basic qualifications to attain professional peak is first degree, then having higher qualifications may not be associated with lower stress levels. A score of nurses reported that inadequate opportunity for career advancement, poor incentives and poor patients' attitude were risk factors for work related stress.

Concerning patients' attitude, aggressive and uncooperative patients can cause inflict physical assault on nurses. A study by Ebrima [40] in Gambia showed that 62.1% of nurses reported to have suffered from workplace violence such as verbal abuse, physical assault, and sexual harassment with majority of the violence conducted by patient relatives and patients.

Conclusion

Increased workload, hazard exposure, shortage of staff, poor incentives, poor patient attitude, increased length and frequency of duty, shortage of resources and equipment, work environment, high energy involvement and limited opportunity for professional advancement were risk factors for work-related stress among nurses in West Africa. The most predominant risk factor was increased workload followed by shortage of equipment and resources.

References

- Montero-Marin J, Prado-Abril J, Piva Demarzo MM, Gascon S, García-Campayo J (2014) Coping with stress and types of burnouts: explanatory power of different coping strategies. *PloS One* 9(2): e89090.
- Khalid I, Khalid TJ, Qabajah MR, Barnard AG, Qushmaq I (2016) Healthcare Workers Emotions, Perceived Stressors and Coping Strategies During a MERS-CoV Outbreak *Clin Med Res* 14(1): 7-14.
- Adeniyi (2021) Impacts of Environmental Stressors on Autonomic Nervous System. *Autonomic Nervous System - Special Interest Topics*.
- Wong TW, Yau JK, Chan CL, Kwong RS, Ho SM, et al. (2005) The psychological impact of severe acute respiratory syndrome outbreak on healthcare workers in emergency departments and how they cope. *Eur J Emerg Med* 12(1): 13-18.
- Flesia L, Monaro M, Mazza C, Fietta V, Colicino E, et al. (2020) Predicting Perceived Stress Related to the Covid-19 Outbreak through Stable Psychological Traits and Machine Learning Models. *Journal of clinical medicine* 9(10): 3350.
- Zamanian Z, Zakian S, Jamali M, & Kouhnavard B (2016) Relationship between Safety Culture and Job Stress among the Personnel of Telecom Companies. *Journal of Safety Promotion and Injury Prevention* 4(3): 161-166.
- Lazarus RS, Folkman S (1987) Transactional theory and research on emotions and coping. *European Journal of Personality* 1(3): 141-169.
- Cai H, Tu B, Ma J, Chen L, Fu L, et al. (2020) Psychological Impact and Coping Strategies of Frontline Medical Staff in Hunan Between January and March 2020 During the Outbreak of Coronavirus Disease 2019 (COVID-19) in Hubei China. *Med Sci Monit* 26: e924171-1-e924171-16.
- Brown S, Westbrook RA, Challagalla G (2005) Good cope, bad cope: adaptive and maladaptive coping strategies following a critical negative work event. *J Appl Psychol* 90(4): 792-798.
- Heinen M, Achterberg TV, Schwendimann R, Zander B, Matthews A, et al. (2013) 'Nurses' intention to leave their profession: A cross sectional observational. study in 10 European countries. *Int J Nurs Stud* 50(2): 174-184.
- Mulisa D, Tollossa T, Ayana AO, Regasa MT, Bayisa L, et al. (2022) Nurses are leaving the nursing profession. *SAGE Open Med* p. 10.
- Sharma SK, Rani R (2020) Nurse-to-patient ratio and nurse staffing norms for hospitals in India: A critical analysis of national benchmarks. *J Family Med Prim Care* 9(6): 2631-2637.
