

Review Article

Predictors and Impact of Burnout among Nurses in Nigerian Tertiary Hospitals: A General Review

Adetoun Oyekunle, RN, MNSc. FCNA(NZ)^{1*}, Sherif Olanrewaju, PhD, MPS, PGDE, RN²

¹Doctoral Candidate, School of Nursing, Midwifery and Health Practice, Victoria University of Wellington, Wellington, New Zealand

²Postdoctoral Research Fellow, Center for Health Outcomes and Policy Research, University of Pennsylvania School of Nursing, Philadelphia. U.S.A.

***Corresponding Author:** Adetoun Oyekunle

Doctoral Candidate, School of Nursing, Midwifery and Health Practice, Victoria University of Wellington, Wellington, New Zealand

Article History

Received: 17.02.2025

Accepted: 25.03.2025

Published: 03.04.2025

Abstract: *Background:* Burnout among Nigerian nurses in tertiary hospitals is a significant issue, leading to adverse effects on both nurse wellbeing and patient outcomes. *Purpose:* This review aims to explore the key predictors of burnout among nurses in Nigerian tertiary hospitals and examine the coping strategies and interventions that can mitigate its impact. *Methods:* A literature review was conducted focusing on work-related, socio-demographic, and systemic factors influencing burnout. *Findings:* Key predictors of burnout among Nigerian nurses include high nurse-patient ratios, long working hours, and inadequate administrative support. Effective coping strategies include implementing peer support programs, scheduling regular breaks, promoting work-life balance through flexible scheduling, and improving staffing levels to mitigate burnout. *Implications for Policy and Practice:* There is a need for systemic reforms, including improved staffing ratios, better working conditions, and mental health support for nurses. These changes are crucial for reducing burnout and enhancing nurse retention to improve care quality and patient safety.

Keywords: Burnout, Nurses, Healthcare, Nigeria, Job Demands, and Coping Strategies.

INTRODUCTION AND BACKGROUND

Globally, burnout rates among healthcare workers are alarmingly high, with nurses more affected than other healthcare professionals (Li *et al.*, 2024). Nurse burnout is a significant issue in Nigerian tertiary hospitals, where high workloads, inadequate staffing, and poor working conditions contribute to stress and fatigue, leading to diminished care quality (Van der Colff & Rothmann, 2014). This often produces burnout, a psychological phenomenon with possible physical manifestations characterised by continued energy expenditure under prolonged adverse conditions (Rožman, Treven, & Cingula, 2018). In this context, nurses face various stressful working conditions while meeting patients' physical and psychological needs. These stressors include excessive workload, co-worker strain, health risks from patients' exposure, demands from patients and their relatives, and administrative duties (Ayandiran *et al.*, 2018; Okwaraji *et al.*, 2014). Therefore, nurse burnout manifests through symptoms such as emotional exhaustion, depersonalisation, and a reduced sense of personal accomplishment (Maslach *et al.*, 2001). These symptoms have far-reaching consequences, affecting not just individual nurses' wellbeing but also organisational effectiveness and patient care outcomes (Cañadas-De la Fuente *et al.*, 2015).

This review examines the key predictors of burnout among Nigerian nurses, focusing on work-related, socio-demographic, and systemic factors. It also explores the impact of burnout on nurses' health and patient care and discusses coping mechanisms. The review calls for systemic reforms to reduce burnout and improve nurse retention and mental health in Nigeria's nursing workforce.

Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

CITATION: Adetoun Oyekunle & Sherif Olanrewaju (2025). Predictors and Impact of Burnout among Nurses in Nigerian Tertiary Hospitals: A General Review. *South Asian Res J Nurs Health Care*, 7(2): 28-35.

Definition and Concept of Burnout

Burnout is a term derived from the combination of "burn" and "out," symbolising the combustion and dissipation of energy, motivation, and overall health due to occupational stress. First introduced by Hebert Freudenberger in 1974, burnout was used to describe the negative effects of workplace stress, particularly in helping professions. According to the Institute of Quality and Efficiency in Healthcare (IQWiG, 2006), burnout is characterised by exhaustion, depletion of energy, and the inability to meet work demands. (Maslach, Schaufeli, & Leiter (2001) defined it as a psychological syndrome that develops as a prolonged response to chronic emotional and interpersonal stressors in the workplace. The core components of burnout include emotional exhaustion, depersonalisation, and a reduced sense of personal accomplishment. Prolonged exposure to workplace stress diminishes personal effectiveness, leading to reduced quality of output, feelings of cynicism, and a negative perception of professional efficacy (Maslach *et al.*, 2001). Rožman *et al.*, (2018) classified burnout symptoms into three major categories: physical, psychological, and behavioural, and further identified burnout manifestations to include reduced energy and efficiency, diminished motivation, and proneness to errors.

