

Association of Occupational Stress and Burnout with Perceived Quality of Nursing Care Among Nurses in Tertiary Care Hospitals: A Cross-Sectional Study.

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Abstract

Background: While nurses are frontline healthcare providers, certain workplaces may expose them to occupational stress and burnout. Nurses' experience of these psychological issues can impact on their professional performance and their experiences of the quality of care. This study aimed to examine the relationships of occupational stress and burnout with nurses' perceived quality of care in tertiary hospitals. **Methodology:** A quantitative analytical cross-sectional study was conducted among 138 registered nurses working in tertiary-care hospitals. Data were collected using a structured questionnaire that included sociodemographic characteristics, the Nurses' Occupational Stressor Scale (NOSS-21), the work-related burnout subscale of the Copenhagen Burnout Inventory (CBI), and a single item assessing perceived nursing-care quality. Cronbach's alpha was used to check the internal consistency of the instrument. Data obtained were analyzed using IBM SPSS Statistics, calculating descriptive statistics, Spearman's correlation analysis and regression analysis. Results were deemed to be significant if p-values were 0.05 or less. **Results:** The NOSS-21 and CBI demonstrated acceptable internal consistency, with Cronbach's alpha values of 0.725 and 0.767, respectively. The correlation coefficient between occupational stress and perceived quality of nursing care was $r_s = -0.274$ with $p = 0.001$ which is significant and shows that higher level of stress in occupation was associated with lower level of perceived nursing care. In addition, there was a significant positive correlation between occupational stress and burnout ($r_s = -0.287$, $p = 0.001$). The significant correlation of values between burnout and perceived quality of nursing care ($r_s = 0.189$; $p = 0.027$) was observed. Occupational stress was a significant independent predictor of perceived nursing-care quality ($\beta = -0.258$, $p = .003$), whereas burnout was not ($\beta = 0.116$, $p = .176$). **Conclusion:** Occupational stress was significantly associated with nurses' perceptions of care quality in tertiary-care hospitals. Addressing workplace stressors through a supportive environment, appropriate workload distribution, and effective management may protect nurses' well-being and help maintain high-quality patient care.

Keywords: Occupational stress; Burnout; Nursing care quality; Nurses; Tertiary hospitals; Copenhagen Burnout Inventory; NOSS-21

Introduction

Nurses form the largest professional cadre in staffing of healthcare professionals and they have a pivotal role in the continuity, safety, and quality of patient services. They not only make direct interventions in the patient's care but also deliver constant surveillance, administer medication, provide health education, documentation, and multidisciplinary care coordination, as well as emotional support to patients and their families (Karam, Chouinard et al. 2023). This can be especially challenging in hospitals that perform tertiary care, as the nurses often must look after patients with complex, acute, and life-threatening situations (Charan, Kalia et al. 2025). Without proper staffing, organizational supports, teamwork, and physically and psychologically fit staff for heavy workloads and challenging clinical duties, high-quality care cannot be provided in these settings. The working environment of nurses and psychological health outcomes seem to be closely linked to the quality and safety of healthcare provisioning (Li, Zhao et al. 2024).

The stress associated with a job is thus a significant issue in nursing. It is "when the non-physical or physical aspects of the work place put constant pressures on an individual's psychological or physical resources (Ullah, Arbab et al. 2025). There are several stressors that nurses can experience in their jobs such as overload of work, time pressure, low staffing levels, challenging relationships with patients and family members, use of violence/bullying in the workplace, organizational issues, job hazards, lack of vacation time, and poor work/life balance (Lee, Seo et al. 2024). But, during taxing shifts, nurses can also find it challenging to meet their own basic needs, like getting a reasonable amount of rest and resting meal breaks. Constant stress can have a negative impact on nurse well-being and functioning on the job. Nurses' Occupational Stressor Scale (NOSS) is developed to consider the multi-dimensionality of the occupational stress impacting the nursing profession and offers a nursing-specific method for its assessment (Chen, Guo et al. 2020). Chronic exposure to challenging work environments can lead to burnout, too (Conceição and Palma-Moreira 2025). While there are several different definitional approaches to burnout, burnout as it relates to work is conceptualized as a state of physical and/or psychological exhaustion in the Copenhagen Burnout Inventory (CBI) (Kristensen, Borritz et al. 2005). For nurses, it can be a sense of emotional fatigue, feeling tired after work, frustration at work, inability to face another day at work, as well as the loss of energy away from work. So, burnout is not simply fatigue after an especially challenging work rotation, but can be an enduring work-related experience. CBI has shown good psychometric properties in hospital nurses. A study that examined RNs showed that the work-related burnout subscale, used in the research, had strong internal consistency (Ibrahim, Alenezi et al. 2025).

