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Burnout and Work Stress among Healthcare Workers in Non-Governmental Organizations in Nigeria: A Scoping Review

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Abstract

Burnout among healthcare workers continued to impact their health and productivity. This scoping review mapped and merged existing literature on burnout, work-related stress, and its factors among health professionals in non-governmental organizations(NGOs) in Nigeria. The implications and strategies for enhancing well-being were highlighted. This scoping review was conducted in five stages, and the report was aligned to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guideline. Multiple databases were searched for English-language articles posted between January 2003 and December 2024. Studies were filtered based on predefined inclusion and exclusion criteria. Data was collected using a customized Excel-based table and analyzed thematically. Twenty-one studies were reviewed across five regions (Asia, Europe, the Middle East, Africa, and Multiregional), with Nigerian studies representing 38%. Studies among the NGOs' health professionals were few. Most studies used the Maslach Burnout Inventory (MBI) and a combination of tools to measure burnout. Our study showed that the distribution of Burnout in Nigeria varied by cadre and settings. The burnout prevalence among primary care physicians was 13.6% driven by emotional exhaustion, 45% in public state facilities in Delta, 75.5% among tertiary hospital physicians in South-East, and 85% among Nurses and healthcare workers in private hospitals in Abuja. The common causes were excessive workload, limited resources, overcommitment, understaffing, and inadequate support. Research on burnout among NGO healthcare workers in Nigeria remained limited. Focused studies are needed to expand the evidence base, guide targeted interventions, and promote supportive workplace policies to enhance staff wellbeing.

Keywords: *Burnout, Healthcare Workers, Nigeria, Non-Governmental Organizations, Scoping Review, Work Stress.*

Introduction

Burnout and occupational stress are now widely recognized as major threats to the global healthcare workforce, with serious consequences for employee wellbeing and health system performance. In Nigeria, healthcare professionals working in nongovernmental organizations (NGOs) play a central role in delivering critical services, including HIV, tuberculosis, malaria, and maternal and child health programs [1]. The rapid scale-up of donor-funded health interventions has significantly increased workload, accountability pressure, emotional strain, and time demands on this workforce. Nigeria additionally experiences a severe shortage of trained healthcare workers, with the workforce remaining below the World Health Organization’s recommended minimum

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threshold for effective service delivery [2]. This workforce gap leads to increased patient loads, prolonged working hours, and limited recovery time, all of which heighten the risk of burnout. Burnout was first introduced as a psychological response to chronic occupational stress and later defined as a multidimensional syndrome consisting of emotional exhaustion, depersonalization, and reduced personal accomplishment [3]. Contemporary models describe burnout as a progressive condition that begins with high enthusiasm and gradually evolves into chronic fatigue, emotional detachment, and long-term psychological exhaustion [4, 5]. Globally, the prevalence of burnout among healthcare professionals has risen sharply, increasing from approximately 32% in 2018 to over 45% by 2022 [6]. In Nigeria, burnout levels are diverse, with prevalence rates as high as 69% among physicians and nurses [7]. Burnout has been linked to numerous adverse physical outcomes, including musculoskeletal pain, gastrointestinal disturbances, and cardiovascular complications [8, 9], as well as psychological consequences such as anxiety, irritability, and depression [10–12]. At the organizational level, burnout contributes to poor job satisfaction, high staff turnover, reduced quality of care, and increased health system costs, while impacting healthcare worker wellbeing, which is directly associated with patient safety, service quality, and overall health outcomes [13]. The Maslach Burnout Inventory (MBI) tool, which measures burnout across three domains, has been widely adopted as the gold standard for measuring burnout. Several versions have been created, like the Human Services Survey (HSS), specifically tailored for healthcare workers. However, due to accessibility and cost limitations, alternative tools such as the Oldenburg Burnout Inventory and the Copenhagen Burnout Inventory are also frequently applied. Burnout is viewed as an outcome of interactions: individual characteristics, organizational conditions, and system-level factors. These manifest as emotional exhaustion, depersonalization, and personal accomplishment, ultimately affecting productivity, health status, staff retention, and patient outcomes. Two conceptual frameworks, leveraging the Job Demand-Resource model [14] and Maslach's multidimensional burnout theory, depicted in Figure 1, were incorporated in the study to show how individual, organizational, and system-level factors interact to cause burnout and other outcomes. Determinants (Individual, Organizational, Systemic) lead to Burnout Dimensions (Emotional Exhaustion, Depersonalization, Reduced Accomplishment) to Outcomes (Low productivity, Health decline, Turnover, and Poor patient outcomes).

