OPEN ACCESS
Saudi Journal of Medicine
Abbreviated Key Title: Saudi J Med
ISSN 2518-3389 (Print) | ISSN 2518-3397 (Online)
Scholars Middle East Publishers, Dubai, United Arab Emirates
Journal homepage: https://saudijournals.com

Original Research Article

Sociodemographic Correlates of Frustration and Coping Styles among Healthcare Workers in North-Central Nigeria: A Cross-Sectional Study

Paul E. Agbo[1]*, Surajudeen, O. Bello[2], Idris A. Yusuf[3], Ikrama I. Hassan[4], Ene F. Agbo[5], Tajudeen L. Ibrahim[2], Valentine K. Adikaibe[6], Salihu O. Mohammed[7], Lucky L. Changkat[7], Rita O. Ewuga[8], James L. Ajige[8], Adaku C. Ezeala[9], Christian T. Agba[9], Biodun M. Lawal[10], Ahmed T. Bako[11], Innocent E. Okoliko[12], Augustine D. Abah[13], Yusuf H. Onawo[14]

[1]Department of Psychiatry, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[2]Department of Paediatrics, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[3]Department of Internal Medicine, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[4]Department of Epidemiology and Community Health, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[5]Department of Paediatrics Federal University Teaching Hospital, Lafia, Nasarawa State
[6]Department of Surgery, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[7]Department of Obstetrics and Gynaecology, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[8]Department of Ophthalmology, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[9]Department of Family Medicine, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[10]Department of Anatomic Pathology, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State
[11]Department of Anaesthesia, Federal University Teaching Hospital, Lafia, Nasarawa State
[12]Department of Pharmacy, Federal University Teaching Hospital, Lafia, Nasarawa State
[13]Department of Psychology, Federal University Teaching Hospital, Lafia, Nasarawa State
[14]Department of Laboratory Sciences, Federal University Teaching Hospital, Lafia, Nasarawa State

DOI: https://doi.org/10.36348/sjm.2026.v11i05.002 | **Received:** 22.02.2026 | **Accepted:** 16.04.2026 | **Published:** 02.05.2026

***Corresponding Author:** Paul E. Agbo
Department of Psychiatry, Federal University of Lafia/ Federal University Teaching Hospital, Lafia, Nasarawa State

Abstract

Background: Healthcare workers in resource-constrained settings experience significant occupational stressors that may influence coping behaviours and psychological wellbeing. ***Objective:*** To examine the relationship between frustration, sociodemographic characteristics, and coping styles among healthcare workers in a tertiary hospital in North-Central Nigeria. ***Methods:*** A cross-sectional analytical study was conducted among 385 healthcare workers using stratified sampling. Data were collected using a structured questionnaire, the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS), and the Brief COPE inventory. Descriptive statistics summarized participant characteristics and workplace stressors. Pearson and partial correlation analyses assessed relationships between frustration and coping styles. Multiple linear regression identified independent predictors of maladaptive coping. Statistical significance was set at $p < 0.05$. ***Results:*** Workplace frustration was highly prevalent, driven by workload, inadequate equipment, and poor remuneration. Adaptive coping strategies predominated, particularly active coping, planning, and religious coping. Frustration was not associated with adaptive coping ($r = -0.017$, $p = 0.737$) but was significantly associated with maladaptive coping ($r = 0.266$, $p < 0.001$). This relationship remained significant after adjusting for sociodemographic variables ($r = 0.241$, $p < 0.01$). Regression analysis showed that frustration independently predicted maladaptive coping ($\beta = 0.266$, $p < 0.001$), while longer professional experience was protective. **Conclusion:** Healthcare workers demonstrated resilience through adaptive coping strategies; however, increased frustration is associated with greater reliance on maladaptive coping. Addressing structural stressors is essential to improve coping and wellbeing.

Keywords: Coping styles, frustration, healthcare workers, occupational stress, Nigeria.

Copyright © 2026 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.

1.0 INTRODUCTION

Healthcare workers (HCWs) are central to the effective functioning of health systems worldwide, yet they are among the most exposed occupational groups to psychological stress. The demanding nature of healthcare delivery, characterized by long working hours, high patient loads, emotional strain, and exposure to life-threatening situations, places HCWs at heightened risk of occupational stress and burnout. Globally, burnout among healthcare professionals has reached concerning levels, with prevalence estimates ranging between 30% and 50% across different settings (Dubale *et al.,* 2019; West *et al.,* 2018). More recent evidence suggests that approximately 40% of healthcare workers experience significant work-related stress or burnout symptoms, reflecting a growing global public health concern (World Health Organization [WHO], 2023). These conditions have serious implications, including reduced job satisfaction, increased medical errors, absenteeism, and compromised quality of patient care (West *et al.,* 2018).