Burnout has potential implications not only for the personal and professional health and vitality of health care workers, such as nurses, but also for patient care quality and safety (Li, Yang et al. 2024). Nurses need to focus, make the correct clinical decisions, communicate effectively, make timely decisions, show empathy, and follow health and safety protocols in caring for their patients (Zainal, Islam et al. 2025). Physical and psychological fatigue, which can last for a long time, can make it harder to keep up with these responsibilities (Kunasegaran, Ismail et al. 2023). In a systematic review and meta-analysis of 85 studies and 288,581 nurses in 32 countries, nurse burnout was linked to poor patient-safety outcomes, medication error and adverse events, missed care, low patient satisfaction and low-quality patient care as assessed by nurses (Li, Yang et al. 2024). Burnout was found to be specifically linked with poorer nurse assessed formal quality of care, highlighting the potential significance of psychological state of nurses for healthcare provision (Li, Yang et al. 2024). An important viewpoint from which these relations can be viewed is perceived quality of nursing care. Nurses have constant contact with patients and first-hand observation of the situation where care is given (Vujanić, Mikšić et al. 2022). Nurse-reported assessments do not measure objective standards of health care quality and should be viewed as an important professional view of health care processes and the clinical environment (Al-Hammouri, Hamdan et al. 2024). Investigating perceived care quality and occupational stress and burnout

together might therefore offer a larger picture of how perceived care quality is related to how nurses perceive their work situation (Babapour, Gahassab-Mozaffari et al. 2022).

In the context of tertiary care settings, where the workload and needs of patients can be quite demanding, nursing is a crucial role that requires understanding such relationships (Maghsoud, Rezaei et al. 2022). Traditional one-on-one coping strategies might not work if workplace stress is triggered by organization factors, staffing, workload, working schedules, relationships at work or opportunities for recovery (Johari 2020). A recognition, therefore, of the factors in the workplace that can be modified and a discussion of burnout may be advantageous for both the nursing staff and the health care organization (Vargas-Benítez, Izquierdo-Espín et al. 2023). Data regarding these connections can help nurse managers and hospital executives refine staff supporting systems, enhance patient-centered care, and create organizational strategies that safeguard nurses' health and wellbeing, while still delivering top-tier patient care (Liu, Liu et al. 2023). While occupational stress and burnout have received much attention in the nursing literature, the simultaneous study of both along with nurse perceptions of care quality result in a more integrated understanding of the role of the two in clinical practice (Nowrouzi-Kia, Lightfoot et al. 2015). Therefore, this study attempts to analyze the relationship between occupational stress and burnout and perception of nursing care by nurses in the tertiary care hospitals. The Nurses' Occupational Stressor Scale (NOSS-21) will be used to assess the occupational stressors, and the 'Work-Related Burnout' subscale of the Copenhagen Burnout Inventory (CBI) will be used to assess work-related burnout. The perceived quality of nursing care will be measured by nurse's overall assessment of the nursing care in their unit. Results may help to promote evidence-based practices around reducing occupational stress and burnout, enhancing nurse working conditions and better supporting quality nursing care.

Methodology

Study Design

A quantitative analytical cross-sectional design was used to examine the relationships of occupational stress and work-related burnout with perceived quality of nursing care among registered nurses working in tertiary-care hospitals. This design was appropriate because the exposure and outcome variables were measured at a single point in time, allowing their associations to be examined without manipulating any study variable.

