Received: December 15, 2025
Revised: April 1, 2026
Accepted: June 25, 2026
Published: June 30, 2026

Elicit Journal of Medical Science and Discovery
ISSN:3093-0480

https://elicitpublisher.com

EMPIRICAL PAPER

Relationship Between Nurse Burnout and Nurses' Perceptual Evaluation of the Quality of Patient Care in Outpatient Departments of Federal Teaching Hospital Lokoja, Kogi State

Abiodun Samuel Olowolafe[1*], Ojone Mercy Onate[2]

Affiliations

[1]Department of Nursing, National Open University of Nigeria (NOUN), Nigeria
[2]United Evangelical Church College of Nursing, Ochadamu Ofu LGA, Nigeria

ORCID Identifiers

Abiodun Samuel Olowolafe
0000-0003-0304-4386

Ojone Mercy Onate
0009-0002-2980-2333

DOI

10.65820/ejmsd-3vol2-issue1-2026

Abstract

Purpose: This study assessed nurses' knowledge of burnout, examined the relationship between burnout and perceived patient care quality, and determined the association between coping strategies and patient care quality in the Outpatient Departments of the Federal Teaching Hospital Lokoja, Kogi State.

Methodology: A descriptive cross-sectional survey design was adopted. Using Taro Yamane's formula, a sample size of 160 nurses was derived from a population of 268, while 150 registered nurses with at least six months of outpatient experience participated. Data were collected using a validated structured questionnaire (Cronbach's alpha = 0.78) and analyzed using descriptive statistics and Chi-square tests at $p < 0.05$.

Results: Findings showed that respondents had good knowledge of burnout (49.3%). Major contributors included long working hours (Mean = 3.67 ± 0.68), manpower shortage (Mean = 3.50 ± 0.81), and working with inexperienced staff. Burnout was perceived to negatively affect patient care through errors of omission and malpractice, medication errors, and aggression or conflict. Rest-based coping strategies were most commonly adopted. A significant association existed between effective coping strategies and good patient care quality [$\chi^2(1, N = 150) = 10.82$, $p = 0.001$, Cramér's V = 0.27].

Novelty and Contribution: The study contributes to existing knowledge by providing empirical evidence on how burnout and coping mechanisms influence patient care quality in an outpatient healthcare setting.

Social and Practical Implications: The findings highlight the need for systematic burnout screening, tailored coping interventions, improved staffing, and stronger nurse–manager collaboration to enhance nurse wellbeing, patient safety, and healthcare outcomes.

Keywords: Nurse Burnout; Nurse Perception; Patient Care Quality; Outpatient Nursing; Nigeria

*Corresponding author

E-mail address: olowolafe.as@gmail.com

How to cite this article:

Olowolafe, A.S., & Onate, O.M. (2026). Relationship Between Nurse Burnout and Nurses' Perceptual Evaluation of the Quality of Patient Care in Outpatient Departments of Federal Teaching Hospital Lokoja, Kogi State. *Elicit Journal of Medical Science and Discovery*, 2(1), 30-42. https://doi.org/10.65820/ejmsd-3vol2-issue1-2026

1 Introduction

Globally, nurse burnout has become a major concern within healthcare systems and a significant public health issue (Woo et al., 2020). Nurses are currently facing unprecedented levels of professional demand due to multiple factors, including workforce shortages, increased patient admissions, chronic disease management, and a rising aging population (Haddad et al., 2023). These challenges are further compounded by rapid technological advancements, epidemiological transitions, and emerging infectious diseases, all of which intensify nurses' responsibilities and stress levels (Kuehn, 2020). Excessive workload and persistent occupational stress among nurses have been consistently identified as major contributors to burnout, ultimately affecting the overall quality of patient care (Jun et al., 2021).

Burnout refers to a state of physical, emotional, and mental exhaustion resulting from prolonged exposure to work-related stressors (Woo et al., 2020). It is characterized by emotional fatigue, depersonalization, and a diminished sense of personal accomplishment. When nurses experience burnout, it often leads to decreased motivation, reduced job satisfaction, and impaired clinical judgment, which in turn compromise the safety, efficiency, and empathy required for quality patient care (Jun et al., 2021). Burnout can also be understood as the physiological, psychological, and behavioral responses that occur when individuals struggle to cope with pressures within their work environment (Adib-Hajbaghery & Khamechian, 2020). In nursing practice, these pressures commonly arise from long working hours, staff shortages, complex patient needs, and administrative burdens. When such stressors persist without adequate coping mechanisms or institutional support, they may result in burnout, an occupational hazard that negatively affects both healthcare professionals and patient outcomes (Adib-Hajbaghery & Khamechian, 2020).

Nurses play a critical role in patient care and recovery. As frontline healthcare providers, they are often the first point of contact for patients and are responsible for continuous monitoring, assessment, and coordination of care (Haddad et al., 2023). Their involvement in patient care from admission to discharge requires high levels of concentration, compassion, and professional competence (Kuehn, 2020). However, when nurses become emotionally or physically exhausted, their ability to provide attentive and empathetic care declines, leading to increased patient dissatisfaction, medical errors, and reduced quality of care (Jun et al., 2021). Scholars have identified two major forms of stress associated with occupational experiences: eustress and distress (Selye, 1976). While eustress may motivate individuals and enhance performance by encouraging them to meet challenges effectively, distress resulting from excessive or prolonged occupational stress produces harmful psychological and physiological effects. In the nursing profession, distress contributes to fatigue, absenteeism, irritability, and disengagement, all of which may compromise patient safety and weaken the therapeutic relationship between nurses and patients (Woo et al., 2020; Jun et al., 2021).