Emotional exhaustion, considered as the central component of burnout, is characterised by a sense of being emotionally depleted and unable to manage the emotional demands of work or being able to engage with others (Maslach *et al.*, 2001). Healthcare professionals, particularly nurses, frequently experience emotional exhaustion due to long working hours, constant patient care, and the emotional burden of dealing with distressing patient outcomes (Bakhamis, Paul III, Smith, & Coustasse, 2019). This exhaustion can present physically as chronic headache, fatigue, irritability, and frustration, with more time spent working with less being accomplished (Rožman *et al.*, 2018).

Depersonalisation refers to a detached and impersonal approach to patients or clients (Maslach *et al.*, 2001). Nurses experiencing this form of burnout may adopt a callous or indifferent attitude toward their patients, perceiving them as tasks rather than individuals deserving of empathetic care (Zewdu, Abera, Abebe, Mulugeta, & Dessie, 2017). This detachment often serves as a defence mechanism to shield against overwhelming emotional demands but can escalate to negative behaviours such as sarcasm, irritability, or even self-medication with substances like alcohol (Mosadeghrad, 2013).

A reduced sense of personal accomplishment involves feelings of ineffectiveness and failure to achieve professional goals (Maslach *et al.*, 2001). Nurses experiencing this may believe their work has little to no impact on patient outcomes, leading to decreased job satisfaction, low motivation, and reduced productivity. This diminished sense of efficacy often results in absenteeism, lowered workplace morale, and a higher risk of accidents due to lapses in concentration and energy (Hogarth, 2017).

Prevalence of Burnout Among Nigerian Nurses

Burnout among Nigerian nurses reflects global patterns with significant emotional, professional, and psychological impacts. Multiple studies have documented the prevalence and dynamics of burnout among nurses in various healthcare settings across Nigeria, emphasising its complex and multifactorial nature (Ozumba & Alabere, 2019; Usifo & Salawu, 2024). For instance, Ozumba and Alabere (2019) reported a relatively low overall prevalence of burnout syndrome at around 5% at the University of Port Harcourt Teaching Hospital. However, emotional exhaustion and depersonalisation remained critical concerns, with 76 (24%) of respondents experiencing high emotional exhaustion and 47(14%) reporting high depersonalisation and 147 (46%) with reduced personal accomplishment.

A cross-sectional study conducted by Okwaraji and Aguwa (2014) documented high levels of burnout and psychological distress among Nigerian nurses in tertiary health institutions. Among 210 respondents, 43% reported high emotional exhaustion, 47% experienced high depersonalisation, and 54% felt reduced personal accomplishment. Furthermore, 44% scored positive on the General Health Questionnaire (GHQ-12), indicating significant psychological distress. The prevalence of burnout is alarmingly high among Nigerian mental health nurses. Alabi *et al.*, (2021) reported emotional exhaustion at 44%, depersonalisation at 32%, and reduced personal accomplishment at an overwhelming 99%. These findings emphasise the burden of burnout and mental health challenges among nurses.

Burnout is also very prevalent among nurses in general hospital settings. Unlike mental health settings, which focus on psychiatric and mental health disorders, general hospitals handle a wider range of medical conditions, including emergencies, surgeries, and chronic illnesses. The demanding environment, continuous patient flow, long shifts, and rapid decision-making contribute to high stress and burnout levels among these nurses.

Another study evaluating the prevalence and associated factors of burnout among nurses in a Nigerian general hospital reported similar findings, with 39% of nurses experiencing emotional exhaustion, 29% experiencing depersonalisation, and 40% experiencing reduced personal accomplishment (Lasebikan & Oyetunde, 2012).