In high-income regions such as North America and Europe, occupational stress among healthcare workers remains substantial despite relatively advanced healthcare systems. In the United States, burnout prevalence among physicians has been reported to exceed 45%, driven by increasing administrative workload, electronic health record burdens, and workforce shortages (Shanafelt *et al.,* 2022). Similarly, European studies have documented high levels of work-related stress among healthcare professionals, with approximately one in three workers reporting significant occupational strain (European Agency for Safety and Health at Work, 2022). These findings suggest that even in well-resourced systems, organizational and structural factors, rather than resource availability alone, play a critical role in shaping occupational stress.

The burden of occupational stress is even more pronounced in low- and middle-income countries (LMICs), where healthcare systems often operate under severe resource constraints. Healthcare workers in these settings frequently contend with inadequate infrastructure, limited medical supplies, insufficient staffing, and weak institutional support. These challenges contribute to higher levels of stress, burnout, and workforce attrition (Willis-Shattuck *et al.,* 2008). Evidence indicates that healthcare professionals in LMICs experience higher stress levels compared to their counterparts in high-income settings, largely due to systemic deficiencies within healthcare systems (Dubale *et al.,* 2019).

In Africa, the situation is particularly critical. The continent faces a substantial shortage of healthcare workers, compounded by increasing healthcare demands and limited health financing. Studies across African countries consistently report high levels of occupational stress and burnout among healthcare workers, often driven by poor working conditions, inadequate remuneration, and limited opportunities for career advancement (Asamani *et al.,* 2019; Dubale *et al.,* 2019). These stressors are further exacerbated by high disease burden, workforce migration, and weak health system infrastructure.

Within sub-Saharan Africa (SSA), healthcare systems are under significant strain due to persistent workforce shortages and high patient-to-provider ratios. Estimates suggest that burnout prevalence among healthcare workers in SSA ranges from 34% to as high as 87%, reflecting severe systemic challenges (Dubale *et al.,* 2019). In many settings, healthcare workers are required to perform multiple roles beyond their professional scope, leading to role overload, fatigue, and emotional exhaustion. Despite the high burden of occupational stress, research in SSA has predominantly focused on prevalence and determinants of stress and burnout, with comparatively limited attention given to coping mechanisms and adaptive responses (Ozoemena *et al.,* 2021).

Nigeria reflects many of the systemic challenges observed across SSA. The healthcare system is characterized by workforce shortages, uneven distribution of personnel, inadequate infrastructure, and poor remuneration. Studies have reported high levels of occupational stress and burnout among Nigerian healthcare workers, with prevalence estimates ranging from moderate to severe across different professional groups (Nwosu *et al.,* 2020; Nwobodo *et al.,* 2023). Structural challenges such as heavy workload, lack of equipment, administrative inefficiencies, and poor work–life balance contribute significantly to workplace frustration. These factors not only affect healthcare worker wellbeing but also compromise the efficiency and sustainability of healthcare delivery.

Coping strategies play a critical role in how healthcare workers manage occupational stress. Coping refers to the cognitive and behavioural efforts individuals employ to manage demands that are appraised as stressful (Carver, 1997). These strategies are broadly categorized into adaptive coping (e.g., problem-solving, planning, seeking social support) and maladaptive coping (e.g., denial, substance use, disengagement). Adaptive coping strategies have been associated with improved psychological resilience and better job performance, whereas maladaptive coping may exacerbate stress and contribute to burnout (Meyer, 2001).

The Self-Determination Theory (SDT) provides a useful framework for understanding these dynamics. SDT posits that three basic psychological needs—autonomy, competence, and relatedness—are essential for optimal functioning and wellbeing (Deci & Ryan, 2017). When these needs are satisfied, individuals are more likely to exhibit intrinsic motivation, resilience,

© 2026 | Published by Scholars Middle East Publishers, Dubai, United Arab Emirates

and adaptive coping behaviours. Conversely, when these needs are thwarted, individuals experience frustration, which may influence coping responses and overall psychological wellbeing.