The consequences of nurse burnout extend beyond the individual nurse to the healthcare organization and patients. Organizationally, burnout contributes to decreased productivity, high turnover rates, increased absenteeism, and disruptions in service delivery (Hayes et al., 2021). For patients, its effects may include poor communication, reduced trust, delayed interventions, and lower satisfaction with care (Li et al., 2024). Given these implications, there is a need to investigate the relationship between nurse burnout and patients' perception of the quality of patient care, particularly in outpatient departments where nurses frequently manage large volumes of patients under significant time constraints (Jun et al., 2021). This study therefore seeks to examine the association between nurse burnout and patients' perceptual evaluation of the quality of patient care in the Outpatient Departments of the Federal Teaching Hospital Lokoja, Kogi State. The findings of the study will contribute to evidence-based strategies aimed at improving nurse well-being and enhancing patient care outcomes.

Globally, nurse burnout has become a major concern because of its adverse effects on the quality of patient care (Woo et al., 2020). Nurses, who constitute a vital component of healthcare delivery systems, are increasingly exposed to high workload and occupational stress that impose significant physical, psychological, and emotional demands on them. These demands often result in fatigue and burnout, a condition characterized by emotional exhaustion, depersonalization, and a reduced sense of professional accomplishment (Woo et al., 2020). When nurses experience burnout, their ability to provide compassionate, attentive, and high-quality care may be significantly compromised, thereby affecting patient outcomes and satisfaction (Jun et al., 2021).

High workload among nurses has been associated with numerous negative outcomes, including physical strain, headaches, musculoskeletal pain, poor concentration, irritability, absenteeism, and reduced efficiency in clinical tasks. These outcomes not only affect nurses' well-being but may also jeopardize patient safety and continuity of care. In

addition, a decline in nurses' attitudes toward patients, relatives, and colleagues has been observed in many healthcare facilities as a result of occupational stress and work overload (Jun et al., 2021).

In Nigeria, public hospitals, including the Federal Teaching Hospital Lokoja, continue to experience a chronic shortage of nursing personnel (Chukwu & Essue, 2024). Evidence from previous reports indicates that the combined density of physicians and nurses declined to approximately 0.92 per 1,000 population, compared to 0.99 per 1,000 population reported in 2006 (Rosser et al., 2022; World Health Organisation, 2006). This trend suggests a gradual reduction in healthcare workforce availability over time. Although rapid population growth may partly explain this decline, the expansion of the healthcare workforce has not kept pace with increasing population demands (Chukwu & Essue, 2024). Inadequate staffing, poor resource allocation, and weak institutional support systems have consequently increased workload on the available nurses (Peng et al., 2023). As a result, many nurses are required to attend to a large number of patients within limited timeframes, leading to fatigue, medical errors, and declining standards of patient care (Waterfield & Barnason, 2022).

Research has consistently shown that appropriate nurse-to-patient ratios are associated with better clinical outcomes (Needleman et al., 2019). For instance, Needleman et al. (2019) established that higher staffing levels contribute to improved patient recovery, reduced complications, and lower mortality rates. Conversely, excessive workload among nurses increases the likelihood of adverse events such as medication errors, delayed treatment, and patient dissatisfaction. Almenyan et al. (2021) further emphasized that fatigue, inadequate staffing, and insufficient time for patient interaction are among the major factors undermining healthcare quality. Despite growing evidence on nurse burnout, limited studies have specifically examined its association with patients' perception of the quality of care in outpatient departments of tertiary hospitals in Kogi State. Therefore, this study aimed to assess relationship between nurse burnout and nurses' perceptual evaluation of the quality of patient care in outpatient departments of Federal Teaching Hospital Lokoja, Kogi State. The Specific objectives include:

i. To assess nurses' knowledge of burnout and its relationship with quality of patient care in the Outpatient Department of Federal Teaching Hospital Lokoja, Kogi State.
ii. To determine the relationship between nurse burnout and nurses' perceptual evaluation of the quality of patient care in the outpatient departments of Federal Teaching Hospital Lokoja, Kogi State.
iii. To determine the relationship between coping strategies for nurse burnout and nurses' perceptual evaluation of the quality of patient care in the Outpatient Department of Federal Teaching Hospital Lokoja, Kogi State.

The study seeks to answer the following research questions

i. What is the level of nurses' knowledge of burnout and its relationship with quality of patient care in the Outpatient Department of Federal Teaching Hospital Lokoja, Kogi State?
ii. What is the relationship between nurse burnout and nurses' perceptual evaluation of the quality of patient care in the outpatient departments of Federal Teaching Hospital Lokoja, Kogi State?
iii. What is the relationship between coping strategies for nurse burnout and nurses' perceptual evaluation of the quality of patient care in the Outpatient Department of Federal Teaching Hospital Lokoja, Kogi State?

Research Hypothesis:

H_0: There is no significant association between coping strategies for burnout and patient care quality.

H_1: There is a significant association between coping strategies for burnout and patient care quality.