Research in tertiary hospitals demonstrates the tangible impact of burnout on healthcare delivery. Ayandiran *et al.*, (2018) explored burnout among 230 nurses in Osun State and found a statistically significant association between burnout and self-reported quality of care. Nurses experiencing high levels of burnout were more likely to report a decline in the quality of care provided, illustrating the detrimental effects of burnout on patient outcomes and professional performance.

Furthermore, a systematic review and meta-analysis found that nurse burnout is associated with decreased patient safety, increased medical errors, and lower patient satisfaction (Aiken *et al.*, 2023). Another study in a tertiary hospital revealed that high burnout levels among nurses led to a 30% increase in medication errors and a 25% decrease in patient satisfaction scores (Levins, 2023).

Predictors of Burnout Among Nigerian Nurses

Burnout is a prevalent issue among Nigerian nurses. Although burnout has many predicting factors, studies on nurse burnout have identified some common themes, especially within the Nigerian context. Burnout among nurses in Nigeria is driven by a combination of work-related, systemic, and socio-demographic factors, which collectively exert significant emotional, psychological, and physical strain on these healthcare professionals. Understanding these predictors is crucial for addressing the pervasive issue of burnout in Nigerian healthcare systems.

Work-Related Factors

Occupational factors such as shift work, workload, role clarity, and ambiguity are leading causes of burnout among nurses (Ndawula, 2016). For Nigerian nurses, burnout is primarily driven by excessive workloads, high nurse-patient ratios, and prolonged working hours without rest. Usifo and Salawu (2024) found that chronic sleep deprivation and an uncondusive work environment also contribute significantly to burnout. High nurse-patient ratios and extended shifts without breaks were identified as key factors causing extreme fatigue and emotional exhaustion, further exacerbated by insufficient resources.

A descriptive, cross-sectional study by Ayandiran *et al.*, (2018) revealed that excessive workload directly impacts nurses' ability to provide quality care, fostering emotional exhaustion.

Shift work and irregular schedules also contribute to burnout. Lasebikan and Oyetunde (2012) identified frequent night duties as a significant predictor of emotional exhaustion, reinforcing the strain placed on nurses by their demanding schedules.

Inadequate staffing remains a critical issue in Nigerian healthcare. The shortage of nursing staff increases workload and perpetuates feelings of being overwhelmed, contributing to both emotional exhaustion and reduced personal accomplishment (Akin-Otiko, 2014). This staffing deficiency forces nurses to take on multiple roles, making it challenging to meet the demands of their profession effectively.

Systemic Factors

Organisational and workplace dynamics emerged as significant contributors. Lasebikan and Oyetunde (2012) found that the working environment within Nigerian hospitals significantly exacerbates burnout among nurses. Poor working conditions, such as the lack of essential medical supplies, outdated equipment, and insufficient facilities, hinder nurses' ability to perform their duties effectively (Balogun, 2022). Studies by Owumi *et al.*, (2018) and Ayandiran *et al.*, (2018) highlight that these frustrations lead to feelings of helplessness and depersonalisation as nurses emotionally detach from their work to cope with the stress.

The COVID-19 pandemic has intensified these challenges, further increasing emotional exhaustion and depersonalisation. Factors such as heavier patient loads, heightened infection risks, and inadequate personal protective equipment (PPE) have escalated burnout levels among nurses (Iddrisu *et al.*, 2023). The pandemic has also exposed systemic deficiencies in Nigeria's healthcare system, particularly the lack of adequate mental health support for healthcare workers (Bello *et al.*, 2024).

Another critical factor is the lack of administrative support. Ogundipe *et al.*, (2014) and Uchendu *et al.*, (2020) found that many hospitals fail to provide the necessary recognition and encouragement that could bolster nurses' morale. This lack of support leaves nurses feeling isolated and undervalued, contributing to emotional exhaustion and depersonalisation.

Interpersonal conflicts and role ambiguity also contribute to burnout. Tensions between doctors and nurses and unclear role definitions foster a hostile work environment. Lasebikan and Oyetunde (2012) identified doctor/nurse

conflict as a significant predictor of emotional exhaustion. Similarly, Chemali *et al.*, (2019) and Mohammed (2022) noted that emotional detachment often becomes a coping mechanism for nurses facing unresolved professional conflicts.