Despite growing evidence on occupational stress among healthcare workers, there remains a significant gap in understanding how frustration and sociodemographic factors interact to influence coping behaviours, particularly in resource-constrained settings such as North-Central Nigeria. Most studies in Nigeria and SSA have focused on stress prevalence and burnout, with limited emphasis on coping styles and their predictors. Furthermore, few studies have integrated psychological constructs such as need satisfaction and frustration with sociodemographic determinants in explaining coping behaviour.

Addressing this gap is essential for informing targeted interventions aimed at improving healthcare worker wellbeing and strengthening health system resilience. This study therefore aimed to examine the relationship between frustration, sociodemographic characteristics, and coping styles among healthcare workers in a tertiary healthcare institution in North-Central Nigeria.

1.2 General Objective

To examine the relationship between workplace frustration, sociodemographic characteristics, and coping styles among healthcare workers.

1.2.1 Specific objectives

1. To determine the prevalence of workplace frustration among healthcare workers
2. To identify coping styles among healthcare workers
3. To determine the correlates and predictors of coping styles

2.0 METHODS

2.1 Study Design and Setting

A cross-sectional analytical study was conducted at the Federal University Teaching Hospital, Lafia, Nigeria.

2.2 Study Population

The study population comprised full-time clinical staff, including doctors, nurses, pharmacists, laboratory scientists, and psychologists.

2.2.1 Inclusion Criteria

- Full-time clinical staff of FUTHL
- Minimum of six months of continuous service at the institution
- Provided written informed consent

2.2.2 Exclusion Criteria

- Ad-hoc or temporary staff
- Non-clinical staff

2.3 Sample Size Determination

The sample size for this study was determined using the Cochran formula for cross-sectional studies (Weiss *et al.,* 2012);

$$n = \frac{Z^2 P(1-P)}{d^2}$$

Using:

- Z = 1.96
- P = 0.35
- d = 0.05

Adjusted for 10% non-response = **385**

The number of healthcare workers at FUTH Lafia is 840, including doctors 189, nurses 461, pharmacists 71, 105 laboratory scientists and Technicians, and clinical psychologists 14.

After proportional allocation, Doctors 87, Pharmacists 33, Nurses 211, Lab Scientists 48, and 6 Psychologists

Total number of participants = **385**

2.4 Sampling Technique

A stratified sampling technique proportional to professional cadre was used.

2.5 Data Collection Instruments

1. **Sociodemographic and Workplace Questionnaire:** Captured demographic and workplace characteristics.
2. **Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS):** This assessed satisfaction and frustration across the three basic psychological domains: autonomy, competence, and relatedness. The instrument has strong psychometric validity across diverse settings and cultures (Heissel *et al.,* 2018; Benita *et al.,* 2020; Costa *et al.,* 2018; Cordeiro *et al.,* 2016) and adapted for specific contexts (Vandenkerckhove, 2019; Rouse *et al.,* 2020).
3. **Brief COPE Inventory:** The Brief COPE is a 28-item instrument with 2 items per subscale, comprising 14 subscales that measure active coping, planning, positive reframing, acceptance, humour, religion, using emotional support, using instrumental support, self-distraction, denial, venting, substance use, behavioural disengagement, and self-blame (Carver, 1997). It helps to classify coping strategies as either adaptive or maladaptive (Teques *et al.,*2018; Meyer, 2001; Su *et al.,*2015). It has been used in diverse settings and it has been validated across (Teques *et al.,*2018; Chase *et al.,*2013; Kannis-Dymand *et al.,*2020; Rodrigues *et al.,*2022). Responses were rated on a 4-point Likert scale, and subscales were analysed according to established scoring guidelines.

2.6 Data Collection Procedure

Data collection occurred between May and July 2025. Trained research assistants from each clinical department facilitated recruitment. Respondents were approached during departmental meetings, morning reviews, and break periods. After obtaining informed consent, the questionnaires were administered in a private setting to ensure confidentiality and accuracy of responses.

2.7 Data Analysis

Data were analysed using SPSS version 23. Descriptive statistics were computed. Pearson and partial correlation analyses were conducted. Multiple linear regression identified predictors of maladaptive coping. Statistical significance was set at $p < 0.05$.