Study Setting

Data were collected independently from registered nurses working in tertiary-care hospitals in Pakistan. Recruitment was not restricted to a specific hospital, ward, or clinical department. Nurses from different clinical backgrounds and work environments were included to capture variation in occupational demands and workplace experiences. Participants completed the questionnaires privately to protect confidentiality and minimize the influence of colleagues or supervisors on their responses.

Study Population

The target population comprised registered nurses working in tertiary-care hospitals in Pakistan. Nurses who were actively involved in direct patient care and met the eligibility criteria were invited to participate.

Inclusion Criteria

Registered nurses were eligible if they were employed in a tertiary-care hospital, directly involved in patient care, able to evaluate their working environment and the quality of nursing care, and willing to provide informed consent.

Exclusion Criteria

Nurses working exclusively in administrative or non-clinical roles, nursing students, interns, and nurses on extended leave during the data-collection period were excluded. Questionnaires containing substantial missing or uninterpretable data were also excluded from the final analysis.

Sample Size and Sampling Technique

The final sample comprised 138 registered nurses. Participants were recruited using non-probability convenience sampling. Eligible nurses who were available during the data-collection period and willing to participate were approached until the required sample size was achieved.

$$n = \frac{z^2 \times p(1 - p)}{\epsilon^2}$$

Where:

- $Z=1.96$ (standard normal deviate for 95% confidence interval)
- $p=0.10$ (assumed prevalence of adequate first aid knowledge – conservative 10%, maximizing variance)
- $d=0.05$ (absolute precision or margin of error)

$$n = Z^2 \times p \times (1 - p) / d^2$$

Where:

$Z = 1.96$ (for 95% CI)

$p = 10\% = 0.1$ (assumed prevalence of adequate first aid knowledge; conservative estimate maximizes sample size)

$d = 0.05$ (absolute precision)

$$n = 1.96^2 \times 0.1 \times (1-0.1) / 0.05^2$$

$$n = 138$$

138 participants

Data Collection Instruments

Data were collected using a structured questionnaire consisting of 37 items divided into four sections. The questionnaire assessed participants' sociodemographic and work-related characteristics, occupational stress, work-related burnout, and perceived quality of nursing care.

Section A: Sociodemographic and Work-Related Characteristics

This section collected information on participants' demographic and professional characteristics. It consisted of eight items covering age, gender, highest nursing qualification, total nursing experience, current clinical unit, usual work shift, average working hours per week, and type of hospital. These variables were used to describe the study population and examine differences in the main study variables according to participants' characteristics.

Section B: Occupational Stress Assessment

Occupational stress was assessed using the 21-item Nurses' Occupational Stressor Scale (NOSS-21) developed by Chen et al. (2020). The scale was designed specifically to measure occupational stressors experienced by nurses. It covers several dimensions of workplace stress, including workload demands, work-family conflict, organizational problems, interpersonal difficulties, occupational hazards, and unmet workplace needs.

Each item was rated on a four-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree. Higher scores indicated greater exposure to occupational stressors. The original NOSS-21 demonstrated good internal consistency, with a Cronbach's alpha of 0.91, supporting its reliability for assessing occupational stress among nurses (Chen et al., 2020).

Section C: Work-Related Burnout Assessment

Work-related burnout was measured using the work-related burnout subscale of the Copenhagen Burnout Inventory (CBI). This subscale consists of seven items assessing the degree of physical and psychological exhaustion that participants attribute to their work.

The first three items are rated from “to a very high degree” to “to a very low degree,” while the remaining four items are rated from “always” to “never/almost never.” Responses are converted into scores of 100, 75, 50, 25, and 0, with higher scores indicating greater work-related burnout. The positively worded seventh item is reverse-scored according to the official CBI scoring procedure. The final work-related burnout score is calculated as the mean of the completed items. Previous research has demonstrated satisfactory psychometric properties and good internal consistency for the work-related burnout subscale among nurses (Montgomery et al., 2021).

Section D: Perceived Quality of Nursing Care

Perceived quality of nursing care was assessed using a single global nurse-reported quality-of-care item. Participants were asked:

“How would you describe the quality of nursing care delivered to patients in your unit?”

Responses were categorized as poor (1), fair (2), good (3), and excellent (4). Higher scores indicated more positive perceptions of nursing-care quality. This item captured nurses’ overall professional assessment of the quality of care delivered within their current clinical unit.