Socio-Demographic Factors

Socio-demographic factors also shape burnout levels among Nigerian nurses. Younger nurses often report higher levels of emotional exhaustion due to inexperience and the demands of heavy workloads (Lasebikan & Oyetunde, 2012; Chemali *et al.*, 2019). Female nurses face additional stress from balancing professional responsibilities with domestic obligations, particularly in contexts where societal expectations place a disproportionate burden on women (Rashedi *et al.*, 2014).

Marital status also influences burnout, with married nurses reporting higher stress levels as they navigate family obligations alongside demanding work schedules. Conversely, nurses with higher educational qualifications are better equipped to cope with job-related stress, potentially due to their advanced training and coping strategies (Lasebikan & Oyetunde, 2012).

Financial strain is another prominent predictor. Economic pressures due to low wages and Nigeria's high cost of living exacerbate job dissatisfaction. Nurses who feel undercompensated for their efforts are more likely to experience emotional exhaustion and diminished personal accomplishment (Lasebikan & Oyetunde, 2012). Poor remuneration was also highlighted by Alabi *et al.*, (2021) as a factor that undermines nurses' ability to cope effectively with their roles, especially in urban settings where the cost of living is high.

Impact of Burnout on Nurses and Organisational Outcomes

The effects of burnout extend beyond individual wellbeing to affect organisational outcomes. It contributes to poor physical and mental health, including clinical depression and anxiety and can lead to communication breakdowns within healthcare teams (Rudman, Arborelius, Dahlgren, Finnes, & Gustavsson, 2020). If left unaddressed, burnout can result in chronic health conditions and an overall decline in workplace morale, further underscoring the need for systemic interventions to support healthcare professionals (Mosadeghrad, 2013; Hogarth, 2017).

The consequences of burnout among nurses are profound, with tremendous negative impacts on their personal and professional lives. Studies have shown that nurse burnout is linked to increased patient mortality (Welp, Meier, & Manser, 2015) and higher rates of hospital-acquired infections (Cimiotti, Aiken, Sloane, & Wu, 2012). Emotional exhaustion and reduced empathy diminish nurses' ability to deliver compassionate, patient-centred care, particularly in high-stress environments such as intensive care units (ICUs) and emergency departments (Ayandiran *et al.*, 2018).

Burnout also impairs cognitive function, leading to chronic fatigue and increasing the risk of errors, such as medication mistakes, which directly compromise patient safety (Gardner & Dubeck, 2016). As burnout intensifies, nurse turnover rates rise, worsening staffing shortages and increasing workloads for the remaining staff. This cycle of stress and declining care quality places additional strain on an already overburdened healthcare system (Rudman *et al.*, 2020).

Furthermore, the effects of burnout extend beyond immediate professional challenges to long-term mental health issues, including depression, anxiety, and substance abuse, further reducing nurses' effectiveness (Kakiashvili *et al.*, 2013). Consequently, burnout creates a cascading impact that undermines healthcare delivery and contributes to poor patient outcomes. Addressing this issue through individual, organisational, and policy-level interventions is essential for improving nurse wellbeing and maintaining high-quality healthcare delivery (Asuquo *et al.*, 2013; Oyibo, 2015).

Strategies to combat burnout

Regardless of burnout's classification, the widespread prevalence of emotional exhaustion and demoralisation among Nigerian nurses warrants urgent attention. Unfortunately, there is still limited evidence on how to effectively address this growing issue within the local context. However, emerging research suggests that interventions at both individual and organisational levels can be impactful. A comprehensive approach combining both strategies appears to be the most promising way forward.

Burnout among Nigerian nurses is driven by work-related stressors, organisational challenges, and socio-demographic influences, each requiring targeted interventions to mitigate their impact. Addressing these predictors through a comprehensive strategy can foster a more resilient nursing workforce and improve healthcare delivery.

Addressing Work-Related Stressors

Interventions targeting work-related stressors must focus on reducing excessive workloads, promoting work-life balance, and improving resource allocation. Lasebikan and Oyetunde (2012) advocated the reduction of long work hours and the removal or elimination of unconventional or irregular work shifts. Ensuring manageable nurse-to-patient ratios

through strategic staffing can help distribute tasks evenly, preventing emotional exhaustion. Streamlining administrative processes with the use of technology can further reduce non-clinical tasks that contribute to burnout.