2.8 Ethical Approval

Ethical approval was obtained from the Research Ethics Committee of the Federal University Teaching Hospital, Lafia.

RESULTS

Table 1: Sociodemographic

Variable	Category	n	%
Age (years)	< 20	3	0.8
	20–30	136	35.3
	30–40	163	42.3
	40–50	55	14.3
	> 50	28	7.3
Gender	Male	150	39.0
	Female	235	61.0
Religion	Christianity	259	67.3
	Islam	124	32.2
	Other religions	2	0.5
Marital status	Married	262	68.1
	Single	116	30.1
	Divorced	1	0.3
	Widowed/Separated	6	1.6
Professional cadre	Consultants	14	3.6
	Residents	45	11.7
	Medical officers	35	9.1
	Nurses	203	52.8
	Pharmacists	32	8.3
	Medical laboratory scientists	50	13.0
	Psychologists	6	1.6
Years of professional experience	< 1 year	42	10.9
	1–5 years	160	41.6
	6–10 years	96	24.9
	11–20 years	60	15.6
	> 20 years	27	7.0
Monthly salary (₦)	<100,000	37	9.6
	100,000–200,000	175	45.5
	200,000–300,000	100	26.0
	300,000–400,000	25	6.5
	400,000–500,000	18	4.7
	>500,000	26	6.8
Does spouse work in this facility?	Yes	32	8.3
	No	353	91.7
Spouse profession	Health worker	46	11.9
	Other profession	145	37.7
Number of children	1	45	11.7
	2	58	15.1
	3	66	17.1
	4	25	6.5
	5	13	3.4
	6	4	1.0
	≥7	2	0.5

Note. ₦1,500 ≈ $1 USD.

Table 2: Sources of Frustration among Healthcare Workers

Source of Frustration	Most Affected Levels (Moderate to Very Much)
Lack of equipment/tools	88%+ cumulative
Excess workload	85%+ cumulative
Poor salary	84%+ cumulative
Work–life imbalance	77%+ cumulative
Workplace safety concerns	74%+ cumulative
Limited research/innovation opportunities	~71% cumulative
Administrative burden	69%+ cumulative
Lack of professional development	68%+ cumulative
Lack of recognition	~61% affected
Poor interpersonal relationships	~48% affected

Table 3: Distribution of Psychological Need Satisfaction and Frustration among Healthcare Workers (N = 385)

Domain	Mean ±SD	Category (%)	Interpretation
Autonomy satisfaction	14.89 ± 4.00	Low: 28.3% • Moderate: 49.6% • High: 22.1%	Moderate
Competence satisfaction	17.11 ± 3.17	Low: 12.4% • Moderate: 46.8% • High: 40.8%	High
Relatedness satisfaction	15.80 ± 3.49	Low: 18.2% • Moderate: 52.3% • High: 29.5%	Moderate–High
Autonomy frustration	11.03 ± 3.84	Low: 36.1% • Moderate: 44.7% • High: 19.2%	Moderate
Competence frustration	7.08 ± 3.00	Low: 62.6% • Moderate: 27.4% • High: 10.0%	Low
Relatedness frustration	7.06 ± 3.11	Low: 64.3% • Moderate: 25.1% • High: 10.6%	Low
Total need satisfaction	47.80 ± 8.98	—	Moderate–High
Total frustration	25.17 ± 7.49	—	Moderate

Competence satisfaction recorded the highest mean score, followed by relatedness, while autonomy satisfaction was comparatively lower. Among frustration domains, autonomy frustration was the most prominent, suggesting perceived constraints in decision-making and control within the workplace.

Table 4: Coping Strategies among Healthcare workers

Coping Domain	Mean± SD	Category (%)	Interpretation
Adaptive coping (total)	38.72 ± 6.85	Low: 15.6% • Moderate: 54.3% • High: 30.1%	Predominant
Active coping	6.46 ± 1.48	—	High
Planning	6.12 ± 1.52	—	High
Positive reframing	5.70 ± 1.60	—	Moderate–High
Emotional support	5.33 ± 1.67	—	Moderate
Instrumental support	5.21 ± 1.59	—	Moderate
Acceptance	5.64 ± 1.45	—	Moderate–High
Religion	5.96 ± 1.70	—	High
Humor	4.21 ± 1.83	—	Low–Moderate
Maladaptive coping (total)	14.38 ± 4.92	Low: 61.2% • Moderate: 29.7% • High: 9.1%	Low
Self-distraction	4.83 ± 1.52	—	Moderate
Denial	3.01 ± 1.43	—	Low
Substance use	2.42 ± 1.01	—	Very Low
Behavioural disengagement	3.27 ± 1.36	—	Low
Venting	4.56 ± 1.67	—	Moderate
Self-blame	3.69 ± 1.58	—	Low–Moderate

Source: SPSS 23.

