Nigerian Medical Journal
NIGERIA MEDICAL ASSOCIATION
Print ISSN 0300-1652, E-ISSN 2229-774X

Original Article

Prevalence, Patterns, and Predictors of Burnout Among Healthcare Workers in a Tertiary Hospital in North-Eastern Nigeria

Nathaniel Birdling Noel[1*], NsikakMfon Inam[2], Nkechi Ifeanyi Nwabufoh[3], Fatimah Joy Baba[4], Dauda Samuel Hananiya[5], Ahmad Ayuba Umar[6]

[1]Department of Public Health, Modibbo Adama University Teaching Hospital, Yola, Adamawa State, Nigeria
[2]Department of Surveillance and Epidemiology, Nigeria Centre for Disease Control and Prevention, Abuja, Nigeria
[3]Department of Pharmacy, Alex Ekwueme Federal Teaching Hospital, Abakaliki, Ebonyi State, Nigeria
[4]Department of Paediatrics, Modibbo Adama University Teaching Hospital, Yola, Adamawa State, Nigeria
[5]Disease Prevention and Control Cluster, World Health Organization, Northcentral Zonal Office, Minna, Niger State, Nigeria, [6]Department of Community Medicine, Faculty of Clinical Sciences, College of Medical Sciences, Ahmadu Bello University, Zaria, Kaduna State, Nigeria

Abstract

Background: Burnout is a job-related phenomenon that results from prolonged, unresolved workplace stress. It is characterized by feelings of exhaustion, increased mental distance from one's job, and reduced professional efficacy. In Nigeria, the ongoing emigration of the medical workforce, coupled with growing work load and poor working conditions, has heightened the risk of burnout, especially in states with severe healthcare manpower shortages, such as Adamawa State. This study assessed the prevalence, patterns, and predictors of burnout among healthcare workers at Modibbo Adama University Teaching Hospital, Yola, Adamawa State, Northeastern Nigeria.

Methodology: A cross-sectional study was conducted among 200 doctors and nurses at Modibbo Adama University Teaching Hospital, Yola, Northeastern Nigeria, selected through a two-stage sampling. Data were collected using a semi-structured, self-administered questionnaire incorporating the Maslach Burnout Inventory for Human Services Survey adapted for Medical Personnel. Predictors were determined using a multivariable logistic regression analysis.

Results: The prevalence of burnout was high, affecting 140 (70.0%) respondents, with low personal achievement being the most common dimension (103; 51.5%). High emotional exhaustion was reported by 58 (29.0%) respondents, while depersonalization was observed among 52 (26.0%). Professional cadre and perception of the work environment were significantly associated with burnout, with nurses (AOR: 3.62, 95% CI: 1.37 - 9.59, p: 0.010) and those reporting a negative perception of their work environment (AOR: 6.98, 95% CI: 2.22 - 22.01, p: 0.001) showing higher levels of burnout.

Conclusion: Burnout was highly prevalent among the healthcare workers, potentially affecting their well-being and the quality of care provided. Improvements in the work environment, institutional stress-management programmes, and staffing policy reforms are recommended.

Keywords: Burnout, Health professional, Emotional exhaustion, Depersonalization, Low personal achievement, Nigeria

***Correspondence:** Nathaniel Birdling Noel, Department of Public Health, Modibbo Adama University Teaching Hospital, Yola, Adamawa State, Nigeria, natebirdling@gmail.com. +2348036671807

How to Cite: Noel NB, Inam NM, Nwabufoh NI, Baba FJ, Hananiya DS, Umar AA. Prevalence, patterns, and predictors of burnout among healthcare workers in a tertiary hospital in North-Eastern Nigeria. *Niger Med J.* 2025 Sep–Oct;66(5): 1909–1923. http: doi:10.71480/nmj.v66i5.1092.