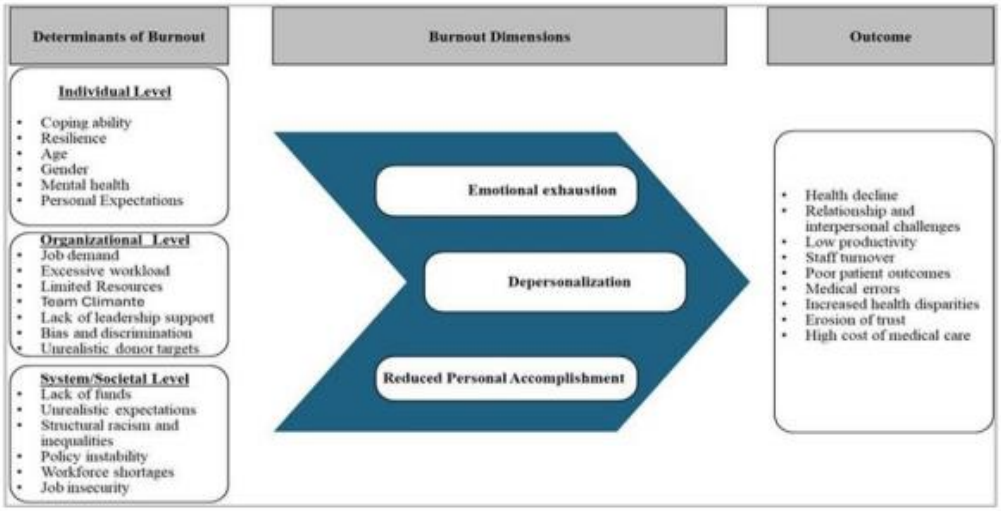

Figure 1. Conceptual Framework Illustrating Determinants and Outcomes of Burnout and Work Stress among Healthcare Workers

Although burnout has been extensively studied among healthcare workers in Nigeria's public and private hospitals, research focusing specifically on NGO healthcare professionals remains extremely limited. This lack of data restricts the design of targeted occupational health interventions for this key workforce group.

Aim of the Study

To map and synthesize existing evidence on burnout and work-related stress among healthcare professionals and those working in NGO settings in Nigeria.

Objectives

1. To explore the scope of literature on burnout and occupational stress among healthcare professionals.
2. To explore the extent to which this evidence addresses healthcare professionals working in non-governmental organization (NGO) settings in Nigeria
3. To identify determinants and contributory factors of burnout.
4. To highlight the implications of burnout for staff wellbeing and healthcare delivery.

Significance of the Study

This study expands current knowledge of occupational burnout by drawing attention to an understudied workforce segment. The findings will support the development of targeted staff wellness interventions and contribute to sustaining quality healthcare delivery in Nigeria.

Materials and Methods

Study Design

This scoping review followed the five-stage methodological framework proposed by Arksey and O'Malley and adhered to the PRISMA-ScR reporting guideline to ensure methodological rigor and transparency.

Research Question

What is currently known about burnout and work-related stress among healthcare professionals, particularly those working in NGO settings in Nigeria?

Information Sources and Search Strategy

Searches were conducted across PubMed, Google Scholar, African Journals Online (AJOL), Scopus, and Web of Science. Keywords included "burnout," "work stress," "healthcare workers," "NGOs," and "Nigeria," using both controlled vocabulary and free-text terms.

Eligibility Criteria and Study Selection

Studies published in English between January 2003 and December 2024 were included. Eligible studies examined burnout or occupational stress among healthcare workers across hospital, community, private, and NGO settings. Two reviewers independently screened articles. From 19,931 records, 21 studies met the final inclusion criteria. Details of the study selection process are presented in the PRISMA-ScR flow diagram depicted in Figure 2.

Data Extraction

Data was extracted using a structured Excel and summarized in a table. Key variables extracted included study location, author, year of publication, study design, population, assessment tools, and key outcomes.

Data Synthesis

Data were synthesized using descriptive mapping and thematic analysis to detail study demographics, trends in burnout prevalence, and contributory factors. To minimize bias, two reviewers independently assessed the papers for eligibility and quality. The reviewers met to resolve any disagreements regarding eligibility and/or quality.

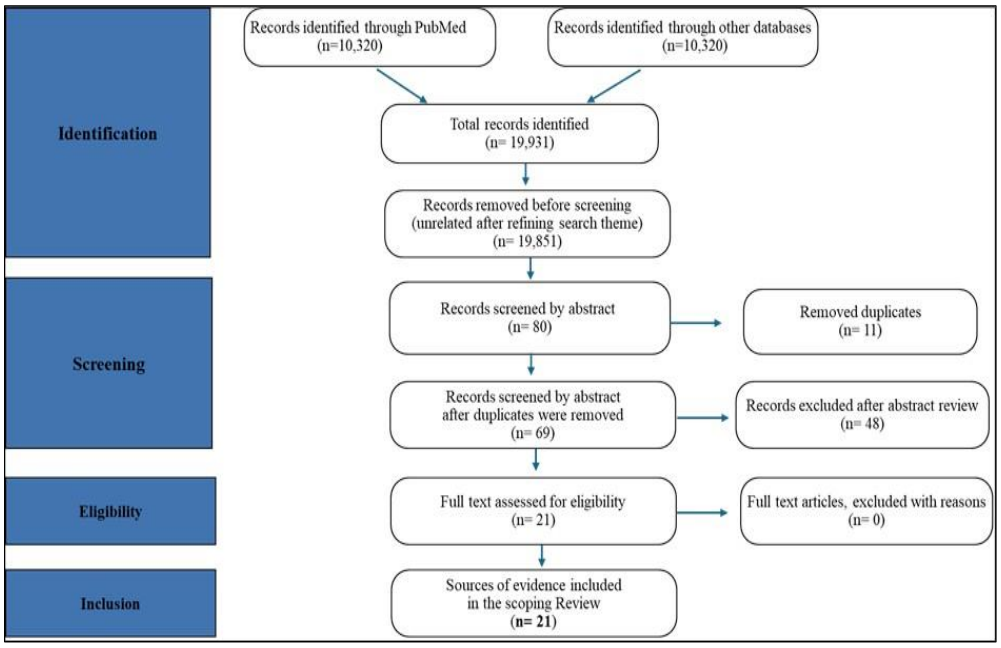

Figure 2. PRISMA Flow Chart

Results

Study Characteristics

Electronic Databases (n = 21)