The analysis shows a dominance of adaptive coping strategies.

Table 5: Correlation Matrix of Frustration and Coping Styles

Variable	1	2	3
1. Total Frustration	1		
2. Adaptive Coping	–0.017	1	
3. Maladaptive Coping	0.266**	–0.182**	1

Note: ** Correlation is significant at $p < 0.01$ (2-tailed)

Pearson correlation analysis was conducted to examine the relationships between frustration and coping styles (Table 5). There was no significant relationship between total frustration and adaptive coping (r = –0.017, p = 0.737). However, frustration demonstrated a significant positive correlation with maladaptive coping (r = 0.266, p < 0.001), indicating that higher levels of workplace frustration were associated with increased use of maladaptive coping strategies. Additionally, adaptive coping was negatively correlated with maladaptive coping (r = –0.182, p < 0.01).

Table 6: Partial Correlation Matrix of Frustration and Coping Styles Controlling for Sociodemographic Variables (N = 385)

Variable	1	2	3
1. Total Frustration	1		
2. Adaptive Coping	–0.012	1	
3. Maladaptive Coping	0.241**	–0.168**	1

Controlled variables: Age, gender, professional cadre, monthly income, and years of experience

Note: ** Correlation is significant at *p* < 0.01 (2-tailed)

To account for potential confounding by sociodemographic factors, partial correlation analysis was conducted controlling for age, gender, professional cadre, monthly income, and years of experience (Table 6). The results remained largely unchanged. Frustration was not significantly associated with adaptive coping (r = –0.012, p > 0.05), but remained significantly associated with maladaptive coping (r = 0.241, p < 0.01). The negative relationship between adaptive and maladaptive coping also persisted (r = –0.168, p < 0.01).

Table 7: Predictors of Maladaptive Coping

Predictor	B	SE	β	p-value
Frustration	0.177	0.035	0.266	<0.001
Female sex	0.742	0.386	0.097	0.056
Age (30–40 yrs)	–0.331	0.502	–0.040	0.511
Income	0.215	0.187	0.063	0.253
Cadre	NS	—	—	>0.05
Experience >20 yrs	–5.082	1.601	–0.243	0.002

Model summary

- $R^2 = 0.131$
- Adjusted $R^2 = 0.085$
- $F(19, 365) = 2.886$
- $p < 0.001$.

Frustration emerged as a significant independent predictor of maladaptive coping, indicating that higher levels of workplace frustration were associated with increased use of maladaptive coping strategies.

Healthcare workers with more than 20 years of experience were significantly less likely to engage in maladaptive coping behaviours.

DISCUSSION

This study examined the relationship between workplace frustration, sociodemographic characteristics, and coping styles among healthcare workers in a tertiary healthcare institution in North-Central Nigeria. The findings provide important insights into how healthcare workers respond to occupational stress in resource-constrained settings and highlight the complex interplay between structural, psychological, and individual factors.

A key finding of this study is the high prevalence of workplace frustration, primarily driven by structural and organizational factors such as excessive workload, inadequate equipment, poor remuneration, and work–life imbalance. These findings are consistent with previous research in low- and middle-income countries, where systemic healthcare constraints are major drivers of occupational stress (Dubale *et al.,* 2019; Nwobodo *et al.,* 2023). In such settings, healthcare workers are often required to function under resource limitations that increase workload demands and reduce recovery time, thereby contributing to sustained psychological strain.

Despite these stressors, healthcare workers in this study predominantly employed adaptive coping strategies, including active coping, planning, positive reframing, and religious coping. This suggests a notable degree of resilience within the workforce. The prominence of religious coping reflects the sociocultural context of Nigeria, where spirituality plays a central role in everyday life and serves as an important psychological resource. Similar patterns have been reported in other sub-Saharan African contexts, where coping strategies are often shaped by cultural and social support systems (Ozoemena *et al.,* 2021).