Data Collection Procedure

Eligible nurses were approached during the data-collection period after the necessary institutional and administrative approvals had been obtained. Before participation, the purpose and procedures of the study were explained to each eligible nurse. Participants received an information sheet, an informed-consent form, and the study questionnaire. Participation was entirely voluntary. Nurses who agreed to participate completed the questionnaire based on their workplace experiences. The questionnaire required approximately 8–10 minutes to complete. No personally identifying information was collected. Completed questionnaires were examined for completeness, coded, and entered a database for statistical analysis.

Reliability of the Study Instruments

The internal consistency of the study instruments was assessed using Cronbach’s alpha. The NOSS-21 demonstrated acceptable internal consistency, with a Cronbach’s alpha of 0.725, while the work-related burnout subscale of the CBI showed satisfactory internal consistency, with an alpha coefficient of **0.767**. Values of 0.70 or higher are generally considered acceptable. Therefore, both instruments demonstrated adequate internal consistency in the present sample. Cronbach’s alpha was not calculated for perceived quality of nursing care because it was assessed using a single item.

Data Analysis

Data were coded, entered, cleaned, and analyzed using IBM SPSS Statistics version 27. Participants’ sociodemographic and work-related characteristics were summarized using descriptive statistics. Categorical variables were reported as frequencies and percentages, while continuous and composite variables were summarized using appropriate measures of central tendency and dispersion. Scores for the NOSS-21 and the CBI work-related burnout subscale were calculated according to their established scoring procedures. Cronbach’s alpha was used to assess the internal consistency of the multi-item instruments. The normality of the study variables was examined using the Shapiro–Wilk test. Because perceived nursing-care quality was measured using four ordered categories and the study variables were not normally distributed, Spearman’s rank-order correlation was used to examine the bivariate relationships among occupational stress,

work-related burnout, and perceived nursing-care quality. Ordinal logistic regression was used to examine whether occupational stress and work-related burnout independently predicted perceived nursing-care quality. Occupational stress and burnout were entered as the main independent variables, while relevant sociodemographic and occupational variables were considered as covariates. Adjusted odds ratios with 95% confidence intervals were reported. Statistical significance was set at $p < .05$.

Ethical Considerations

Data collection will be done with approval of participating tertiary-care hospitals' administrative departments and with ethical clearance from the appropriate Institutional Review Board/Ethics Committee before its start. Each participant will be briefed on the purpose, the voluntary nature of participation, confidentiality of answers and exit without penalty from the research study. Will obtain informed consent prior to administering questionnaire. Names or other personal identifiers will not be recorded and data collected will only be used for research. Electronic research data will be retained in a secure fashion and only for the purposes of research.

Results

Participant Characteristics

A total of 138 registered nurses participated in the study, with no missing responses. The demographic and work-related characteristics of participants are presented in Table 1. The largest proportion of participants were aged 26–30 years (31.9%), followed by those aged 31–35 years (23.9%) and 20–25 years (21.7%). More than half of the participants were female (55.8%) and male participants represented 42.8% of the sample.

Regarding educational background, most nurses held a Diploma in Nursing (54.3%), followed by post-RN BSN qualifications (21.0%). Nearly half of the participants had less than one year of nursing experience (47.8%), while 32.6% had 1–5 years of experience. Most nurses worked in surgical units (56.5%), followed by intensive care units (24.6%). Most participants reported working day shifts (54.3%), and the most common weekly working duration was 41–48 hours (45.7%). Most participants were employed in private hospitals (84.1%).