Quick Response Code:

Introduction

Burnout is an occupational phenomenon that results from prolonged, unresolved workplace stress. It is characterized byfeeling drained (emotional exhaustion), emotional detachmentfrom one's job (depersonalization), and a sense of ineffectiveness and unfulfillment in one's career (reduced personal accomplishment).[1]Persistent work overload is a common cause of burnout as it limits opportunities for rest and recovery, thereby perpetuating physical and mental strain and diminishing workers' capacity to meet job demands.[2]Burnout has been linked to impaired decision-making, increased risk of medical errors, reduced quality of care, lower job satisfaction, absenteeism, and high staff turnover, which further exacerbates health workforce shortages, especially in resource-limited settings.[2–4]

Nigeria's health workforce density remains critically low, with an estimated 2.9 doctors per 10,000 population, far below the World Health Organization's recommendation of 17 per 10,000.[5,6]The severe shortage of healthcare workforce, coupled with the lack of policies regulating workhours, has led to excessively long shifts among healthcare workers, with doctors reportedly working an average of 107 hours per week, compared to the 48-hour weekly limit recommended in many high-income countries.[7–9] These conditions increase vulnerability to burnout and related adverse outcomes, including reported cases of death among overworked health professionals.[10]

Globally, burnout affects approximately one in two healthcare workers, with rates as high as 66% among doctors and nurses.[11,12]In Nigeria,burnout prevalence has been reported at up to 70% and more [13–17] and may potentially worsen if the ongoing medical workforce'smassive exoduscontinues unabated.[18]Our study setting, Adamawa State, has a particularly strained workforce, with approximately 280 practising doctors, equating to one doctor per 16,633 people, placing the state among the bottom seven states nationally in doctor-to-population ratios.[19]Despite this, there is limited evidence on the assessment of burnout rates among healthcare workers in the state. This study,therefore, aimed to determine the prevalence, patterns, and predictors of burnout among doctors and nurses at Modibbo Adama University Teaching Hospital, Yola. Understanding the magnitude of burnout in this context is essential to raising awareness and stimulating a prompt and viable response from stakeholders through targeted interventions that will ease the strain on the health workforce.

Materials And Methods

Study Area

The study was conducted at Modibbo Adama University Teaching Hospital (MAUTH), located in the Yola metropolis of Adamawa State, Northeastern Nigeria. The MAUTH is the largest tertiary health facility in Adamawa State, with an estimated capacity of 700 beds. It functions as a referral centre for other health facilities in the region, providing specialist healthcare services as well as undergraduate and postgraduate training for various health professionals, including doctors, nurses/midwives, pharmacists, laboratory scientists, and health record officers. Information from an unpublished administrative source indicates that MAUTH has approximately 1500 staff, comprising both clinical and non-clinical personnel.

Study Design and Population

This was a cross-sectionalstudyamong doctors and nurses. This studyfocused on doctors and nurses because they constitute the major frontline clinical workforce and aredirectlyinvolved in patient care.They typically have higher patient contact hours, bear the greatest responsibilities for clinical decision-making, and are central to determining patient outcomes. Doctors and nurses who have been in the employment of the hospital for at least 1 year were included in the study, while those absent from duty (on leave or away on posting outside the hospital) during the study period were excluded.

Sample Size Determination

The sample size was determined using Cochran's formula ($n=Z^2pq/d^2$)for the determination of the sample size for a cross-sectional study where the outcome variable is qualitative.[20] Where n is the minimum sample size, Zis the standard normal deviate at 95% confidence interval (1.96), p is the proportion of healthcare workers from a previous study in Nigeria who experienced burnout (85%),[21]q is the complementary probability (1–p), and d is theprecision of the study set at 5%. This gave a sample size of 220 after adjusting for a 10% non-response.

Sampling Technique

A two-stage sampling technique was employed. In the first stage, a stratified sampling approach with proportional allocation was used to distribute the sample size between doctors and nurses, resulting in 60 doctors and 160 nurses. In the second stage, participants within each cadre were selected through simple random sampling using computer-generated random numbers in Microsoft Excel.