A critical contribution of this study lies in clarifying the relationship between frustration and coping styles. The unadjusted correlation analysis demonstrated no significant relationship between frustration and adaptive coping, but a significant positive relationship between frustration and maladaptive coping. This finding indicates that while healthcare workers experiencing frustration do not necessarily reduce their use of adaptive coping strategies, they are more likely to engage in maladaptive coping behaviours as frustration increases.

Importantly, the partial correlation analysis—controlling for age, gender, professional cadre, income, and years of experience—yielded similar results. Frustration remained significantly associated with maladaptive coping but not with adaptive coping. The consistency between unadjusted and adjusted analyses suggests that the observed relationships are robust and not explained by sociodemographic factors. This strengthens the internal validity of the findings and indicates that frustration is an independent driver of maladaptive coping behaviour among healthcare workers.

These findings are conceptually important. They challenge the simplistic assumption that coping behaviours uniformly reflect psychological resilience or wellbeing. Instead, the results support a more nuanced interpretation in which coping represents a multidimensional response to stress exposure. In this context, adaptive coping appears to be relatively stable and possibly influenced by ingrained behavioural patterns or professional training, whereas maladaptive coping is more sensitive to increases in stress and frustration.

The regression analysis further reinforces this interpretation. Frustration emerged as a significant independent predictor of maladaptive coping, even after adjusting for sociodemographic variables. This indicates that workplace frustration does not merely coexist with maladaptive coping but actively contributes to it. Healthcare workers experiencing higher levels of frustration are therefore more likely to adopt less effective coping strategies, which may, in turn, exacerbate stress and increase vulnerability to burnout.

The negative association observed between adaptive and maladaptive coping further highlights the dynamic nature of coping behaviours. Individuals who engage more frequently in adaptive coping strategies are less likely to rely on maladaptive strategies, suggesting a degree of behavioural substitution or preference. This finding aligns with theoretical models of coping that emphasize the coexistence and interaction of multiple coping strategies rather than a single dominant approach (Carver, 1997).

Sociodemographic variables were less influential than expected. Although previous studies have reported significant associations between factors such as income, professional cadre, and coping styles, the adjusted analyses in this study indicate that these variables do not substantially alter the relationship between frustration and coping. This suggests that workplace factors may play a more central role than individual demographic characteristics in shaping coping behaviours among healthcare workers in this setting.

However, years of professional experience showed a protective effect against maladaptive coping, with more experienced healthcare workers being less likely to engage in such behaviours. This finding is consistent with existing literature suggesting that experience enhances coping capacity through skill acquisition, professional confidence, and familiarity with stressors (Koinis *et al.,* 2015). It also underscores the importance of mentorship and experience-sharing within healthcare systems as potential strategies for strengthening coping among less experienced staff.

The findings of this study can be further interpreted within the framework of Self-Determination Theory (SDT). The relatively high levels of competence and relatedness satisfaction observed in the study suggest that healthcare workers derive a sense of effectiveness and social connection from their roles, which may support the use of adaptive coping strategies. However, the higher levels of autonomy frustration indicate that healthcare workers perceive limited control over their work environment. According to SDT, such frustration of autonomy needs is associated with diminished motivation and increased vulnerability to maladaptive outcomes (Deci & Ryan, 2017). This may explain the observed link between frustration and maladaptive coping.

The policy implications of these findings are significant. Interventions aimed at improving healthcare worker wellbeing should prioritize structural changes that reduce workplace frustration. These include improving staffing levels, ensuring the availability of essential equipment, addressing salary disparities, and promoting work–life balance. Reducing these stressors is likely to have a direct impact on lowering maladaptive coping behaviours.

In addition, psychosocial interventions should be implemented to promote adaptive coping strategies and discourage maladaptive behaviours. These may include stress management training, peer support programs, and access to mental health services. Organizational interventions that enhance autonomy—such as participatory decision-making and supportive leadership—may also be particularly beneficial, given the role of autonomy frustration identified in this study.

© 2026 | Published by Scholars Middle East Publishers, Dubai, United Arab Emirates

The relatively modest explanatory power of the regression model suggests that coping behaviours are influenced by additional factors not captured in this study. These may include personality traits, organizational culture, and external stressors. Future research should explore these variables using longitudinal designs to better understand causal pathways and temporal relationships.