2 Methodology

The study adopted a descriptive cross-sectional survey design to examine the relationship between nurse burnout and nurses' perceptions of the quality of patient care in the outpatient departments of the Federal Teaching Hospital, Lokoja, Kogi State. The target population comprised nurses of various professional levels, including both male and female staff with diverse qualifications and specialties working within the hospital's outpatient units. Although the total nursing workforce in the Federal Teaching Hospital, Lokoja, is approximately 268, a sample of 160 nurses was selected to participate, and 150 nurses were actually used as respondents for this study. Sample size was calculated using the the number of nurses currently working at Federal Teaching Hospital, Lokoja, Kogi State. The estimated number of nurses working in Federal Teaching Hospital Lokoja, Kogi State is 268, the sample was determined using Taro Yamane's formula as follows:

$$n=N/(1+N(e)2).$$

$$n=268/(1+268(0.05)2),$$

$$n=268/(1+268(0.0025),$$

$$n=268(1+0.67),\ n=268/1.67,$$

$$n=160.47,$$

$$n=160$$

Note: n= sample size; N=population under study; e=margin or maximum error

A purposive prospective non-probability sampling technique was employed to select different categories of nurses working in the outpatient departments of the Federal Teaching Hospital, Lokoja, Kogi State. Inclusion criteria comprised registered nurses who had worked in the outpatient departments for at least six months and who consented to participate in the study. Nurses on leave, student nurses, intern nurses, and nurses who declined consent were excluded from the study. Data were collected using three structured questionnaires adapted from related standardized burnout and patient care quality instruments. The use of separate questionnaires was considered necessary because the study assessed distinct variables, including nurses' knowledge of burnout, nurse burnout and nurses' perceptual evaluation of the quality of patient care, and coping strategies for burnout management. The instruments were modified to suit the study objectives and the outpatient hospital setting. The researcher developed a structured instrument titled 'Perceived Impact of Nurses' Burnout on Patient Care Questionnaire' using a four-point Likert scale with response options: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). For scoring purposes, responses were assigned numerical values as follows: Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1. The maximum obtainable score was 10, while the minimum was 0. The instrument consisted of four sections with a total of 30 items. Section A contained six items on demographic characteristics of respondents. Section B comprised items assessing nurses' knowledge of burnout. Section C contained items assessing nurse burnout and nurses' perceptual evaluation of quality of patient care. Section D focused on coping strategies adopted by nurses in managing burnout-related challenges.

The content and face validity of the instruments were established through expert review by two specialists in Nursing Science and one expert in Measurement and Evaluation, who assessed the relevance, clarity, and appropriateness of the items in relation to the study objectives. Corrections and recommendations provided were incorporated into the final version of the instruments. Reliability was defined as the extent to which the data collection instrument consistently produces stable and repeatable results (Romero-Morales, et al., 2019). To establish reliability, the test–retest method was applied among 20 nurses working in a secondary healthcare facility outside the study setting. The questionnaires were administered twice at an interval of two weeks, and the responses obtained were analyzed using Cronbach's alpha reliability statistics. Internal consistency of the instrument was assessed using Cronbach's alpha reliability coefficient, and the instrument yielded a Cronbach's alpha coefficient of 0.78, indicating good reliability of the scale. The researcher, with the assistance of two trained research assistants, administered the questionnaires to respondents during official break periods and less busy clinic hours to minimize work disruption and response bias. Respondents were informed that participation was voluntary and that their responses would be treated confidentially and used strictly for academic purposes. The questionnaires were completed independently by the respondents without interference or guidance from the researcher, and no personal identifiers were included on the instruments to preserve anonymity.

Data obtained from completed questionnaires were coded, organized, and analyzed using descriptive and inferential statistics. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to answer the research questions, while Chi-square statistical test was used to test the hypotheses at 0.05 level of significance. Findings were presented using tables and charts.

Ethical approval for the study was obtained from the Health Research Ethics Committee of Federal Teaching Hospital Lokoja, Kogi State. Informed consent was obtained from all participants before data collection. Participation was voluntary, and respondents were informed of their right to withdraw from the study at any stage without penalty. Confidentiality and anonymity were maintained throughout the study through the use of identification codes instead of names. Artificial intelligence tools were used to support data organization and manuscript preparation under the supervision of the researcher.

3 Results

Table 1 Distribution of the study sample according to sociodemographic characteristics (n= 150).

Socio-demographic variable	Frequency (n= 150)	Percentage (%)
Age		
20-29	10	6.7
30-39	32	21.3
40-50	67	44.7
50 and above	41	27.3
Means ±SD 2.93 ± 0.87		
Religion		
Christianity	101	67.3
Islam	49	32.7
Others	-	-
Gender		
Male	53	35.3%
Female	97	64.7%
Marital status		
Single	49	32.7%
Married	101	67.3%
Separated	-	
Divorce	-	
Qualification		
Double qualification	44	29.3
BNSc	46	30.7
MSc	33	22.0
Others	27	18.0
Clinical experience		
1-10yrs	14	9.3
11-20yrs	53	35.3
21-30yrs	41	27.3
31and above	42	28.0

Source: Field survey 2023

The age distribution of the respondents showed that 10 (6.7%) were aged 20–29 years, 32 (21.3%) were between 30–39 years, 67 (44.7%) were within the 40–50 years age group, while 41 (27.3%) were aged 50 years and above. Regarding religion, the majority of the respondents were Christians, accounting for 101 (67.3%), while 49 (32.7%) were Muslims; none of the respondents reported other religious affiliations. In terms of gender, females constituted the majority with 97 (64.7%), whereas males accounted for 53 (35.3%). Concerning marital status, most respondents were married 101 (67.3%), while 49 (32.7%) were single. Likewise, about 46(30.7%) of the Nurses were double qualified while 53(35.3%) of the respondents were having 11-20 years of clinical experience.