Study Instrument

Data was collected using a pretestedsemi-structuredself-administered questionnaire comprising three sections. Section A contained information on sociodemographic characteristics, Section B compriseda 20-item statements assessing the participants' perception of their work environment (workload, staffing, support, availability of resources, team cohesion, quitting job, and job satisfaction) with a 5-point Likert scale response (*strongly agree, agree, undecided, disagree, and strongly disagree*), while Section C assessed burnout and incorporated questions adopted from the validated Maslach Burnout Inventory for Human Services Survey adapted for Medical Personnel (MBI-HSS (MP)).[22]

The MBI-HSS (MP)is a22-item tool that comprises the three subscales of the burnout syndrome, namely emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA). The EE subscale has 9 items (items 1, 2, 3, 6, 8, 13, 14, 16, and 20), DP has 5 items (items 5, 10, 11, 15, and 22), and PA has 8 items (items 4, 7, 9, 12, 17, 18, 19, and 21). The frequency with which the study participants experienced the feelings related to each subscale is assessed using a seven-point frequency scale comprising: *never, a few times a year or less, once a month or less, a few times a month, once a week, a few times a week, and every day*.

Thereliability of the study instrument in our setting was assessed with the coefficients as follows: Cronbach's alpha of 0.91 for the work environment perception tool, 0.76 for the MBI-HSS (MP), and 0.70 for the combined tools.

Data analysis

Data was analyzed using the Statistical Product and Service Solutions (SPSS) version 23 (IBM, Armonk, New York, USA).

The responses to the items in section B (perception of thework environment) were scored as follows: strongly agree = 5, agree = 4, undecided = 3, disagree = 2, and strongly disagree = 1 for positively worded statements, while responses to the negatively worded statementswere scored in the reverse. The maximum attainable score was 100, and a score between 80-100, corresponding to the two highest points of preferable responses (strongly agree or agree and strongly disagree or disagree for positively worded and negatively worded statements, respectively) were adjudged as good perception, while scores below 80 corresponding to an indecisive response or undesirable response (strongly agree or agree for negatively worded statements and strongly disagree or disagree for positively worded statements) were adjudged as poor perception.

The responses to the items in the MBI-HSS (MP)tool were scored as follows: never = 0, a few times a year or less = 1, once a month or less = 2, a few times a month = 3, once a week = 4, a few times a week = 5, and every day = 6.The MBI-HSS (MP)tool measures levels of burnout as either high, moderate, or low for each of the three subscales. The level of burnout is high if EE is ≥27, PA is ≤31, and DP is ≥13; moderate if EE is 17–26, PA is 32–38, and DP is 7–12; and low if EE is ≤16, PA is ≥39, and DP is ≤6. For both the EE and DP subscales, higher scores correspond to higher degrees of perceived burnout. Conversely, lowerscores on the PA subscale correspond to higher degrees of perceived burnout.Overall, burnout was defined as meeting the criteria for high burnout in at least one of the MBI-HSS (MP)subscales, i.e. high EE or high DP or low PA. Individuals who did not meet any of these criteria were classified as having no burnout.

Categorical variables were presented using frequencies and proportions in frequency tables, while quantitative variables were summarized and presented as median and interquartile range because the distributions were skewed. The skewness of the quantitative variables was assessed using the Kolmogorov-Smirnov test.

To determine the predictors of burnout, logistic regression analysis was used. Allexplanatory variables were individually entered into a binary logistic regression model to generate crude odds ratios (CORs) and 95% confidence intervals (CIs), followed by inclusion of these variables simultaneously into a multivariable logistic regression model. In themultivariable logistic regression analysis, adjusted odds ratios (AORs)were reported with 95% CIs and a $p < 0.05$was considered statistically significant.Multicollinearity was assessed by examining the variance inflation factor (VIF) and tolerance values for each independent variable in the multivariablelogistic regression model. Tolerance values of≤0.10 and VIF values of ≥10 were taken as indicating the occurrence of collinearity. In the model reported for our study, the tolerance values ranged from 0.33-0.95, and VIF values ranged from 1.05-3.20, indicating no collinearity between the variables.

Ethical Considerations

Ethical clearance was obtained from the institutional research and ethics committee of MAUTH, Yola, with reference number: MAUTHY/HREC/25/372. Additionally, written and verbal informed consent was obtained from the study respondents, while also assuring them confidentiality of the information obtained would be maintained.

Results

Out of the 220 questionnaires distributed, 200 were returned completed, giving a response rate of 90.9%.

Table 1: Sociodemographic Characteristics of the Study Respondents (n = 200).