The data were sourced from nine electronic databases. A total of 19,931 records were retrieved from PubMed (10,320) and eight other databases (9,611). Duplicates were removed, and inclusion criteria were applied to get the final articles (21) used for the study. The scoping review included studies published between 2003 and 2024. Ninety percent of the studies were published between 2014 and 2024, while ten percent dated back to the earlier period of 2003–2013. The distribution of the 21 articles across databases is summarized in Table 1 below.

Table 1. Distribution of Study Articles across Electronic Databases

S/n	Database / Online Library	Number of Articles (n)
1	Ajol (African Journal Online)	2
2	Annals of Medical and Health Sciences Research	1
3	BioMed Central	1
4	Google Scholar	3
5	NCBI Resource	1
6	PubMed Central	4
7	PubMed	3
8	ResearchGate	5
9	ScienceDirect	1
	Total	21

Note: N = 21 articles retrieved across all databases

Data was extracted using a structured Excel and summarized in a table. Some of the key variables extracted included country/study location, author and year of publication, population, assessment tools, key outcomes, and citation. A snapshot of this table is outlined in Table 2 below.

Table 2. A Snapshot of the Data Extraction Table

Country/ Location	Author/ Year	Title	Setting	Burnout Assessment Tool	Study Population	Key Outcomes	Citations
Africa-Egypt	Abdo, S. a. M.; El-Sallamy, R. M.; El-Sherbiny, A. a. M.; Kabbash, I. A. 2016	Burnout among physicians and nursing staff working in the emergency hospital of Tanta University, Egypt	Public tertiary health facility	MBI	Doctors & Nurses	Age, sex, exposure to violence, years of experience, work burden, supervisors, and work activities were significant predictors of burnout. Nurses experienced high EE*, and Physicians had a higher level of DP**. Both physicians (Doctors) and nurses showed high LPA	[15]
Sub-Saharan Africa-Ghana	Ayisi-Boateng, Nana K.; Bankah, Elizabeth M.; Ofori-Amankwah, Gerhard K.; et al. 2020	Cross-sectional self-assessment of burnout amongst doctors in Ghana	Ghanian Doctors who atended a conferen ce	MBI	Doctors	Moderate burnout among Ghanaian doctors: 10.8% EE*, 5.5% DP**, and 7.8% LPA***. No significant links were found with age, sex, years of practice, or specialty.	[16]
Africa-Ethopia	Bhagavathula, Akshaya Srikanth; Abegaz, Tadesse Melaku; et al. 2018	Prevalence of burnout syndrome among health-care professionals at Gondar University Hospital, Ethiopia	Public tertiary health facility	Mixed. Astudillo and Mendinueta questionnair e and the Maslach Burnout Inventory (MBI)	Healthcare workers	Burnout prevalence was 13.7%; Observed higher emotional exhaustion and inefficacy than cynicism. Significant associations with age, patient load, shift work, sex, marital status, and years of experience.	[17]
Sub-Saharan Africa	Dubale, B. W., Friedman, L. E., Chemali, Z., Denninger, J. W.,	Systematic review of burnout among healthcare providers in Sub-Saharan Africa	Public, State, Rural, Tertiary, Primary)	Mixed-Mostly MBI-HSS, MBI, COPERHEN GEN etc(review	Healthcare workers (Doctors, Nurses & others)	Burnout prevalence ranged 40–80%, and high among nurses. Factors associated include: poor work environments, interpersonal/professional conflict, emotional	[18]

	Mehta, D. H., Alem, A., Fricchione, G. L., Dossett, M. L., & Gelaye, B. 2019			confirms dominance)		distress, and low social support.	
Nigeria	Gadzama, N. N., Wudiri, W. Z., Ofoli, J., Ede, V., & Stephen, Y. 2024	Assessing Burnout Among Healthcare Professionals in a Private Hospital in Abuja, FCT North Central Nigeria	Private Health Facility	Burnout Clinical Subtypes Questionnaire (BCSQ-12)	Healthcare workers	85% reported burnout. The most common burnout type was frenetic (71%), followed by worn-out (61%) and under-challenged (18%). Key contributors were long working hours, limited rest, and job dissatisfaction.	[19]
Malawi	Kim, M. H., Mazenga, A. C., Simon, K., Yu, X., Ahmed, S., Nyasulu, P., 2018.	Burnout and self-reported suboptimal patient care amongst health care workers providing HIV care in Malawi	Public health facilities	MBI	Health Care workers in HIV treatment facilities	Burnout was common among HCWs providing HIV care and was associated with self-reported suboptimal patient care practices/attitudes.	[20]
Nigeria	N Lar-Ndam, J.K.A. Madaki, L Pitmang, M.D. Audu, D Salihu, M Gyang 2015	Burnout among primary care Physicians in Jos-Plateau, North-Central Nigeria	Public, Primary Health Care	MBI-HSS	Primary care Doctors	Burnout was common among primary care physicians and associated with the nature and type of working environment. Burnout prevalence: 13.6% EE*, 21.6% DP**, and 15% LPA***. Self-reported perceived health status of excellent or good health was associated with lower risk of high burnout	[21]