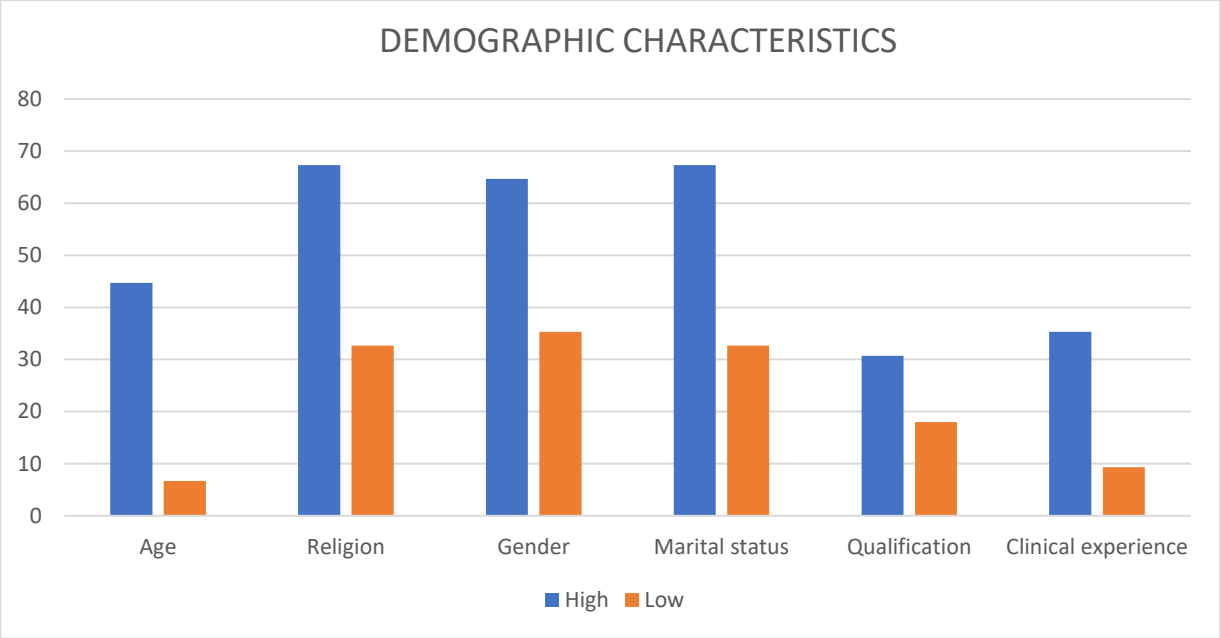

Figure 1 A bar chart showing sociodemographic characteristics of the nurses

Research question 1: What is the level of nurses' knowledge of burnout and its relationship with quality of patient care in the Outpatient Department of Federal Teaching Hospital Lokoja, Kogi State?

Table 2 Nurses' knowledge of burnout and its relationship with quality of patient care (n= 150)

Nurses' knowledge of burnout	SA	A	SD	D	Mean ± SD	X^2	Decision
Experience heavy nurses' burnout	80	30	15	25	**3.17 ± 1.04**	**67.33**	Significant
What are the physiological, psychological, and behavioral responses of nurses to internal and external pressures while delivering professional nursing care?	40	70	20	20	**2.87 ± 0.96**	**44.67**	Significant
Where do most nurses get information about nurse burnout and its management?	60	50	30	10	**2.93 ± 1.13**	**39.33**	Significant
What are the common stressors that contribute to nurse burnout (e.g., patient relatives, physical, mental, emotional)?	90	40	5	15	**3.43 ± 0.81**	**115.33**	Significant
Is shortage of manpower a significant cause of nurse burnout in clinical settings?	100	30	5	15	**3.50 ± 0.81**	**147.33**	Significant
Does working long hours contribute significantly to nurse burnout in clinical settings?	115	25	4	6	**3.67 ± 0.68**	**220.72**	Significant
Does working with inexperienced nurses contribute to burnout among experienced nurses in clinical settings?	95	40	5	10	**3.50 ± 0.77**	**136.67**	Significant

χ^2 critical value at ***p < 0.05 = 7.815***

The table presents nurses' knowledge of burnout and its relationship with quality of patient care in the Outpatient Department of Federal Teaching Hospital Lokoja, Kogi State. The findings indicate that respondents demonstrated **high levels of knowledge and strong agreement** across all items, as reflected by mean scores above the criterion mean of **2.50**. The highest mean score was observed for the item on long working hours contributing to nurse burnout (Mean = 3.67 ± 0.68), suggesting that nurses overwhelmingly recognized prolonged working hours as a major contributor to burnout in clinical settings. Similarly, high mean scores were recorded for shortage of manpower (Mean = 3.50 ± 0.81) and working with inexperienced nurses (Mean = 3.50 ± 0.77), indicating that staffing challenges are perceived as significant drivers of burnout among nurses. The relatively lower, yet still acceptable, mean score for physiological, psychological, and behavioral responses to pressure (Mean = 2.87 ± 0.96) suggests moderate variability in respondents' understanding of burnout manifestations. The chi-square (χ^2) analysis further revealed that all calculated χ^2 values were far greater than the critical value of 7.815 at $p < 0.05$, indicating that the observed response distributions were **not due to chance**. This implies statistically significant agreement among respondents on all aspects of nurse burnout assessed in the table.

Table 3 Summary of nurses' knowledge of burnout and its relationship with quality of patient care

Nurses' knowledge	Frequency (%)
Good knowledge (>3)	74(49.3)
A little knowledge	21(14.1)
Poor knowledge (<3)	44(29.3)
Do not understand	11(7.3)

This table shows that 74(49.3%) have the knowledge of burnout, 21(14%) have not heard of the nurses' burnout, 44(29.3%) have only heard a little while 11(7.3%) have heard but do not understand.