A key strength of this study is the use of validated psychometric instruments and the inclusion of both unadjusted and adjusted analyses. This study has several limitations. The cross-sectional design limits causal inference, and the use of self-reported measures may introduce response bias. Additionally, the study was conducted in a single tertiary institution, which may limit generalizability. However, the use of validated instruments and the inclusion of both unadjusted and adjusted analyses strengthen the reliability of the findings.

In conclusion, this study demonstrates that healthcare workers in a resource-constrained setting experience high levels of workplace frustration but predominantly employ adaptive coping strategies. However, increasing levels of frustration are associated with greater use of maladaptive coping behaviours, independent of sociodemographic factors. Addressing workplace stressors and promoting supportive organizational environments are essential for improving coping and overall wellbeing among healthcare workers.

Implications for Healthcare Systems

The findings of this study highlight the need for organisational interventions aimed at reducing occupational stress among healthcare workers. Improving staffing levels, ensuring adequate medical resources, and addressing salary disparities may help alleviate major workplace stressors. Additionally, promoting supportive leadership, enhancing professional recognition, and expanding opportunities for career development may strengthen healthcare workers' sense of autonomy and job satisfaction.

Institutional strategies that promote psychological wellbeing, such as stress management programmes, peer support networks, and mental health services, may further enhance resilience among healthcare professionals. Strengthening these support systems is particularly important in resource-constrained healthcare environments where occupational stress levels are often high.

CONCLUSIONS

Healthcare workers in this study experienced significant workplace frustration driven by structural factors such as workload, inadequate resources, and poor remuneration. While adaptive coping strategies predominated, increased frustration was associated with greater use of maladaptive coping behaviours. These findings underscore the need for systemic and organisational interventions to improve healthcare worker wellbeing.

Author Contributions

Conception and Study design: PE, A; SO, B; IA, Y; I I, H; E F, A; R, E; A, J L; A, CE; A, CT; L, M; T, A; O, I; A, A; H, O Y; I, HI;

Study Protocol Design: A, PE; S, BO; Y, AI; I, TL; A, FE; R, E; A, J L; A, CE; A, CT; L, M; T, A; O, I; A, A; H, O Y; I, HI;

Critically Reviewed the Manuscript: A, PE; S, BO; Y, AI; I, TL; A, FE; R, E; A, J L; A, CE; A, CT; L, M; T, A; O, I; A, A; H, O Y; I, HI;

Approved The Final Draft of the Manuscript: A, PE; S, BO; Y, AI; I, TL; A, FE; R, E; A, J L; A, CE; A, CT; L, M; T, A; O, I; A, A; H, O Y; I, HI;

REFERENCES

- Adediran, O. S. (2021). Religious coping and psychological wellbeing among healthcare workers in Nigeria. *Journal of Religion and Health, 60*(4), 2505–2518. https://doi.org/10.1007/s10943-021-01234-5
- Agyemang, G., Bema, Y., Eturu, D. A., Bawontuo, V., & Kuupiel, D. (2023). Occupational stress and burnout among healthcare workers in Africa: A scoping review. *Systematic Reviews, 12*(1), 1–12. https://doi.org/10.1186/s13643-023-02200-w
- Adebayo, O., Olatunji, A., & Eze, C. (2022). Job satisfaction and retention among healthcare workers in Nigeria. *International Journal of Health Policy and Management, 11*(8), 1345–1356.
- Ali, A., & Kumar, S. (2023). Mediating effect of challenges on demographics and coping strategies among healthcare workers. *International Journal of Environmental Research and Public Health, 20*(5), 4474. https://doi.org/10.3390/ijerph20054474
- Asamani, J. A., Amertil, N. P., Ismaila, H., Francis, A. A., Chebere, M., Nabyonga-Orem, J., & Matthews, Z. (2019). The demographic shift of healthcare workforce in sub-Saharan Africa. *Human Resources for Health, 17*(1), 39. https://doi.org/10.1186/s12960-019-0377-4
- Awosoga, O., Odunaiya, N. A., Oyewole, O. O., Ogunlana, M. O., Mbada, C. E., Onyeso, O. K., Adegoke, O. M., Ayodeji, A. F., & Odole, A. C. (2022). Work-life quality and wellbeing among healthcare professionals in Nigeria. *BMC Health Services Research, 22*, 1–10. https://doi.org/10.1186/s12913-022-08808-3
- Babatope, V. O., Okoye, J. O., Adekunle, I. A., & Fejoh, J. (2023). Burnout and organizational commitment among healthcare professionals. *Future Business Journal, 9*(1), 1–12. https://doi.org/10.1186/s43093-023-00219-y
- Birhanu, M., Gebrekidan, B., Tesefa, G., & Tareke, M. (2018). Workload and workplace stress among healthcare professionals. *Journal of Environmental*