Cameroon	Mbanga et al., 2018	Determinants of burnout syndrome among nurses in Cameroon	State and Private Hospitals	Oldenburg Burnout Inventory (OLBI)	Nurses at the state-owned and private hospitals	Determinants of burnout syndrome among 143 nurses (mean age 29.75±6.55 years) showed that being in a personal relationship (Beta=2.25) significantly explained 3.8% of the variation in burnout (R2=3.8, F (1, 125)=4.89, p=0.029).	[22]
Sub-Saharan Africa	Moyo, E., Dzobo, M., Moyo, P., Murewanhema, G., Chitungo, I., Dzinamarira, T. 2023	Burnout among healthcare workers during public health emergencies in sub-Saharan Africa	Public health facilities	Mixed tool: (MBI+)	Healthcare workers	Public health emergencies exacerbate burnout risk; systemic, structural factors increase workload; review offers prevention strategies.	[23]
Nigeria	Nwosu, Arinze D. G.; Ossai, Edmund N.; Mba, Uwakwe C.; Anikwe, Ifeanyi; Ewah, Richard; Obande, Bernard O.; Achor, Justin U. 2020	Physician burnout in Nigeria: a multicentre, cross-sectional study	Tertiary health institutions	Oldenburg Burnout Inventory (OLBI).	Doctors	Physician burnout in Nigeria is high. Burnout prevalence was 75.5%. Majority (74.6%) of the physicians perceived that physician burnout could impact patient safety.	[24]
Nigeria	Bolanle Ogungbamila 2013	Occupational Burnout Among Employees in Some Service Occupations in Nigeria	Multiservice	MBI	Multi sectors (Health, Police & teachers)	Health workers reported high EE*, DP**, and overall burnout compared to police officers and teachers. While their sense of reduced personal accomplishment was greater than that of	[25]

						police, it was similar to that of teachers. These findings suggest that health workers are particularly vulnerable to burnout due to the high emotional and organizational demands of their roles, coupled with inadequate job rewards, highlighting a critical imbalance between effort and compensation.	
Nigeria	Ojeogwu, C. I.; Aboloje, E. A.; Afamefuna, F. U.; Osuvwe, C. O.; Israel, O. E 2023	Prevalence of Occupational Burnout among Healthcare Workers in Delta State, Nigeria	Public, Hospital	MBI-HSS	Healthcare workers	45% HCP experienced burnout. Burnout factors were heavy workload (30.7%) and shift work (20%). Burnout manifested in unhealthy lifestyle behaviors, overeating (51.4%), physical inactivity (28.6%), and, increased alcohol consumption (1.4%).	[26]
Nigeria	Benjamin. Oladapo Olley 2003	Comparative study of burnout syndrome among health professionals in a Nigerian teaching hospital	Public, Tertiary Health Facilities	Mixed tool: Maslach Burnout Inventory (MBI), General Health Questionnaire (GHQ-30) assessed overall mental health and Spielberger State-Trait Anxiety Inventory (STAI) to evaluate	Healthcare workers	Burnout was significantly higher among nurses than other health professionals. Emotional exhaustion was the most common dimension. Burnout was influenced by marital status, experience, and working hours.	[27]

				anxiety levels			
Nigeria	Ozumba, LillianNgozi; Alabere, IbidaboDavid 2019	Burnout among Doctors and Nurses at University of Port Harcourt Teaching Hospital, South South Nigeria	Public, Tertiary Health Facility	MBI	Doctors and Nurses	30% had burnout in one subscale, while Fifteen (4.7%) respondents fulfilled the criteria for burnout syndrome when the three subscales were considered together. 23.8% had high EE*, 14.7% DP**, and 30% LPA***	[28]
Cyprus	Solomonidou, Alexia; Katsounari, Ioanna 2020	Experiences of social workers in nongovernmental services in Cyprus leading to occupational stress and burnout	NGO (Social workers)	Semi-structured questionaire	NGO (Social workers)	Causes/determinants of burnout were: excess workload, overtime, role ambiguity, unmet personal expectations and a negative public perception of the profession, insufficient support from supervisor and colleagues.	[29]
Cyprus	Parlalis, S., & Hadjicharalambous, D. 2024	A Study of the Relation between Social Workers' Burnout and Job Satisfaction	NGO Social workers	Mixed tool: (MBI & Job Satisfaction Survey)	NGO (Social Workers)	76.1% showed burnout symptoms; 34.3% had EE*, 52.6% high DP**, 85.8% LPA*** Job satisfaction was low (38.1%), with women and younger workers experiencing higher burnout.	[30]