A bar chart showing nurses' knowledge of burnout and its relationship with quality of patient care

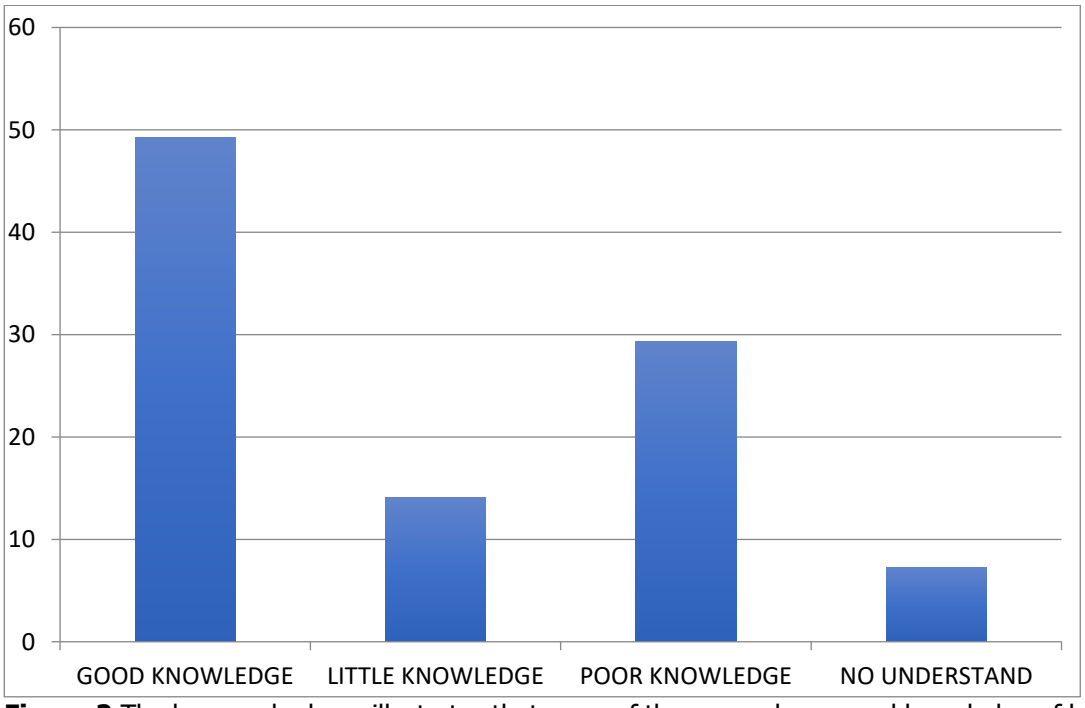

Figure 2 The bar graph above illustrates that more of the nurses have good knowledge of burnout and its relationship with quality of patient care

Research question 2: What is the relationship between nurse burnout and nurses' perceptual evaluation of the quality of patient care in the outpatient departments of Federal Teaching Hospital Lokoja, Kogi State?

Table 4 shows the relationship between nurse burnout and nurses' perceptual evaluation of the quality of patient care (n = 150)

Impact of nurses' burnout on patients care among nurses	SA	A	SD	D	Mean ± SD	Decision
Error of omission and malpractice which putting the patient under life threat is usually due to impact of nurses' burnout among healthcare giver	80 (53.3)	50 (33.3)	5 (3.3)	10 (6.7)	**3.33 ± 0.87**	**Agreed**
Difficulty in sleeping after prolong duty are common impact of nurses' burnout among nurses working in the clinical settings	50 (33.3)	60 (40.0)	20 (13.3)	20 (13.3)	**2.93 ± 1.00**	**Agreed**
Prolong wound healing and mal-union may be the impact of heavy nurses' burnout among nurses	40 (26.7)	30 (20.0)	50 (33.3)	30 (20.0)	**2.40 ± 1.20**	**Disagreed**
Aggression and conflict are the common response experienced by nurses due to the overwork	50 (33.3)	60 (40.0)	20 (13.3)	30 (20.0)	**3.00 ± 1.13**	**Agreed**
Low back pain, loss of appetite and general body weakness are common nurses' burnout experienced by nurses	40 (26.7)	60 (40.0)	20 (13.3)	30 (20.0)	**3.27 ± 1.22**	**Agreed**
nurses' burnout among nurses usually result to medication error and missing drug when providing care to the patient	50 (33.3)	50 (33.3)	25 (16.7)	25 (16.7)	**2.83 ± 1.07**	**Agreed**
Most of the relapse after patient has been discharge may be due to the impact of nurses' burnout among the nurses	30 (20.0)	80 (53.3)	10 (6.7)	30 (20.0)	**2.73 ± 1.00**	**Agreed**

Table 4 presents respondents' views on the relationship between nurse burnout and nurses' perceptual evaluation of the quality of patient care in outpatient departments of Federal Teaching Hospital Lokoja. The findings indicate that e**rror of omission and malpractice** was reported by **80 (53.3%) strongly agree and 50 (33.3%) agree**, yielding a significant mean score of **3.33 ± 0.87**, indicating that nurse burnout significantly contributes to clinical errors affecting patient safety. **Aggression and conflict with patients** showed a significant impact, with **50 (33.3%) strongly agree and 60 (40.0%) agree**, producing a mean of **3.00 ± 1.13**, confirming that burnout significantly increases negative nurse–patient interactions. **Loss of appetite and general weakness** was significantly reported, as **40 (26.7%) strongly agree and 60 (40.0%) agree**, resulting in a mean score of **3.27 ± 1.22**, demonstrating that burnout significantly affects nurses' wellbeing and care delivery.

Research question 3: What is the relationship between coping strategies for nurse burnout and nurses' perceptual evaluation of the quality of patient care in the Outpatient Department of Federal Teaching Hospital Lokoja, Kogi State?