In addition to staffing improvements, implementing flexible work schedules and scheduled rest periods can support a healthier work-life balance, enabling nurses to recharge and reduce chronic fatigue. Smith *et al.*, (2019) advocated proactive measures, including regular exercise, healthy diet, adequate rest and sleep, regular breaks at work, having friends and building a support community while imbibing positive values at work. Access to stress management training, including mindfulness and relaxation techniques, can empower nurses to better regulate their emotional responses to the workplace.

Diaz-Silveira *et al.*, (2012) recognised the efficacy of relaxation techniques such as retreats, restorative breaks for napping, fatigue and stress reduction, self-care, informal interaction, mental health promotion, mindfulness, and meditation as having mitigating effects while replenishing morale and reducing the occurrence of burnout among nurses. Furthermore, creating peer support networks and mentorship programs can help nurses share coping strategies, reducing feelings of isolation and reinforcing a supportive professional community (Yang *et al.*, 2015).

Emotional intelligence (EI) has been identified as a protective factor against burnout. Ugwu *et al.*, (2017) found that higher EI levels among nurses were associated with lower counterproductive work behaviours (CWB). EI moderated the relationship between emotional exhaustion and CWB, as well as between depersonalisation and CWB, indicating that nurses with high EI are better able to manage the emotional demands of their roles.

Mitigating Organisational Challenges

Organisational challenges such as inadequate working conditions, lack of administrative support, and poor workplace morale require systemic interventions. Hospitals should invest in modern medical equipment, adequate medical supplies, and comfortable workspaces to enhance job satisfaction and reduce the frustration that fuels depersonalisation (Ayandiran *et al.*, 2018).

Administrative support plays a crucial role in mitigating burnout. Hospital leadership should implement policies that recognise and reward nurses' efforts, fostering a culture of appreciation and collaboration. Providing access to counselling services and professional development programs can enhance resilience and reduce emotional detachment.

Conflict resolution programs and communication training are essential to address interpersonal tensions between nurses and other healthcare professionals (Ndawula., 2016). A more collaborative and respectful work environment can help restore nurses' sense of personal accomplishment and reduce emotional exhaustion.

Managing Socio-Demographic Influences

Socio-demographic factors, such as age, gender, and educational background, influence how nurses experience and cope with burnout. Younger and less experienced nurses may benefit from targeted mentorship and onboarding programs that build resilience and equip them with practical coping strategies (Van der Heijden, Brown Mahoney, & Xu, 2019).

Female nurses, who often balance professional responsibilities with domestic duties, require supportive workplace policies, such as access to childcare services and flexible scheduling, to alleviate the dual burden of work and home obligations (Ogboghodo & Edema, 2020).

Higher educational qualifications are associated with lower susceptibility to burnout, highlighting the importance of professional development initiatives. Policies that provide opportunities for continuing education and financial support for advanced training can empower nurses and improve job satisfaction (Rashedi, Rezaei, & Gharib, 2014).

Equitable compensation policies that reflect the cost of living can also alleviate the financial strain that exacerbates emotional exhaustion, particularly in urban areas with higher costs of living.

Policy and Regulatory Interventions

Burnout among nurses in Nigerian tertiary hospitals is a significant issue, compounded by high workloads, inadequate staffing, and poor working conditions, which ultimately undermine nurse wellbeing and healthcare delivery. Addressing burnout among nurses in Nigeria requires targeted interventions that focus on improving staffing ratios, enforcing safe working hours, and prioritising mental health support for nurses (Asuquo *et al.*, 2013; Oyibo, 2015).

Despite nurses constituting the largest healthcare professional group in Nigeria (Uchendu *et al.*, 2020), there is a significant shortage of approximately 800,000 nursing personnel to meet the growing health needs of the population. This personnel gap, coupled with weak policy frameworks, financial constraints, demographic changes, and poor working conditions, exacerbates job stress and burnout among nurses (Rudman *et al.*, 2020). The impact of these factors on nurses' wellbeing and the quality of healthcare services underscores the need for systematic policy reforms to ensure a healthier work environment.