Arab countries (Middle East- Bahrain, Egypt, Jordan, Lebanon, Palestine, Saudi Arabia and Yemen)	Elbarazi, Loney, Yousef, and Elias 2017	Prevalence of and factors associated with burnout among health care professionals in Arab countries: A systematic review	Health Facilities	Mostly Maslach Burnout Inventory (MBI)	Health Care workers	High EE* (20.0–81.0%), DP** (9.2–80.0%), and LPA***(13.3–85.8%). Gender, nationality, service duration, working hours, and shift patterns were all significantly associated with burnout.	[31]
Middle East	Chemali, Ezzeddine, Gelaye, Dossett, Salameh, Bizri, Dubale, and Fricchione 2019	Burnout among healthcare providers in the complex environment of the Middle East: A systematic review	Public health facilities	Mixed tool: (MBI-dominated)	Healthcare workers (Doctors, Nurses & others)	Burnout was common among healthcare professionals. Prevalence ranged between 40 and 60%. Burnout was associated with characteristics of work environments, exposure to violence and terror, and emotional distress and low social support	[32]
London, UK	Bhui, Dinos, Galant-Mieczniko wska, de Jongh, and Stansfeld 2016	Perceptions of work stress causes and effective interventions in employees working in public, private and non-governmental organisations: a qualitative study	Public, private, and non-governm ental organisat ions (NGO)	Semi-structured interviews using topic guide	Public, Private and 2 NGOs (Mixed population)	Reported causes of work stress include: poor work conditions, lack of management, work demands, limited support, autonomy, unfair treatment, nadequate recognition, effort–reward imbalance, role conflict, lack of transparency, and poor communication	[33]
Africa/South East Asia	Wright, Mughal, Babatunde, Dikomitis, Mallen, Helliwell 2022	Burnout among primary health-care professionals in LMICs: systematic review and meta-analysis	Primary Health Facilities	Mixed: Mostly MBI (Systematic review)	Healthcare workers (Doctors nurses, & others)	Prevalence range: 2.5%–87.9% Pooled prevalence were 28.1% high EE*; 16.4% high DP**; 31.9% LPA***. Burnout is associated with workload, lack of support, job stress, COVID-19 pressures.	[34]

Nigeria	Daramola F. Oni, Ismaheel A. Azeez, Fatai A. Olaniyan, Titilayo H. Ilori 2024	Prevalence and predictors of job stress among Healthcare workers in secondary health centers in Nigeria	Public, Secondary Health Facilities	Mixed: APGAR, Structured questionnaire aligned to the (Job-Demand control scale)	HCWs (Physicians, Health management staff, Pharmacists, Nurses, and Laboratory personnel)	Prevalence was highest among physicians (42.1%) and other healthcare workers (42.9%), with lower rates among health management/support staff (31.3%), pharmaceutical personnel (28.6%), nurses and midwives (23.5%), and laboratory personnel (23.1%). Family type influenced stress levels, with higher rates in monogamous families (34.7%) compared to polygamous families (9.4%) and single parents (18.2%). Family support emerged as a key predictor.	[35]

Note: EE=emotional Exhaustion, DP**=Depersonalization, LPA***= Low Personal Accomplishment*

Regional Mapping

The final 21 publications reviewed spanned five regions: Asia, Africa, Europe, the Middle East, and one study spanning multiple regions. 71.4% of the studies were from Africa, and Nigeria contributed the largest share [15-28]. Two studies (9.5%) from Asia [29-30]. Two (9.5%) studies were from the Middle East [31-32], one (4.8%) was in Europe [33], and one (4.8%) study spanned multiple regions [34], focusing on both Africa and Southeast Asia. The geographic distribution of the publications is detailed in *Figure 3* below.

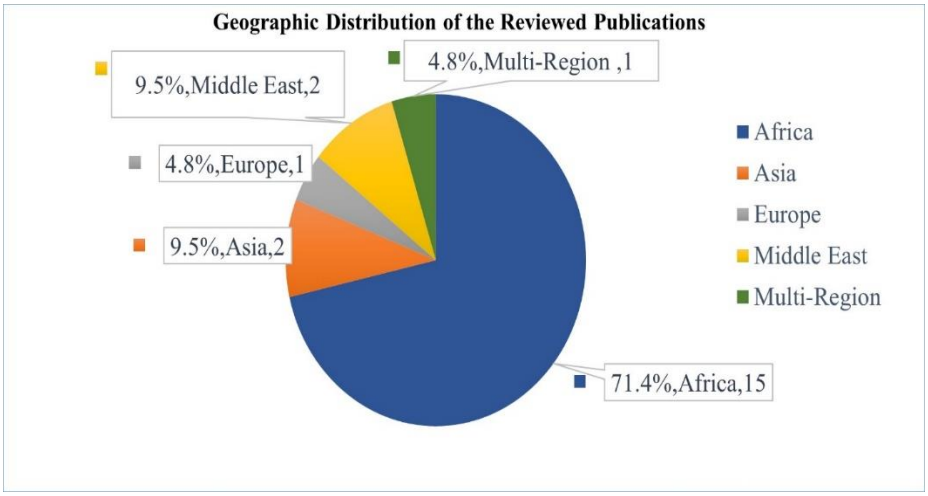

Figure 3. Geographic Distribution of the Reviewed Publications

Study Designs

Cross-sectional designs dominated the literature (61.9%), followed by systematic reviews (23.8%), qualitative interviews (9.5%), and surveys (4.8%). All Nigerian studies employed cross-sectional designs. This is summarized in Table 3 below.