Variable	Frequency	%
Age group (years)		
21-35	103	51.5
36-50	82	41.0
51-65	15	7.5
Median age (IQR)	35 years (29-42)	
Years of practice		
< 10	124	62.0
≥ 10	76	38.0

Median Years of Practice (IQR)	7 years (3-15)	
Gender		
Male	77	38.5
Female	123	61.5
Cadre		
Doctor	59	29.5
Nurse/Midwife	141	70.5
Rank hierarchy		
Senior[+]	65	32.5
Junior	135	67.5
Work Unit		
Surgical	106	53.0
Medical	94	47.0
Employment status		
Permanent	112	56.0
Temporary[#]	88	44.0
Marital status		
Married	108	54.0
Single	89	44.5
Separated	3	1.5
Self-rated health status		
Good	174	87.0
Fair	26	13.0

IQR - Interquartile range, [+]Consultant, Chief Medical Officer, Principal Medical Officer, Senior Registrar, Assistant Director Nursing Services, Chief Nursing Officer, Assistant Chief Nursing Officer, Principal Nursing Officer, [#]Contract, Locum, Residency

One hundred and three of the respondents fell within the 21–35-year age group,and the median age was 35 yearswith an interquartile range (IQR) of 29–42 years. One hundred and twenty-three (61.5%) of the respondents were female, and 108 (54.0%) were married. With regards to professional experience, 124 (62.0%) respondents had practised for less than 10 years,while 112 (56.0%) were permanent employees, and 174 (87.0%) rated their health status as good (**Table 1**).

Table 2: Respondents' responses towards their perception of their work environment (n = 200)

Statement	SA f (%)	A f (%)	U f (%)	D f (%)	SD f (%)
The workload at my duty station is heavy.	42 (21.0)	120 (60.0)	11 (5.5)	20 (10.0)	7(3.5)
Staffing levels at my duty station are adequate.	16 (8.0)	87 (43.5)	19 (9.5)	54 (27.0)	24 (12.0)
I feel well-supported at work by my co-workers and superiors.	42 (21.0)	121 (60.5)	18 (9.0)	13 (6.5)	6 (3.0)
There are adequate resources at work to enable me to function as desired.	26 (13.0)	70 (35.0)	24 (12.0)	64 (32.0)	16 (8.0)
There is good team cohesion at my duty station.	33 (16.5)	131 (65.5)	19 (9.5)	10 (5.0)	7 (3.5)
I have been considering changing jobs lately.	15 (7.5)	83 (41.5)	46 (23.0)	39 (19.5)	17 (8.5)
I am satisfied with my job.	24 (12.0)	96 (48.0)	35 (17.5)	34 (17.0)	11 (5.5)
Effective action is taken to resolve employees' issues.	19 (9.5)	85 (42.5)	28 (14.0)	56 (28.0)	12 (6.0)
The work schedule at my duty station is well-planned and flexible.	14 (7.0)	119 (59.5)	21 (10.5)	35 (17.5)	11 (5.5)
There are opportunities for career growth in my current workplace.	26 (13.0)	117 (58.5)	31 (15.5)	25 (12.5)	1 (0.5)
My workplace policies and procedures are fair and transparent.	16 (8.0)	123 (61.5)	32 (16.0)	28 (14.0)	1 (0.5)
I feel comfortable and safe at my duty station.	26 (13.0)	116 (58.0)	26 (13.0)	24 (12.0)	8 (4.0)
I feel respected and valued by my superiors.	24 (12.0)	127 (63.5)	33 (16.5)	13 (6.5)	3 (1.5)
I am able to maintain a healthy balance between my work and personal life.	23 (11.5)	123 (61.5)	22 (11.0)	27 (13.5)	5 (2.5)
I feel that my efforts and achievements are recognized and rewarded.	20 (10.0)	94 (47.0)	34 (17.0)	39 (19.5)	13 (6.5)
Communication between management and staff is clear, open, and effective.	11 (5.5)	101 (50.5)	34 (17.0)	40 (20.0)	14 (7.0)