Additionally, nurses are largely underrepresented in health policy development, with only 10% of those involved in policymaking being nurses (Asuquo *et al.*, 2013). This lack of representation further contributes to policies that do not adequately address nurses' unique challenges. Therefore, it is essential that hospital management and policymakers work closely with nursing leaders to develop strategies that improve staffing levels, balance workloads, and create a healthier work environment. Such efforts will not only help reduce burnout but also enhance the quality of patient care and ensure the long-term sustainability of the nursing workforce.

To address burnout, healthcare organisations and hospital administrators should take the lead in implementing and enforcing policies that ensure appropriate staffing to alleviate workload stress. Regular assessments of staffing levels, based on patient acuity and workload, should be part of ongoing management practices. Additionally, policies that prioritise work-life balance for nurses are crucial (Boamah, Hamadi, Havaei, Smith, & Webb, 2022). This includes ensuring adequate days off and breaks between shifts and policies that promote a healthy balance between professional responsibilities and personal life. Therefore, hospital administrators and human resources departments should collaborate to develop and enforce these policies while encouraging self-care practices and providing resources for stress management to create a more sustainable and fulfilling work environment (Usifo and Salawu, 2024).

Incorporating nurses' perspectives into policymaking is also critical. Given their firsthand experience with workplace stressors, nurses are in the best position to propose practical solutions to reduce burnout. By including nurses in the development of policies, their unique challenges and needs would be properly addressed. Finally, establishing national standards for nurses' wellbeing and burnout prevention will further strengthen healthcare delivery and contribute to the retention of nurses in the workforce.

Implication to Research and Practice

Existing literature underscores the multifactorial nature of nurse burnout in Nigeria, indicating that work-related, systemic, and socio-demographic factors interweave to produce adverse emotional and psychological outcomes. However, most studies rely on cross-sectional research designs that constrain the ability to identify causal pathways or long-term effects of burnout. Future research would benefit from longitudinal and mixed method approaches that track nurses over time, capturing how burnout evolves and how interventions or changes in policy influence these trajectories.

Healthcare institutions must prioritise improved staffing ratios, workload redistribution, and supportive work environments to address nurses' emotional exhaustion and depersonalisation. Reducing long work hours, ensuring adequate rest periods, and enforcing safe nurse-to-patient ratios would likely alleviate the chronic fatigue and emotional strain reported by many Nigerian nurses. Hospital administrators should also invest in modern equipment and sufficient medical supplies to facilitate optimal patient care and reduce the frustration that amplifies burnout.

CONCLUSION

Burnout among nurses in Nigerian tertiary hospitals poses a serious threat to both patient outcomes and nurses' wellbeing. Key contributors, including excessive workloads, inadequate staffing, poor administrative support, and socio-demographic pressures, drive emotional exhaustion, depersonalisation, and diminished personal accomplishment. The impact extends beyond individuals, affecting institutional efficiency and patient care through increased errors, reduced morale, and higher turnover rates.

Addressing burnout among nurses is critical for maintaining healthcare delivery and ensuring workforce sustainability. Policy reforms focused on fair compensation, mental health support, and professional development are crucial to reducing burnout and enhancing nurse retention. By prioritising systemic changes, healthcare institutions can create a resilient workforce capable of delivering high-quality care and sustaining long-term improvements. Addressing burnout among nurses is critical for maintaining healthcare delivery and ensuring workforce sustainability. Urgent reforms in staffing, work conditions, and mental health support are needed to alleviate burnout and its associated consequences, including substance abuse and poor mental health outcomes.