Table 3. Summary of the Distribution of Reviewed Studies by Region, Study Design, and Publication Year

S/n	Region		Number of Studies N = 21[1]	Method/ Study Designs N = 21[1]				Year of Publication N = 21[1]	
	Variables	Country/ Location	Studies N = 21[1] (100%)	Cross-sectional N = 13[1] (61.9%)	Systematic reviews N = 5[1] (23.8%)	Qualitative interviews N = 2[1] (9.5%)	Survey N = 1[1] (4.8%)	2003 to 2013 N = 2[1] (9.5%)	2014 to 2024 N = 19[1] (90.5%)
1	Africa, n =15[1] (71.4%)			13 (61.9%)	2 (9.52%)	0 (0%)	0 (0%)	2 (9.5%)	13 (61.9%)
		Nigeria	8 (38%)	8 (38.1%)	0 (0%)	0 (0%)	0 (0%)	2 (9.5%)	6 (28.8%)
		Malawi	1 (5%)	1 (4.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4.8%)
		Ethiopia	1 (5%)	1 (4.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4.8%)
		Ghana	1 (5%)	1 (4.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4.8%)
		Cameroon	1 (5%)	1 (4.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4.8%)
		Egypt	1 (5%)	1 (4.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4.8%)
		Sub-Saharan Africa	2 (10%)	0 (0%)	2 (9.52%)	0 (0%)	0 (0%)	0 (0%)	2 (9.5%)
2	Asia, n =2[1] (9.5 %)			0 (0%)	0 (0%)	1 (4.75%)	1 (4.8%)	0 (0%)	2 (9.5%)
		Cyprus	2 (10%)	0 (0%)	0 (0%)	1 (4.75%)	1 (4.8%)	0 (0%)	2 (9.5%)
3	Europe, n=1[1] (4.8 %)			0 (0%)	0 (0%)	1 (4.75%)	0 (0%)	0 (0%)	1 (4.8%)
		UK	1 (5%)	0 (0%)	0 (0%)	1 (4.75%)	0 (0%)	0 (0%)	1 (4.8%)
4	ME, n = 2[1] (9.5 %)			0 (0%)	2 (9.52%)	0 (0%)	0 (0%)	0 (0%)	2 (9.5%)
		UAE+Arab	1 (5%)	0 (0%)	1 (4.76%)	0 (0%)	0 (0%)	0 (0%)	1 (4.75%)
		Multi country	1 (5%)	0 (0%)	1 (4.76%)	0 (0%)	0 (0%)	0 (0%)	1 (4.75%)

5	MR, n=1[1] (4.8 %)			0 (0%)	1 (4.76%)	0 (0%)	0 (0%)	0 (0%)	1 (4.8%)
		Africa+SE Asia	1 (5%)	0 (0%)	1 (4.76%)	0 (0%)	0 (0%)	0 (0%)	1 (4.8%)
[1]n (%)									

ME=Middle East; MR=Multi-Region

Study Populations and Work Setting

Most African and Nigerian studies focused on hospital-based healthcare workers. The studies from Africa centered on physicians, nurses, medical students, social workers, and other healthcare cadres. This is like the research conducted in the Middle East (N=2). Only studies conducted in Asia examined burnout among NGO staff. No Nigerian study directly assessed burnout among NGO healthcare professionals. Of the 15 studies from Africa, eight were carried out in Nigeria [19, 21, 24-28, 35]. Two of these focused solely on doctors [21, 24], one included both doctors and nurses [28], four examined healthcare workers from various professions [19, 26, 27, 35], and one covered a wider group that included healthcare workers, teachers, and police officers [25]. Except for this broader study, most were set in hospital environments, as mentioned. Interestingly, the studies in Nigeria focused on healthcare workers in private and /or public (primary, secondary, and tertiary) hospitals.

Burnout Assessment Tools

The MBI was the most frequently used tool, either alone or combined with other instruments such as the MBI-HSS, OLBI, Copenhagen Burnout Inventory, and structured interviews. Table 4 below provides a summary of the distribution of the 21 studies by region and across burnout/work stress measurement tools.