Table 5 shows coping strategies are used for nurse burnout and their relationship with quality of patient care among nurses (n = 150)

Coping Strategies of nurses' burnout on patients care among nurses	SA	A	SD	D	Mean ± SD	Decision
Taking a shower and rest in a quite environment after heavy nurses' burnout help nurses to cope with long hour duty	70 (46.7)	60 (40.0)	5 (3.3)	15 (10.0)	**3.23 ± 0.82**	**Agreed**
Eating better food and taking adequate rest are common coping strategy of nurses' burnout among nurses	50 (33.3)	50 (33.3)	20 (13.3)	30 (20.0)	**2.80 ± 1.01**	**Agreed**
Watching television, movies and engage in social medias after strenuous duty in the ward is a coping strategy employed by most young nurses	50 (33.3)	60 (40.0)	20 (13.3)	20 (13.3)	**2.93 ± 0.96**	**Agreed**
Going for a break is a major coping strategy on patient care among nurses after strenuous duty	40 (26.7)	50 (33.3)	30 (20.0)	30 (20.0)	**2.67 ± 0.98**	**Agreed**
Engaging in hobbies such as singing, listening to music and reading can help nurses to cope with nurses' burnout	20 (13.3)	30 (20.0)	50 (33.3)	50 (33.3)	**2.13 ± 1.02**	**Disagreed**

The findings in Table 5 indicate that **taking a shower and resting in a quiet environment after heavy duty** was strongly endorsed as a coping strategy for nurses' burnout, with **70 (46.7%) strongly agreeing and 60 (40.0%) agreeing**, giving a combined agreement of **130 (86.7%)** and a mean score of **3.23 ± 0.82**, signifying agreement and the highest level of acceptance among the strategies. **Eating better food and taking adequate rest** was also identified as a common coping strategy, as **50 (33.3%) strongly agreed and 50 (33.3%) agreed**, totaling **100 (66.6%)** agreement, with a mean score of **2.80 ± 1.01**, indicating agreement. For **watching television, movies, and engaging in social media after strenuous duty**, **50 (33.3%) strongly agreed and 60 (40.0%) agreed**, resulting in **110 (73.3%)** agreement and a mean score of **2.93 ± 0.96**, which reflects agreement as a coping strategy among most nurses. **Going for a break after strenuous duty** recorded **40 (26.7%) strongly agreed and 50 (33.3%) agreed**, amounting to **90 (60.0%)** agreement, with a mean score of **2.67 ± 0.98**, showing that it was agreed upon as a coping strategy, though with comparatively lower acceptance.

In contrast, **engaging in hobbies such as singing, listening to music, and reading** was not supported as an effective coping strategy, as only **20 (13.3%) strongly agreed and 30 (20.0%) agreed**, while **100 (66.6%)** disagreed (**50 (33.3%) strongly disagreed and 50 (33.3%) disagreed**), with a mean score of **2.13 ± 1.02**, indicating disagreement.

Table 6 Relationship Between Coping Strategies for Burnout and Patient Care Quality (n = 150)

Coping Strategy	Good Care n (%)	Poor Care n (%)	Total	χ^2	df	p-value	Cramér's V	Decision
Effective coping	85 (65.4%)	45 (34.6%)	130					
Ineffective coping	8 (40.0%)	12 (60.0%)	20					
Total	93 (62.0%)	57 (38.0%)	150	**10.82**	**1**	**0.001**	**0.27**	**Reject H_0**

A Chi-square test of independence was conducted to examine the association between coping strategies for burnout and patient care quality. The results showed a statistically significant association between coping strategies and patient care quality, $\chi^2(1, N = 150) = 10.82$, $p = 0.001$.

Nurses who adopted effective coping strategies had a higher proportion of good patient care outcomes (65.4%) compared to those using ineffective coping strategies (40.0%). Conversely, poor patient care outcomes were more prevalent among nurses with ineffective coping strategies (60.0%).

Effect size estimation using Cramér's V indicated a moderate association (V = 0.27). Therefore, the study rejects the null hypothesis and concludes that there is a statistically significant association between coping strategies for burnout and patient care quality. However, this association does not imply causation.

4 Discussion

4.1 Objective I: Nurses' Knowledge of Burnout

Previous studies have shown that nurses generally possess partial knowledge of burnout, often recognizing it through practical work experiences rather than formal education. Hayes et al. (2021) and Getie et al. (2025) reported that nurses commonly associate burnout with heavy workload, staff shortages, and high patient volume, identifying these as key contributors to burnout in clinical settings. This is consistent with the present study, which also found that nurses predominantly recognize burnout in relation to workload and staffing challenges.

A Chi-square test of independence was conducted to examine the association between coping strategies for burnout and patient care quality. The results showed a statistically significant association between coping strategies and patient care quality, $\chi^2(1, N = 150) = 10.82$, $p = 0.001$.

Nurses who adopted effective coping strategies had a higher proportion of good patient care outcomes (65.4%) compared to those using ineffective coping strategies (40.0%). Conversely, poor patient care outcomes were more prevalent among nurses with ineffective coping strategies (60.0%).

Effect size estimation using Cramér's V indicated a moderate association (V = 0.27). Therefore, the study rejects the null hypothesis and concludes that there is a statistically significant association between coping strategies for burnout and patient care quality. However, this association does not imply causation.

Johnson and Sarwar (2014) further established that long working hours, inadequate rest, and prolonged physical strain are widely perceived by nurses as major contributors to burnout. The present study aligns with this finding, demonstrating a generally high level of awareness among nurses regarding these work-related factors.

In addition, Tourangeau et al. (2007) established that lack of motivation, poor recognition, and limited organizational support significantly contribute to burnout among nurses. This corresponds with the present study, which indicates that although nurses are aware of burnout, their understanding of its psychological and behavioural dimensions is less pronounced compared to more observable workplace stressors.

On a broader scale, Getie et al. (2025) established that burnout is highly prevalent globally, particularly in the form of emotional exhaustion and reduced personal accomplishment. This supports the present study's finding that nurses' knowledge of burnout is largely shaped by systemic workplace conditions rather than formal theoretical understanding.