Table 1. Sociodemographic and Work-Related Characteristics of Participants (N=138)

Characteristics	n	%
Age		
20–25 years	30	21.7
26–30 years	44	31.9
31–35 years	33	23.9
36–40 years	15	10.9
>40 years	16	11.6
Gender		
Male	59	42.8

Characteristics	n	%
Female	77	55.8
Prefer not to say	2	1.4
Highest qualification		
Diploma in Nursing	75	54.3
Post-RN BSN	29	21.0
Generic BSN	14	10.1
MSN/MSc Nursing	9	6.5
Other	11	8.0
Nursing experience		
<1 year	66	47.8
1–5 years	45	32.6
6–10 years	27	19.6
Clinical unit		
Medical	19	13.8
Surgical	78	56.5
ICU	34	24.6
Emergency	7	5.1
Work shift		
Day	75	54.3
Evening	17	12.3
Night	31	22.5
Rotating	15	10.9
Working hours/week		

Characteristics	n	%
≤40 hours	29	21.0
41–48 hours	63	45.7
49–60 hours	31	22.5
>60 hours	15	10.9
Hospital type		
Public	22	15.9
Private	116	84.1

Reliability of Study Instruments

The internal consistency of the study instruments was assessed using Cronbach's alpha. The Nurses' Occupational Stressor Scale (NOSS-21) demonstrated acceptable reliability with a Cronbach's alpha of 0.725. The Work-Related Burnout subscale of the Copenhagen Burnout Inventory (CBI) also showed acceptable internal consistency with an alpha coefficient of 0.767. These values indicate satisfactory reliability of both instruments within the current sample.

Table 2. Reliability Statistics of Study Instruments

Instrument	Number of Items	Cronbach's α
NOSS-21 Occupational Stress Scale	21	0.725
CBI Work-Related Burnout Scale	7	0.767

Descriptive Statistics of Main Study Variables

Descriptive statistics for occupational stress, burnout, and perceived quality of nursing care are shown in Table 3. The mean score for perceived quality of nursing care was 2.50 ± 1.17 (range: 1–4). The mean occupational stress score was 2.54 ± 0.74 , while the mean burnout score was 1.23 ± 0.42 .

Table 3. Descriptive Statistics of Main Variables

Variable	Mean $\pm$ SD	Minimum	Maximum
Perceived quality of nursing care	2.50 ± 1.17	1	4
Occupational stress	2.54 ± 0.74	1	4

Variable	Mean $\pm$ SD	Minimum	Maximum
Work-related burnout	1.23 $\pm$ 0.42	1	2

Levels of Occupational Stress and Burnout

Based on categorized scores, occupational stress was most reported at mild and moderate levels, with each category accounting for 42.8% of participants. High occupational stress was observed among 8.7% of nurses. Regarding burnout, most participants were classified as having low burnout (76.8%), while 23.2% demonstrated mild burnout. No participants were classified in the moderate or high burnout categories.

Table 4. Levels of Occupational Stress and Burnout Among Nurses

Variable	Category	n	%
Occupational stress	Low	8	5.8
	Mild	59	42.8
	Moderate	59	42.8
	High	12	8.7
Burnout	Low	106	76.8
	Mild	32	23.2

Normality Testing

Normality testing was performed using the Shapiro–Wilk test. The results indicated that perceived quality of nursing care, occupational stress, and burnout scores significantly deviated from normal distribution ($p < 0.001$). Therefore, non-parametric statistical methods were applied for subsequent correlation analysis.

Correlation Between Occupational Stress, Burnout, and Quality of Nursing Care

Spearman's rank correlation analysis was conducted to examine relationships among the study variables (Table 5). Occupational stress demonstrated a significant negative correlation with perceived quality of nursing care ($r_s = -0.274$, $p = 0.001$), indicating that higher occupational stress was associated with poorer perceived quality of care. Occupational stress was also significantly correlated with burnout ($r_s = -0.287$, $p = 0.001$). Burnout showed a significant positive correlation with perceived quality of nursing care ($r_s = 0.189$, $p = 0.027$).

Table 5. Spearman Correlation Between Study Variables

Variables	Quality of Care	Occupational Stress	Burnout
Quality of care	1	-0.274**	0.189*
Occupational stress	-0.274**	1	-0.287**
Burnout	0.189*	-0.287**	1

Predictors of Perceived Quality of Nursing Care

A multiple linear regression analysis was performed to examine whether occupational stress and burnout predicted perceived quality of nursing care. The regression model was statistically significant ($F\text{-change} = 7.285$, $p = 0.001$) and explained 9.7% of the variance in perceived quality of nursing care ($R^2 = 0.097$). Occupational stress was a significant negative predictor of perceived quality of nursing care ($\beta = -0.258$, $p = 0.003$), indicating that higher occupational stress was associated with lower perceived quality of care. However, burnout was not a significant independent predictor ($\beta = 0.116$, $p = 0.176$).