I have access to adequate training and professional development.	24 (12.0)	100 (50.0)	24 (12.0)	40 (20.0)	12 (6.0)
The physical conditions of my workplace are comfortable and conducive.	11 (5.5)	96 (48.0)	26 (13.0)	55 (27.5)	6.0 (6.0)
I have access to resources or support systems to manage work-related stress.	7 (3.5)	88 (44.0)	25 (12.5)	61 (30.5)	19 (9.5)
I have sufficient autonomy and control over how I perform my tasks.	11 (5.5)	100 (50.0)	30 (15.0)	46 (23.0)	13 (6.5)
Overall Perception	**f**		**%**		
Negative	182		91.0		
Positive	18		9.0		
SA - Strongly Agree, A - Agree, U - Undecided, D - Disagree, SD - Strongly Disagree					

One hundred and sixty-two (81.0%) respondents either strongly agreedor agreedthat the workload at their duty station is heavy. Similarly,103 (51.5%)respondents felt that staffing levels were adequate, while only 96 (48.0%) felt that there were adequate resources at work. One hundred and twenty (60.0%)respondents reported satisfaction with their job, 98 (49.0%) reported that they had considered changing jobs lately, and 146 (73.0%) indicated they were able to maintain a healthy work-life balance.Overall, one hundred and eighty-two (91.0%) respondents had a negative perception oftheir work environment(**Table 2**).

Table 3: Pattern of Burnout Syndrome among the Study Respondents (n = 200).

Subscale	Frequency	%
Emotional Exhaustion (EE)		
High	58	29.0
Moderate	92	46.0
Low	50	25.0
Depersonalization (DP)		
High	52	26.0
Moderate	63	31.5
Low	85	42.5
Personal Achievement (PA)		
High	61	30.5
Moderate	36	18.0
Low	103	51.5

Regarding the pattern of burnout, 58 (29.0%) respondents had high levels of EE, while 52 (26.0%) had high levels of DP, and 103 (51.5%) had lowPA (**Table 3).**

Table 4: Prevalence of Burnout Syndrome among the Study Respondents (n = 200).

Overall burnout	Frequency	%
No burnout	60	30.0
Burnout in at least 1 subscale (either high EE, high DP or low PA)	140	70.0
Burnout in any 2 subscales (any two of high EE, high DP, or low PA)	62	31.0
Burnout in all 3 subscales (combination of high EE, high DP, and low PA, i.e., high burnout)	11	5.5

Overall, only 60 (30.0%) respondents did not report high levels of burnout in any of the three subscales, while only 11 (5.5%) respondents reported high burnout across all three subscales, signifying severe burnout (**Table 4**).

Table 5: Predictors of Burnout Syndrome among the Study Respondents

Variable	Burnout		COR (95% CI)	p-value	AOR (95% CI)	p-value
	No (n = 60) f (%)	Yes (n = 140) f (%)				
Age group						
21-35 years	21 (20.4)	82 (79.6)	3.42 (1.11-10.49)	0.032*	1.73 (0.33-8.99)	0.515
36-50 years	32 (39.0)	50 (61.0)	1.37 (0.45-4.14)	0.580	1.60 (0.42-6.09)	0.493
51-65 years	7 (46.7)	8 (53.3)	1		1	
Gender						
Male	26 (33.8)	51 (66.2)	0.75 (0.41-1.39)	0.358	1.60 (0.68-3.78)	0.287
Female	34 (27.6)	89 (72.4)	1		1	
Cadre						
Doctor	25 (42.4)	34 (57.6)	1		1	
Nurse/Midwife	35 (24.8)	106 (75.2)	2.23 (1.17-4.23)	0.015*	**3.62 (1.37-9.59)**	**0.010***
Rank						
Senior	31 (47.7)	34 (52.3)	1		1	
Junior	29 (21.5)	106 (78.5)	3.33 (1.76-6.30)	<0.001*	1.50 (0.46-4.91)	0.503
Specialty						
Surgical	30 (28.3)	76 (71.7)	1		1	
Medical	30 (31.9)	64 (68.1)	0.84 (0.46-1.54)	0.578	1.06 (0.54-2.10)	0.862
Years of practice						
<10 years	26 (21.0)	98 (79.0)	3.05 (1.63-5.70)	<0.001*	1.26 (0.38-4.18)	0.703
[illegible]	34 (44.7)	42 (55.3)	1		1	
Employment status						
Permanent	39 (34.8)	73 (65.2)	1		1	
Temporary	21 (23.9)	67 (76.1)	1.71 (0.91-3.19)	0.095	1.17 (0.50-2.73)	0.714
Marital status						
Not married	21 (22.8)	71 (77.2)	1.91 (1.02-3.57)	0.042*	1.39 (0.65-3.01)	0.399
Married	39 (36.1)	69 (63.9)	1		1	
Self-rated health status						