REFERENCES

- Aiken, L. H., Lasater, K. B., Sloane, D. M., Pogue, C. A., Rosenbaum, K. E. F., Muir, K. J., ... & Borchardt, C. J. (2023). Physician and nurse well-being and preferred interventions to address burnout in hospital practice: Factors associated with turnover, outcomes, and patient safety. Paper presented at the JAMA Health Forum.
- Akin-Otiko, B. (2014). Quality nursing care in Nigeria: The ideals, realities and implications. Paper presented at the 2nd Northern Zonal Scientific Conference of the West African College of Nursing.
- Alabi, M. A., Ishola, A. G., Onibokun, A. C., & Lasebikan, V. O. (2021). Burnout and quality of life among nurses working in selected mental health institutions in South West Nigeria. *African Health Sciences*, 21(3), 1428-1439.
- Asuquo, E., Etowa, J., John, M., Ndiok, A., Samson-Akpan, P. E., & Edet, O. B. (2013). Assessing nurses' capacity for health research and policy engagement in Nigeria. *Journal of Applied Medical Sciences*, 2(4), 35.
- Ayandiran, E., Akinyoola, O., Ajao, O., & Chibe, O. (2018). Burnout experience among nurses and self-reported quality of care in Osun State tertiary hospitals. *Research Journal of Health Sciences*, 6(4), 201-207.
- Balogun, J. A. (2022). The vulnerabilities of the Nigerian healthcare system. In *The Nigerian Healthcare System: Pathway to Universal and High-Quality Health Care* (pp. 117-152). Cham: Springer International Publishing.
- Bakhamis, L., Paul III, D. P., Smith, H., & Coustasse, A. (2019). Still an epidemic: The burnout syndrome in hospital registered nurses. *The Health Care Manager*, 38(1), 3-10.
- Bello, S., Neill, R., Jegede, A. S., Bamgboye, E. A., Salawu, M. M., Afolabi, R. F., . . . Ogunlayi, M. (2024). Health systems challenges, mitigation strategies and adaptations to maintain essential health services during the COVID-19 pandemic: learnings from the six geopolitical regions in Nigeria. *BMC Health Services Research*, 24(1), 625.
- Boamah, S. A., Hamadi, H. Y., Havaei, F., Smith, H., & Webb, F. (2022). Striking a balance between work and play: The effects of work-life interference and burnout on faculty turnover intentions and career satisfaction. *International journal of environmental research and public health*, 19(2), 809.
- Cañadas-De la Fuente, G. A., Vargas, C., San Luis, C., García, I., Cañadas, G. R., & De la Fuente, E. I. (2015). Risk factors and prevalence of burnout syndrome in the nursing profession. *International Journal of Nursing Studies*, 52(1), 240-249.
- Chemali, Z., Ezzeddine, F., Gelaye, B., Dossett, M., Salameh, J., Bizri, M., ... & Fricchione, G. (2019). Burnout among healthcare providers in the complex environment of the Middle East: A systematic review. *BMC Public Health*, 19(1), 1337.
- Cimiotti, J. P., Aiken, L. H., Sloane, D. M., & Wu, E. S. (2012). Nurse staffing, burnout, and health care-associated infection. *American Journal of Infection Control*, 40(6), 486-490.
- Díaz-Silveira, C., Alcover, C.-M., Burgos, F., Marcos, A., & Santed, M. A. (2020). Mindfulness versus physical exercise: Effects of two recovery strategies on mental health, stress and immunoglobulin A during lunch breaks. A randomised controlled trial. *International Journal of Environmental Research and Public Health*, 17(8), 2839.
- Gardner, L. A., & Dubeck, D. (2016). Health care worker fatigue. *AJN The American Journal of Nursing*, 116(8), 58-62.
- Hogarth, M. (2017). Avoiding burnout. In *Emotion in the library workplace* (pp. 71-98). Emerald Publishing Limited.
- Iddrisu, M., Poku, C. A., Mensah, E., Attafua, P. Y., Dzansi, G., & Adjorlolo, S. (2023). Work-related psychosocial challenges and coping strategies among nursing workforce during the COVID-19 pandemic: a scoping review. *BMC nursing*, 22(1), 210.
- Kakiashvili, T., Leszek, J., & Rutkowski, K. (2013). The medical perspective on burnout. *International journal of occupational medicine and environmental health*, 26, 401-412.
- Lasebikan, A., & Oyetunde, M. (2012). Burnout among nurses in a Nigerian general hospital: Prevalence and associated factors. *ISRN Nursing*, 2012.
- Levins, H. (2023). How inadequate hospital staffing continues to burn out nurses and threaten patients: Penn LDI. <https://ldi.upenn.edu/our-work/research-updates/how...>
- Li, L. Z., Yang, P., Singer, S. J., Pfeffer, J., Mathur, M. B., & Shanafelt, T. (2024). Nurse Burnout and Patient Safety, Satisfaction, and Quality of Care: A Systematic Review and Meta-Analysis. *JAMA Netw Open*, 7(11), e2443059-e2443059.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422.
- Mosadeghrad, A. M. (2013). Occupational stress and turnover intention: Implications for nursing management. *International Journal of Health Policy and Management*, 1(2), 169.
- Ndawula, M. (2016). *Burnout among staff nurses: Examining the causes, coping strategies, and prevention*.
- Ogboghodo, E. O., & Edema, O. M. (2020). Assessment of burnout amongst resident doctors in Benin City, Edo State, Nigeria. *Nigerian Postgraduate Medical Journal*, 27(3), 215-223.
- Ogundipe, O., Olagunju, A., Lasebikan, V., & Coker, A. (2014). Burnout among doctors in residency training in a tertiary hospital. *Asian Journal of Psychiatry*, 10, 27-32.