4.2 Objective II: relationship between nurse burnout and nurses' perceptual evaluation of the quality of patient care

Previous research consistently shows that nurse burnout negatively affects the quality and safety of patient care. Getie et al. (2025) established that burnout contributes to increased clinical errors and compromises patient safety. This is in agreement with the present study, which found that nurses recognize burnout as a factor that adversely affects patient care outcomes. Giorgi et al. (2018) reported that poor sleep quality and burnout were significantly associated with reduced job performance among shift-work nurses. While the current data show multiple agreed consequences, not just sleep difficulty. Furthermore, Rosser et al. (2022) established that increased nurse staffing improves healthcare service utilization and patient outcomes. The present study supports this finding indirectly by indicating that burnout-related physical and psychological strain among nurses may reduce their effectiveness in delivering quality care, particularly in settings with staffing challenges.

4.3 Objective III: Coping Strategies for Nurse Burnout and Its Impact on Patient Care Quality

Previous studies indicate that nurses commonly adopt rest-related coping strategies to manage burnout. Woo et al. (2020) reported that nurses commonly use rest, sleep, and temporary withdrawal from stressful environments as coping strategies to manage burnout symptoms. This is consistent with the present study, which also found strong preference for rest-related strategies.

Similarly, Hayes et al. (2021) reported that rest-related activities, such as bathing, relaxation, and adequate recovery periods, are effective in reducing emotional exhaustion and occupational stress among nurses. The present study supports this finding, showing agreement with the use of such strategies. In addition, Hayes et al. (2021) noted that a variety of coping approaches, including leisure activities and physical exercise, may help nurses manage burnout more effectively. In contrast, the present study found lower acceptance of these approaches, suggesting variability in coping preferences among nurses.

At the policy level, the weak workforce policies contribute to burnout and limit effective coping capacity among healthcare workers (Chukwu & Essue, 2024). The present study supports this assertion, as the reliance on short-term, individual coping strategies highlights the need for stronger institutional support and policy-driven interventions rather than sole dependence on personal coping mechanisms.

5 Conclusions

Nurses in the outpatient department of Federal Teaching Hospital Lokoja are exposed to various sources of burnout, with manpower shortages and long duty hours emerging as most significant. Burnout is perceived to undermine patient care quality especially through errors of omission and malpractice and nurses mainly rely on short term, rest based coping strategies. These findings underscore the urgency of both reducing key workplace stressors and reinforcing feasible coping supports to sustain nurses' wellbeing and care effectiveness.

Implication of Findings to Nursing Practice

The study's results highlight why pinpointing the main sources of nurses' burnout, understanding its effects, and identifying the most workable coping strategies matter for managing burnout in practice. When nurses and hospital managers recognize these factors, they can introduce targeted actions to strengthen coping and reduce burnout. In turn, this can improve nurses' performance in patient care and support faster, more complete recovery for patients.

It will boost education and awareness about burnout for all staff, giving special attention to those with limited knowledge, so everyone understands what burnout is and why it matters. It will improve workplace conditions by addressing long working hours and manpower shortages, which nurses consistently see as central contributors to burnout. It will support realistic coping at work and provide valuable ways to recover.

When workload and staffing conditions permit, nurses should be encouraged to engage in a wider range of coping activities beyond immediate rest, such as hobbies, physical exercise, relaxation techniques, and structured leisure programs. These activities help build long-term emotional resilience rather than offering only short-term relief from fatigue. By supporting diverse coping options, healthcare institutions can promote sustained wellbeing among nurses, lower the risk of burnout, and ultimately improve the quality and safety of patient care.

Social and Managerial Implications

The results of this study point to significant social and managerial implications for mitigating nurse burnout and enhancing the quality of patient care. From a management standpoint, healthcare administrators and relevant government agencies need to prioritize the introduction of systematic and nurse-specific burnout assessment mechanisms alongside appropriate coping frameworks. Adapting these approaches to individual nursing roles and experiences will support timely recognition of stress, inform suitable management responses, and contribute to a more supportive and healthier workplace environment.

On a professional and social level, nurses should be supported and encouraged to adopt individualized, evidence-informed coping practices that reflect their personal experiences of burnout. Ongoing professional development

programs and context-specific research are vital for strengthening nurses' ability to manage occupational stress in a sustainable manner.

Furthermore, the findings emphasize the value of closer cooperation between nurse managers and frontline staff. Improved communication channels, routine capacity-building activities, and inclusive problem-solving processes can aid in the early identification of burnout, enhance access to coping resources, and promote joint efforts to improve working conditions. Strengthening these relationships is likely to improve nurses' wellbeing while also supporting safer patient care and better overall health service delivery.

Limitations and Suggestions for Future Studies

This research was conducted exclusively among nurses in the outpatient department of the Federal Teaching Hospital Lokoja, which limits the extent to which the results can be applied to nurses in other units or healthcare facilities. The study also examined burnout only in relation to patient care outcomes, leaving out other possible individual and organizational influences. Furthermore, some participants were unable to complete the questionnaire due to time pressure, which may have affected the response rate and depth of the data collected.

Further research is needed to understand the specific causes and development of nurse burnout, enabling the creation of targeted management strategies and potential treatments. Subsequent studies should involve nurses from different hospital departments and multiple healthcare institutions to enhance the representativeness of the findings. Future research should also consider a wider range of factors, including workplace policies, managerial support, and personal resilience, to provide a more holistic understanding of nurse burnout. Incorporating qualitative approaches such as interviews or focus group discussions may further enrich data quality and reduce non-response challenges.