At binary logistic regression analysis level, younger age group (COR: 3.42, 95% CI: 1.11-10.49, p: 0.032), being a nurse/midwife (COR: 2.23, 95% CI: 1.17-4.23, p: 0.015), belonging to a junior rank (COR: 3.33, 95% CI: 1.76-6.30, p: <0.001), years of practice below 10 (COR: 3.05, 95% CI: 1.63-5.70, p: <0.001), not married (COR: 1.91, 95% CI: 1.02-3.57, p: 0.042), and negative perception of the work environment (COR: 5.58, 95% CI: 1.99-15.70, p: 0.001) increased the oddsof burnout.At the multivariable logistic regression analysis level, being a nurse and a negative perception of the work environment were the predictors of burnout. Nurses were approximately four times more likely (AOR: 3.62, 95% CI: 1.37-9.59, p = 0.010) to experience burnout compared to doctors. Similarly, respondents who had a negative perception of their work environment had approximately seven times higher odds (AOR: 6.98, 95% CI: 2.22-22.01, p: 0.001) of experiencing burnout compared to those who had a positive perception. The Hosmer–Lemeshowgoodness-of-fit test indicated an acceptable model fit (χ^2: 10.566,p: 0.228) while the model explained approximately 22% of the variance in the outcome (Nagelkerke R^2: 0.218)(**Table 5).**

Discussion

This study assessed the prevalence, pattern, and predictors of burnout among healthcare workers in MAUTH, Yola, Northeastern Nigeria.In keeping with sub-Saharan regional estimates,[23] more than two-thirds (70%) of the healthcare workers in our study experienced high burnout in at least one subscale. This is not unexpected, given that the majority (91%) of the respondents reported unsatisfactory working conditions. Moreover, the study setting is in a state ranked among the bottom six in Nigeria in terms of the number of healthcare workers.[24]This implies that existing healthcare workers may be overstretched due to unusually high workloads resulting from a shortage of manpower.The high burden of burnout observed in our study aligns with findings from similar Nigerian studies. For example,prevalence ratesranging from 69% to85% were reported in studies conducted in Abuja, Ilorin, and Enugu.[13–17]Similar rateshave been documented in Cameroun(66.3%) and Tanzania (62%),countries with sociodemographic profiles that parallel those of Nigeria.[25,26]Furthermore, our findings corroborate global data from a systematic review, which reported burnout prevalence among healthcare workers ranging from22.2% to 85.1%.[27]Conversely, our prevalence was relatively higher than that reported in other Nigerian and African studies. For instance, 9.8% in Jos,[28]30.7% in Ilorin,[29] 41% in Lagos,[30] and 45% in Abraka,[31] and 53.5% in Togo.[32]This variation may be because some of the studies definedoverall burnout differently,[28]used a different assessment tool – the Copenhagen Burnout Inventory,[30,32]dissimilarities in the study population – either recruited doctors only,[28–30] or included other cadres besides doctors and nurses,[31]or conducted in facilities at a lower level of care.[31]Likewise, a lower prevalence of burnout was also observed among doctors in Kuwait (51.8%). This discrepancy may be explained by the smaller sample size (85), use of the abbreviated 9-item version of the Maslach Burnout Inventory instead of the full 22-item scale, and the higher-income setting with better working conditions and a more resourced healthcare system.[33]Nonetheless, no healthcare worker should have to experience burnout while providing care. The high prevalence of burnout in our setting poses a significant risk to patient safety, as affected workers are more prone to medical errors due to physical and emotional exhaustion, detachment from their work, and reduced empathy. Furthermore, retaining such a highly burnt-out workforce is challenging, as burnout is associated with increased absenteeism, decreased job satisfaction, poor performance, and reduced organizational commitment.[2,3] It is therefore imperative that institutional interventions, such as establishing regular counselling and mental health support services, improving staff-to-patient ratios, and implementing effective workload management and task redistribution strategies, are essential to mitigate high burnout among these workers.