Table 4. Distribution of Studies by Region and Burnout/Work Stress Assessment Tools (N = 21)

Region / Country	Studies n (%)	Mixed Tools (MBI + others) n (%)	MBI n (%)	OLBI n (%)	MBI-HSS n (%)	CBI n (%)	BCSQ-12 n (%)	Job Stress Scale n (%)	Semi-structured Interviews n (%)
Africa	**15 (71.4)**	**6 (28.6)**	**4 (19.0)**	**2 (9.5)**	**2 (9.5)**	**0 (0)**	**1 (4.8)**	**0 (0)**	**0 (0)**
Nigeria	8 (38.1)	2 (9.5)	2 (9.5)	1 (4.8)	2 (9.5)	0 (0)	1 (4.8)	0 (0)	0 (0)
Malawi	1 (4.8)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Ethiopia	1 (4.8)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Ghana	1 (4.8)	0 (0)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cameroon	1 (4.8)	0 (0)	0 (0)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Egypt	1 (4.8)	0 (0)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Sub-Saharan Africa	2 (9.5)	2 (9.5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Asia	**2 (9.5)**	**1 (4.8)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**1 (4.8)**
Cyprus	2 (9.5)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4.8)
Europe	**1 (4.8)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**1 (4.8)**
United Kingdom	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4.8)

Middle East	**2 (9.5)**	**2 (9.5)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**
UAE / Arab States	1 (4.8)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Multi-country	1 (4.8)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Multi-region	**1 (4.8)**	**1 (4.8)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**
Africa + Southeast Asia	1 (4.8)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Note: Percentages are calculated using the total number of studies (N = 21). Mixed tools refer to studies using the Maslach Burnout Inventory (MBI) in combination with other instruments. MBI = Maslach Burnout Inventory; OLBI = Oldenburg Burnout Inventory; MBI-HSS = Maslach Burnout Inventory–Human Services Survey; CBI = Copenhagen Burnout Inventory; BCSQ-12 = Burnout Clinical Subtype Questionnaire-12.

Themes

Prevalence and Causes of Burnout

In the Middle East, emotional exhaustion ranged from 20% to 81%, depersonalization from 9.2% to 80%, and reduced personal accomplishment from 13.3% to 85.8% [31, 32]. In Asia, NGO social workers reported burnout prevalence as high as 76.1%, with reduced personal accomplishment being most prominent [29, 37].

Across Africa, burnout prevalence showed wide variation. In Egypt, moderate-to-high burnout affected over 90% of emergency physicians and nurses [15]. In Ghana, doctors showed 10.8% emotional exhaustion, 5.5% depersonalization, and 7.8% low personal achievement [16]. In Ethiopia, burnout prevalence was lower at 13.7% [17]. Systematic reviews across sub-Saharan Africa reported burnout rates ranging from 30% to 80%, especially among nurses and frontline staff [18, 23], while in Malawi, 62% of HIV care providers met burnout criteria [20].

In Nigeria, burnout prevalence ranged from 4.7% in some tertiary hospitals to over 85% in private facilities. Burnout prevalence noted in primary care settings was 13.6% driven by emotional exhaustion among primary care physicians in Jos, 45% overall burnout in public state facilities in Delta, 75.5% among tertiary hospital physicians in South-East, 85% among Nurses and healthcare workers in a private hospital in Abuja

Ref. [19, 24, 28]. Nurses consistently exhibited higher emotional exhaustion, while physicians displayed greater depersonalization [27]. Community-based health workers also demonstrated high burnout prevalence [26].

Key drivers across regions included heavy workload, extended work hours, inadequate staffing, exposure to violence, poor institutional support, limited welfare policies, and low job satisfaction [15–35]. In Nigeria, additional influences included family structure, perceived health status, institutional support gaps, and effort–reward imbalance [21, 25, 35].

Causes of Burnout

Causes of burnout across the regions were diverse, including individual, occupational, and organizational pressures. Common determinants of burnout include demographic characteristics, high workload, minimal organizational support, and psychosocial stressors. Role demands and increased workloads were linked to burnout in Middle Eastern and Asian countries. In Europe, poor

support, low autonomy, and effort-reward imbalance were identified as causes [29, 31–33]. In African countries, long work hours, inadequate staffing and resources, weak welfare systems, and HIV-related burdens, with personal factors like family structure, perceived health, and limited social support, were highlighted [15–17, 19, 21–23, 25–28, 35]. Within Nigeria, different patterns emerged across settings: public facilities had high workload and inadequate staffing, primary care centers struggled with resource-poor environments, while the private sector featured extended shifts and over-commitment [19, 21, 24, 27, 28, 35]. Although no Nigerian studies examined NGO settings, inferences can be drawn from Asian NGOs and Nigeria's private sector.

Discussion

This scoping review mapped and synthesized existing evidence on burnout and work-related stress among healthcare professionals and those working in NGO settings in Nigeria. Our findings showed that burnout is increasing among healthcare workers across multiple health systems. This section summarizes the study findings in alignment with the study objectives and their implications for staff wellbeing and healthcare delivery.

Scope

Most of the papers were published within the past decade, depicting a global interest in burnout and occupational stress. The dominance of cross-sectional studies limited a deeper understanding of causal pathways, while the scarcity of qualitative research restricted insight into lived workplace experiences. The literature, particularly from Nigeria, remained concentrated in hospital settings. The pattern of burnout prevalence was diverse and pronounced among healthcare workers in a private facility.