and Public Health, 2018, 6286010. https://doi.org/10.1155/2018/6286010

- Bongelli, R., Fermani, A., Canestrari, C., Riccioni, I., Muzi, M., Bertolazzi, A., & Burro, R. (2022). Validation of the Brief COPE scale. *PLoS ONE, 17*(12), e0278486. https://doi.org/10.1371/journal.pone.0278486
- Carver, C. S. (1997). You want to measure coping but your protocol is too long: Consider the Brief COPE. *International Journal of Behavioral Medicine, 4*(1), 92–100.
- Chidi, R., Adeniyi, A. O., Okolo, C. A., Babawarun, O., & Arowoogun, J. O. (2024). Psychological resilience in healthcare workers. *World Journal of Biology Pharmacy and Health Sciences, 17*(2), 387–395. https://doi.org/10.30574/wjbphs.2024.17.2.0088
- Dubale, B. W., Friedman, L. E., Chemali, Z., Denninger, J. W., Mehta, D. H., Alem, A., Fricchione, G. L., Dossett, M. L., & Gelaye, B. (2019). Systematic review of burnout among healthcare providers in sub-Saharan Africa. *BMC Public Health, 19*, 1247. https://doi.org/10.1186/s12889-019-7566-7
- European Agency for Safety and Health at Work. (2022). *Work-related stress in Europe*. https://osha.europa.eu
- Koinis, A., Giannou, V., Drantaki, V., Angelaina, S., Stratou, E., & Saridi, M. (2015). Impact of work environment on mental health of healthcare workers. *Health Psychology Research, 3*(1), 1984. https://doi.org/10.4081/hpr.2015.1984
- Meyer, B. (2001). Coping with severe mental illness. *Journal of Psychopathology and Behavioral Assessment, 23*(4), 265–277.
- Nwobodo, E. P., Strukčinskienė, B., Razbadauskas, A., Grigolienė, R., & Agostinis-Sobrinho, C. (2023). Stress management in healthcare organizations: Nigerian context. *Healthcare, 11*(21), 2815. https://doi.org/10.3390/healthcare11212815
- Nwosu, A. D. G., Ossai, E. N., Uwakwe, C. B. U., Anikwe, I., Ewah, R. L., Obande, B. O., & Achor, J. U. (2020). Physician burnout in Nigeria: A multicentre study. *BMC Health Services Research, 20*, 863. https://doi.org/10.1186/s12913-020-05710-8
- Olatunji, S., & Mokuolu, B. (2014). Job stress and satisfaction among healthcare workers in Nigeria. *African Research Review, 8*(1), 126–140. https://doi.org/10.4314/afrrev.v8i1.10
- Ozoemena, E. L., Agbaje, O. S., Ogundu, L., Ononuju, A. H., Umoke, P. C. I., Iweama, C. N., Kato, G. U., Isabu, A. C., & Obute, A. J. (2021). Psychological distress and coping among Nigerian workers. *BMC Public Health, 21*, 12397. https://doi.org/10.1186/s12889-021-12397-x
- Shanafelt, T. D., West, C. P., Sinsky, C., Trockel, M., Tutty, M., Satele, D. V., Carlasare, L. E., & Dyrbye, L. N. (2022). Changes in burnout among healthcare professionals. *Mayo Clinic Proceedings, 97*(3), 491–506. https://doi.org/10.1016/j.mayocp.2021.11.021
- West, C. P., Dyrbye, L. N., & Shanafelt, T. D. (2018). Physician burnout: Contributors and solutions. *Journal of Internal Medicine, 283*(6), 516–529. https://doi.org/10.1111/joim.12752
- Willis-Shattuck, M., Bidwell, P., Thomas, S., Wyness, L., Blaauw, D., & Ditlopo, P. (2008). Motivation and retention of healthcare workers in LMICs. *BMC Health Services Research, 8*, 247. https://doi.org/10.1186/1472-6963-8-247
- World Health Organization. (2023). *Health workforce and burnout: Global report*. https://www.who.int