- Onigbogi CB, Banerjee S (2019) Prevalence of psychosocial stress and its risk factors among health-care workers in Nigeria: A systematic review and meta-analysis. *Niger Med J* 60(5): 238-244.
- Statista.
- Ekpo AH (2020) Economic Integration in West Africa: A Reconsideration of the Evidence In (Ed) *Regional Development in Africa*. IntechOpen.
- Adeniyi M, Olaniyan O, Fabunmi O, Okojie A, Ogunlade A, et al. (2022) Modulatory Role of Pre-exercise Water Ingestion on Metabolic, Cardiovascular and Autonomic Responses to Prolonged Exercise in Young Mildly Active Male. *International journal of Biomedical Science* 18(2): 1-9.
- Clough BA, March S, Chan R, Casey LM, Phillips R, et al. (2017) Psychosocial interventions for managing occupational stress and burnout among medical doctors: a systematic review. *Syst Rev* 6(1): 144.
- Deary IJ, Agius RM, Sadler A (1996) Personality, and stress in consultant psychiatrists. *Int J Soc Psychiatry* 42(2): 112-123.
- Imperatori C, Bersani FS, Massullo C, Carbone GA, Salvati A, et al. (2020) Neurophysiological correlates of religious coping to stress: a preliminary EEG power spectra investigation. *Neurosci Lett* 728: 134956.
- Martínez JP, Méndez I, Ruiz-Esteban C, Fernández-Sogorb A, García-Fernández JM (2020). Profiles of Burnout, Coping Strategies and Depressive Symptomatology. *Front Psychol* 11: 591.
- Alosaimi FD, Alawad HS, Alamri AK, Saeed AI, Aljuaydi KA, et al. (2018) Stress and coping among consultant physicians working in Saudi Arabia. *Ann Saudi Med* 38(3): 214-224.
- Ella RE, Asuquo EF, Akpan-Idiok P, Ijabula IJ (2016) Impact of Job Stress on Nurses' Job Satisfaction in a Public Hospital, Cross River State, Calabar, Nigeria. *IJHSSE* 3(9): 57-66.
- Nelson O, Nkeiruka OIE (2019) Job Stress Among Nurses in A Nigerian University Teaching Hospital. *BJMHS* 1(2): 1-4.
- Oyebanji OO, Oloyede OR, Ayandiran EO, Olatubi MI, Faremi FA (2022) Occupational Stress and Perceived Quality of Life Among Clinical Nurses: A Cross-Sectional Study in A Nigerian State. *International Journal of Occupational Health and Public Health Nursing* 8 (1):1-18.
- Alabi MA, Ishola AG, Onibokun AC, Lasebikan VO (2021) Burnout and quality of life among nurses working in selected mental health institutions in Southwest Nigeria. *Afri Health Sci* 21(3): 1428-1439.
- Lasebikan VO, Oyetunde MO, Burnout among Nurses in a Nigerian General Hospital: Prevalence and Associated Factors. *ISRN Nurs* 2012: 1-6.
- Iyiola OO, Osibanjo AO, Oyewunmi AE, Kehinde OJ, Igbino E (2016) Code blue stress among Nurses in a teaching hospital and its effects on healthcare delivery. *The social sciences* 11 (7): 312-1317.
- A LA, Abayomi OA, Grace AC, Ayobami AA, Oluwadare M (2022) Determinants Contributing to Increased Prevalence of Workplace Stress among Registered Nurses in Adeoyo Maternity Teaching Hospital Yemetu Ibadan, Oyo-State. *Middle European Scientific Bulletin* 20: 43-53.
- Okoye OG, Olaomi OO, Okoye UE, Onaghise UE (2021) A Cross-sectional Survey of Job Stress Among Nurses Working at National Hospital Trauma Centre, Abuja, Nigeria. *European Journal of Clinical and Biomedical Sciences* 7(2): 27-32.
- Anigbogu, Tawa C, ILO, Clementine I (2022) Occupational Stress and Coping Strategies among Nurses Working in a Tertiary Hospital in Anambra State, Nigeria. *Academic Journal of Nursing and Health Education* 11(1): 1-9.