- Okwaraji, F. E., Aguwa, E. N., & Ikwuka, U. (2014). Burnout, psychological distress and job satisfaction among secondary school teachers in Enugu, South East Nigeria. *International Journal of Academic Research in Progressive Education and Development*, 3(1), 40-46.
- Owumi, B., Kolo, V., Obemeata, A., & Adesokan, B. Continuity and Change in the Practice of Traditional Medicine in Modern Nigeria. *The Nigerian Journal of Sociology and Anthropology* 16(2), 79-92.
- Oyibo, S. (2015). Factors influencing job satisfaction among nurses in Ahmadu Bello University Teaching Hospital (ABUTH), Zaria, Kaduna State, Nigeria. *University of Ghana*.
- Ozumba, L. N., & Alabere, I. D. (2019). Burnout among doctors and nurses at University of Port Harcourt Teaching Hospital, South-South Nigeria. *Archives of Medicine and Health Sciences*, 7(1), 61-68.
- Rashedi, V., Rezaei, M., & Gharib, M. (2014). Burnout and socio-demographic characteristics of nurses in Iran. *Galen Medical Journal*, 3(4), 232-237.
- Rožman, M., Treven, S., & Cingula, M. (2018). The impact of behavioral symptoms of burnout on work engagement of older employees: The case of Slovenian companies. *Naše gospodarstvo/Our Economy*, 64(3), 3-11.
- Rudman, A., Arborelius, L., Dahlgren, A., Finnes, A., & Gustavsson, P. (2020). Consequences of early career nurse burnout: A prospective long-term follow-up on cognitive functions, depressive symptoms, and insomnia. *EClinicalMedicine*, 27, 100565.
- Smith, M., Segal, J., Robinson, L., & Segal, R. (2019). Burnout prevention and treatment. *Techniques for Dealing with Overwhelming Stress. Help Guide*.
- Uchendu, C., Windle, R., & Blake, H. (2020). Perceived facilitators and barriers to Nigerian nurses' engagement in health-promoting behaviors: A socio-ecological model approach. *International Journal of Environmental Research and Public Health*, 17(4), 1314.
- Ugwu, L. I., Enwereuzor, I. K., Fimber, U. S., & Ugwu, D. I. (2017). Nurses' burnout and counterproductive work behavior in a Nigerian sample: The moderating role of emotional intelligence. *International journal of Africa nursing sciences*, 7, 106-113.
- Usifo, R. T., & Salawu, R. A. (2024). Work Related Factors Influencing Burnout Among Nurses in Selected Hospitals in Abeokuta, Ogun State. *International Journal of Nursing, Midwife and Health Related Cases*, 10(2), 22-35.
- Van der Colff, J. J., & Rothmann, S. (2014). Burnout of registered nurses in South Africa. *Journal of Nursing Management*, 22(5), 630-642.
- Van der Heijden, B., Brown Mahoney, C., & Xu, Y. (2019). Impact of job demands and resources on nurses' burnout and occupational turnover intention towards an age-moderated mediation model for the nursing profession. *International Journal of Environmental Research and Public Health*, 16(11), 2011.
- Welp, A., Meier, L. L., & Manser, T. (2015). Emotional exhaustion and workload predict clinician-rated and objective patient safety. *Frontiers in Psychology*, 5, 1573.
- Zewdu, T., Abera, H., Abebe, N., Mulugeta, H., & Dessie, G. (2017). Level of burnout and associated factors among nurses working in public health institutions North Shoa zone, Amhara, Ethiopia. *International Journal of Social Relevance & Concern*, 5(8), 17-26.