Funding

This study was not supported by any grants from funding bodies in the public, private, or not-for-profit sectors. The authors declare that no financial support was received for the research, authorship, and publication of this article.

Conflict of Interest

The authors declare no conflicts of interest" should be included if there is no conflict of interest.

Ethical approval

Ethical clearance was secured from the Research Ethics Committee of the study institution. The respondents' informed consent was duly obtained, and participation in the study was entirely voluntary. The objectives of the study and the content of the questionnaire were adequately explained to the participants prior to data collection. All information collected was treated with strict confidentiality, and no personal identifiers were included in the questionnaire to ensure anonymity. Given that the study focused on perceptions and self-reported experiences, it involved minimal risk to the participants.

References

Adib-Hajbaghery, M., & Khamechian, M. (2020). Nurses' job burnout: A hybrid concept analysis. Journal of Caring Sciences, 9(3), 154–161. https://doi.org/10.34172/jcs.2020.023

Almenyan, A. A., Albuduh, A., & Al-Abbas, F. (2021). Effect of nurses' burnout in intensive care units. Cureus, 13(1), e12674. https://doi.org/10.7759/cureus.12674

Chukwu, O. A., & Essue, B. (2024). Addressing health workforce shortages as a precursor to attaining universal health coverage: A comparative policy analysis of Nigeria and Ghana. Social Science & Medicine, 355, 117095. https://doi.org/10.1016/j.socscimed.2024.117095

Getie, A., Ayenew, T., Amlak, B. T., Gedfew, M., Edmealem, A., & Kebede, W. M. (2025). Global prevalence and contributing factors of nurse burnout: An umbrella review of systematic reviews and meta-analyses. BMC Nursing, 24, 596. https://doi.org/10.1186/s12912-025-03266-8

Giorgi, F., Mattei, A., Notarnicola, I., Petrucci, C., & Lancia, L. (2018). Can sleep quality and burnout affect the job performance of shift-work nurses? A hospital cross-sectional study. Journal of Advanced Nursing, 74(3), 698–708. https://doi.org/10.1111/jan.13484

Haddad, L. M., Annamaraju, P., & Toney-Butler, T. J. (2023). Nursing shortage. In StatPearls. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK493175/

Hayes, B., Douglas, C., & Bonner, A. (2021). Predicting emotional exhaustion among nurses: The contribution of workload and burnout. International Journal of Nursing Practice, 27(3), e12903. https://doi.org/10.1111/ijn.12903

Johnson, S., & Sarwar, M. (2014). Causes of stress among nurses working in the intensive care unit of Ittag Hospital, Lahore. International Journal of Social Sciences and Management, 1(4), 200–204.

Jun, J., Ojemeni, M. M., Kalamani, R., Tong, J., & Crecelius, M. L. (2021). Relationship between nurse burnout, patient and organizational outcomes: Systematic review. International Journal of Nursing Studies, 119, 103933. https://doi.org/10.1016/j.ijnurstu.2021.103933

Kuehn, B. M. (2020). Global shortage of health workers, brain drain stress health systems. JAMA, 324(7), 611–612. https://doi.org/10.1001/jama.2020.11203

Li, Y., Jones, C. B., Ye, X., & Li, H. (2024). Nurse burnout and patient satisfaction outcomes in healthcare settings: A systematic review. BMC Nursing, 23(1), 44–53. https://doi.org/10.1186/s12912-024-01762-y

Needleman, J., Liu, J., Shang, J., Larson, E. L., & Stone, P. W. (2019). Association of registered nurse and nursing support staffing with inpatient hospital mortality. BMJ Quality & Safety, 29(1), 10–18. https://doi.org/10.1136/bmjqs-2018-009219

Peng, X. D., Ye, Y., Ding, X. D., & Chandrasekaran, A. (2023). The impact of nurse staffing on turnover and quality: An empirical examination of nursing care within hospital units. Journal of Operations Management, 69(7), 1124–1152. https://doi.org/10.1002/joom.1245

Romero-Morales, C., Rodríguez-Sanz, D., Palomo-López, P., López-López, D., Pareja-Galeano, H., & Becerro-de-Bengoa-Vallejo, R. (2019). Comparison of the psychometric properties of two Spanish versions of the Maslach Burnout Inventory in nursing professionals. BMC Nursing, 18, Article 41. https://doi.org/10.1186/s12912-019-0367-6

Rosser, J. I., Aluri, K. Z., Kempinsky, A., Richardson, S., & Bendavid, E. (2022). The effect of healthcare worker density on maternal health service utilization in sub-Saharan Africa. The American Journal of Tropical Medicine and Hygiene, 106(3), 939–944. https://doi.org/10.4269/ajtmh.21-0727

Selye, H. (1976). The stress of life (Rev. ed.). McGraw-Hill.

Tourangeau, A. E., Doran, D. M., McGillis Hall, L., O'Brien-Pallas, L., Pringle, D., Tu, J. V., & Cranley, L. A. (2007). Impact of hospital nursing care on 30-day mortality for acute medical patients. Journal of Advanced Nursing, 57(1), 32–44. https://doi.org/10.1111/j.1365-2648.2006.04084.x

Waterfield, D., & Barnason, S. (2022). The integration of care ethics and nursing workload: A qualitative systematic review. Journal of Nursing Management, 30(7), 2194–2206. https://doi.org/10.1111/jonm.13723

Woo, T., Ho, R., Tang, A., & Tam, W. (2020). Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis. Journal of Psychiatric Research, 123, 9–20. https://doi.org/10.1016/j.jpsychires.2019.12.015

World Health Organization. (2006). The world health report 2006: Working together for health. World Health Organization. https://www.who.int/publications/i/item/9241563176