31. Ojekou PG, Titilayo DO (2015) Effect of Work Environment on Level of Work Stress and Burnout among Nurses in a Teaching Hospital in Nigeria. *Open Journal of Nursing* 5: 948-955.
32. Olayinka AO, Osamudiamen OS, OjoAdeleke AO (2013) Occupational stress management among nurses in selected hospital in Benin city, Edo state, Nigeria. *European Journal of Experimental Biology* 3(1): 473-781.
33. Ella RE, Agharandu A, Osuchukwu E, Samson-Akpan PE (2021) Occupational Stress and Job Performance Among Nurses in a Teaching Hospital, in South – South, Nigeria. *International journal of current research and review* 13: 12-17.
34. Omobonike OM (2016) The Opinion of Nurses on Work Related Stress and Strategies Adopted to Cope with it at Wesley Guild Hospital Ilesa Texila *International Journal of Nursing* 2(2): 1-17.
35. Godwin A, Suuk LA, Selorm FH (2022) occupational-stress-and-its-management-among-nurses-at-st-dominic-hospital-akwatia-ghan. *Health science journals*.
36. Adzakpah G, Laar AS, Fiadjoe HS, (2016) Occupational stress among nurses in a hospital setting in Ghana. *Clin Case Rep Rev* 2(2): 333-338.
37. Kaburi BB, Bio FY, Kubio C, Ameme CK, Kenu E (2016) Psychological working conditions and predictors of occupational stress among nurses, Salaga Government Hospital, Ghana 2016. *Pan Afr Med J* 33: 320.
38. Agyemang SP, Ninnoni JP, Enyan NIE (2022) Prevalence and determinants of depression, anxiety, and stress among psychiatric nurses in Ghana: a cross-sectional study. *BMC Nurs* 21(1): 179.
39. Sisawo EJ, Ouédraogo SYA, Huang SL (2017) Workplace violence against nurses in the Gambia: mixed methods design. *BMC Health Serv Res* 17(1): 311.
40. Darboe A, Lin IF, Kuo HW (2016) Effort-reward imbalance and self-rated health among Gambian healthcare professionals. *BMC Health Serv Res* 16: 125.
41. Mikponhoue R, Hinson A, Adjobimey M, Someya P, Cisse I, et al. (2021) Epidemiological Aspect of Burnout among Careful Staff of a Zone Hospital in Cotonou in 2019. *Occupational Diseases and Environmental Medicine* 9(2): 49-62.
42. Badji O, Déogratias AK (2022) Stress at Work and Professional Satisfaction Among Health Care Staff. *International Journal of Applied Psychology* 12(1): 16-22.
43. Adeniyi MJ, Agoreyo FO, Olorunnisola OL, Olaniyan OT, Seriki SA, et al. (2022) Photo-pollution disrupts reproductive homeostasis in female rats: The duration-dependent role of selenium administrations. *Chin J Physiol* 63(5): 235-243.
44. Adeniyi MJ, Fabunmi O, Okojie AK, Olorunnisola OL, Odetola AO, et al. (2020) Impact of Night Study Frequency on Sleep Pattern, Anthropometrical Indices and Peripheral Oxygen Saturation in Age-Matched Nigerian Female Students Prior to Semester Examination. *International Journal of Biomedical Science* 16(3): 37-42.
45. Adeniyi MJ, Agoreyo FO, SF Ige, Fabunmi OA, Ozolua OP, et al. (2021) Physiological Implications of Prolonged Selenium Administrations in Normal and Desynchronized Adult Female Rats. *JKIMSU* 10(4): 21-36.
46. Adeniyi MJ, Agoreyo FO (2020) Duration-related modulation of body temperature rhythm and reproductive cycle in rats by photoperiodic perturbation. *DRJHP* 8(1): 1-6.
47. Oni TJ, Adeniyi MJ (2017) Postural Difference in Expiratory Rate among Females Sanitary Workers and its Relationship with Blood Pressure and Anthropometric Indices. *Biomed J Sci & Tech Res* 1(2): 311-315.
48. Awosika A, Adeniyi M (2022) Impact of Post-Exercise Orthostasis on EEG Amplitudes in Age-Matched Students: Role of Gender. *Arch Neurol & Neurosci* 13(3): ANN.MS.ID.000813.



This work is licensed under Creative Commons Attribution 4.0 License
DOI:10.19080/ARR.2023.08.555745

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission
<https://juniperpublishers.com/online-submission.php>