Extent to Which Evidence Addressed NGO Healthcare Settings in Nigeria

There were no or limited publications of papers that examined burnout among NGO healthcare professionals in Nigeria. Despite the growing dominance of NGOs in public health service delivery in Nigeria, this cohort of professionals remained largely invisible in the Nigerian burnout literature. Most empirical studies in Nigeria focused on hospital settings. Studies from Asia have demonstrated that NGO workers face role ambiguity, ethical dilemmas, and limited societal recognition, suggesting that the organizational culture of non-state actors may generate distinct stress pathways. High burnout prevalence was noted, dominated by reduced personal accomplishment. High workload, extended work shifts, inadequate staffing, poor welfare policies, and weak institutional support were factors linked to work stress and burnout in Nigeria. The private sector in Nigeria highlighted additional challenges of overcommitment and performance-driven pressures, reflecting a frenetic burnout pattern. Although no Nigerian studies examined NGO settings directly, evidence from similar contexts suggests that NGO workers may experience burnout driven by high emotional demands, resource constraints, and role ambiguity, paralleling patterns observed in private healthcare. These findings are particularly relevant for Nigeria, where NGO healthcare professionals operate at the frontline of public health programs but remain absent from the burnout literature. The parallels between private-sector burnout and NGO settings indicate that high demands, limited rest, and performance pressures may also characterize NGO workplaces. The findings suggest that NGO workers are likely exposed to additional stressors, such as donor accountability pressure, unstable funding, limited organizational support, and role ambiguity patterns observed in NGO studies from Asia.

Determinants and Burnout Factors

The factors causing burnout across regions were diverse, with similar individual, occupational, and organizational elements. In the Middle East and Asian countries, role demands, increased workload, and organizational pressures were more prominent. Poor managerial support, low autonomy, and effort-reward imbalance were factors that dominated European studies. In Africa, lack of funds, weak welfare systems, and high disease burdens, especially in HIV delivery contexts, dominated the studies. In Nigeria, the pattern was slightly different across sectors. Public secondary and tertiary facilities had high patient loads and staff shortages, while the primary facilities faced reduced funding and a lack of resources. The private facilities experienced extended shifts coupled with over-commitment.

Implications for Staff Wellbeing and Healthcare Delivery

The prevalence of burnout recorded across the various settings has several implications for the welfare and delivery of care by healthcare professionals. These include emotional exhaustion, depersonalization, and lack of personal accomplishment, which are linked to limitations in health, a lack of job satisfaction, absenteeism, turnover rates, and patient outcomes. In a resource-constrained environment like Nigeria, these impacts add to an already strained health sector. In a nonprofit organization (NGO) setting that offers healthcare, some of the implications associated with burnout across these settings could be more significant. The reason, risk, and implication are linked to the fact that these organizations use a small pool of professionals to carry out high-impact programs that benefit marginalized groups. The lack of information on these professionals within Nigeria further contributes to these associated risks.

Implications for Research and Practice

The absence of studies on NGO healthcare workers in Nigeria represents a critical gap. NGOs deliver a significant share of HIV, TB, Malaria, and maternal health services in the country, often under resource-limited and donor-driven conditions that mirror, and may even exceed, stressors observed in hospital environments. Understanding burnout in this cadre is essential not only for staff wellbeing but also for sustaining program effectiveness and health system resilience. Furthermore, the dominance of the Maslach Burnout Inventory across reviewed studies, while useful for comparability, underscores the need for context-sensitive tools that reflect cultural, organizational, and occupational realities in Nigeria.

Contribution to Knowledge

This review contributes to the literature by consolidating evidence on burnout in Africa and globally, while drawing attention to neglected populations, particularly NGO healthcare professionals in Nigeria. It highlights that while prevalence is widely studied in hospital-based settings, little is known about non-state health actors, despite their growing role in public health delivery. The findings call for more diversified methodologies, broader sectoral inclusion, and targeted interventions to mitigate burnout.

Limitations

Only English-language, peer-reviewed studies were included, excluding NGO reports and grey literature. The reliance on cross-sectional designs and varied burnout instruments limits comparability. Most importantly, the absence of Nigerian NGO-focused studies constrained the direct applicability of findings.

Recommendations for Future Research

There is a need to expand research in Nigeria that explicitly investigates burnout among

NGO healthcare workers. The limited number of existing studies in this area leaves a critical gap, given their prominent role in delivering essential public health services. Additionally, to broaden methodological approaches in future research and incorporate longitudinal, qualitative, and mixed methods designs to move beyond descriptive prevalence studies and generate richer, more explanatory evidence. Such approaches would illuminate not only the scale of burnout but also the processes by which it develops and the strategies that mitigate it.

Conclusion

Burnout among healthcare professionals represents a major occupational health concern globally. In Nigeria, evidence points to high burnout levels among hospital-based workers, yet NGO healthcare professionals remain largely absent from the research literature. Given their central role in HIV, TB, malaria, and maternal health programs, addressing burnout among NGO staff is essential for sustaining service quality and workforce stability. Focused research and targeted occupational health interventions are urgently required.

Conflict of Interest

None.

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Availability of Data

Yes, and were included in the result section.

Ethical Approval

This study used public, anonymized data and did not require ethical approval.

Author Contributions

First author conceptualized and coordinated the research, second and third authors searched databases, reviewed, and supported data synthesis. The fourth and fifth authors supported the review of draft narratives, participated in conflict resolution, and conducted plagiarism checks. The last author provided technical guidance and approval; all authors contributed to the final manuscript.

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