Regarding burnout dimensions, the most common was low personal achievement (51.5%), followed by high emotional exhaustion (29%), and high depersonalization (26%). This suggests that relatively few respondents experienced extreme emotional exhaustion or became detached from patients. Despite reduced feelings of professional accomplishment, many of the healthcare workers remained resilient,

maintaining empathetic and personal approaches in patient care. In other words, while the majority (81%) functioned with minimal exhaustion despite workload excess, a substantial proportion struggled with feelings of reduced efficacy, competence, and accomplishment. This finding aligns with the observation that the majority(91%) of thehealth workersin this study perceived their working conditions as unsatisfactory, characterized by job dissatisfaction, inadequate recognition, limited stress-management support, unconducive physical working conditions, and limited autonomy.Previous studies conducted in Nigeria, Cameroun, Saudi Arabia, and China corroborated our finding of low personal accomplishment as the predominant form of burnout.[25,28,29,34–36]However, other studies from Nigeria, Tanzania, Kuwait, and Saudi Arabia identified high emotional exhaustion as the most prevalent dimension of burnout.[16,23,26,31,33,35]This variation may be attributed to differences in the burnout assessment tools used (such as the abbreviated Maslach Burnout Inventory or the Oldenburg Burnout Inventory), as well as variations in study populations and settings. The predominance of low personal achievement in our study suggests systemic challenges, includingpoor recognition, limited opportunities for professional growth, and low autonomy. These barriers leave healthcare workers feeling less fulfilled and effective, which can, in turn, diminish their motivation, performance, and commitment,ultimately underminingthe quality of healthcare delivery. Therefore, interventions that will strengthen workers' sense of accomplishment and engagement, such as staff recognition programs, continuous professional development initiatives, mentorship programs, and participatory management policies, are recommended.

We found professional cadre and perception of the work environment to be the predictors of burnout.Consistent with previous studies,[35,37–39]nurses were more likely than doctors to experience burnout. This may suggest that nurses are disproportionately overwhelmedby work, possibly due to more patient contact and administrative responsibilities, such as the routine monitoring and documentation of patients' vital signs. Doctors, on the other hand, may benefit from greater autonomy and decision-making authority, which may confer some protection against burnout. However, other studies in Nigeriareported higher burnout among doctors,[16,34]while a study in China found no significant difference between the two groups.[40]Burnout was also more common among respondents with a negative perception of their work environment, characterized by excessive workload, poor physical working conditions, inadequate support systems, limited autonomy, poor communication between staff and management, lack of recognition and reward, unresolved workplace issues, inadequate equipment, and staff shortages. This underscores the critical role of organizational culture and workplace conditions in influencing burnout experiences. Both local and international studies have consistently identified the work environment as a key modifiable predictor of burnout.[16,27,29]Our findingreaffirms that inadequate and unsupportive work environments increase vulnerability to burnout.[2]Hence, promoting a more supportive and enabling work environment through institutional policies and improved physical working conditions is essential to mitigate burnout, enhance the well-being of theworkers, and sustain quality healthcare delivery.

Given the cross-sectional design of this study, causal inferencesregarding the relationship between the perceptionof the work environment and burnout cannot be drawn, as temporality cannot be established. Furthermore, the use of self-reported measures in the burnout inventory may introduce response bias, potentially leading to the underreporting of burnout experiences. Finally, our findings may have limited generalizability for other categories of health workers beyond doctors and nurses, or non-tertiary hospital settings.

Conclusion

This study revealed a high prevalence of burnout among doctors and nurses, with low personal achievement being the most common dimension. Nurses and individuals with negative perceptions of their work environment were at significantly higher risk. These findings underscore the critical influence of the organizational environment in shaping burnout experiences and highlight the urgent need for targeted institutional interventions. Fostering institutional mental health support systems, conducting

periodic workload assessments, and implementing equitable task and workforce redistribution are recommended to mitigate burnout and improve healthcare delivery efficiency.

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