Table 6. Multiple Regression Analysis Predicting Perceived Quality of Nursing Care

Predictor	β	p-value	95% CI
Occupational stress	-0.258	0.003	-0.680 to -0.142
Burnout	0.116	0.176	-0.146 to 0.790

Model: $R^2 = 0.097$, $p = 0.001$

Discussion

This study examined the relationship of occupational stress and burnout with perceived quality of nursing care in nurses working in tertiary hospital beds in the current study. Results showed that there was a significant relationship between occupational stress and the perception of the quality of nursing care such that, higher occupational stress was associated with poor perception of quality of nursing care. Additionally, occupational stress was an important independent correlate of perceived quality of nursing care while burnout was still included in the regression model. These findings highlighted the significance of the work climate and work psychological well-being of the nurses for providing good healthcare services.

The negative relationship found in this study between occupational stress and perceived quality of nursing care aligns with prior studies: the stressful work environment may have a negative impact on the nurses' provision of optimum care to the patients (Babapour, Gahassab-Mozaffari et al. 2022). Nurses need to constantly make judgments and use communication skills, regulate their emotions, make timely decisions, and ensure the safety of patients. Moderately high workloads, low staffing levels, organizational barriers, interpersonal conflict, and limited recovery opportunities may be the factors that compromise a nurse's psychological and physical resources

and thus compromise the level of care they provide (Pi, Liu et al. 2025). Occupational stress has also been previously linked to less positive patient outcomes, missed nursing care, and lower care perceptions, among nurses (Li, Yang et al. 2024). In this study, profession stress was determined as a significant predictor of perceived quality of nursing care, indicating that work-related stress factors may directly affect the provision of nursing services by the nurses daily. This discovery especially holds true in tertiary care hospitals where nurses constantly care for critically ill patients who have complex health issues and/or intensive care needs. These workplaces tend to be features of tertiary hospital settings, where there will be greater responsibility, workload, and continual encounters with difficult clinical situations (Kiptulon, Elmadani et al. 2024). Nurses who are exposed to persistent occupational stress, as a result of insufficient organizational support, inadequate staffing levels, poor leadership, and teamwork, may experience reduced efficiency in their work and lack of care they provide to their patients (Ullah, Arbab et al. 2025). A significant relationship was also found between burnout and perceived quality of the nursing care. This finding is consistent with past research that has shown that nurse burnout is linked to undesirable patient healthcare outcomes, such as decreased patient safety, increased missed care, decreased patient satisfaction, and reduced nurse-assessed quality of care (Li, Yang et al. 2024). There are multiple ways that burnout can impact a nurse's performance, such as feeling emotionally drained, being less motivated, failing to attend to patient care, and becoming less focused on nurse duties during patient interactions (Kelly, Gee et al. 2021). No independent relationship between burnout and perceived quality of nursing care was found through the regression analysis though. Working conditions stress as opposed to burnout may be a more immediate influence on nurses' perceptions of care quality while burnout is a long-term effect of their continued exposure to stress in the workplace. Like the demands of work, staffing issues, organizational issues, and limited opportunities for recovery can directly impact a nurse's ability to care for patients, and burnout can occur over time as a result of an amalgamation of stressors (Kowalczyk, Tomaszewska et al. 2026). The routine exposure to challenging work settings, but inadequate organizational support can over time lead to a decline in effective functioning and make nurses susceptible to burnout (Khatatbeh, Pakai et al. 2022). The results of reliability in the present study also prove the suitability of the measurement instruments used. The internal consistency of the Nurses' Occupational Stressor Scale (NOSS-21) was found to be acceptable and it was appropriate for measuring the occupational stressors experienced by the nurses in this population. Likewise, the Work-Related Burnout subscale of Copenhagen Burnout Inventory (CBI) demonstrated adequate reliability. This is supported by earlier research that shows the validity and reliability of these instruments with health care workers (Silva, Valentim et al. 2024). The importance of this study to the literature is that it investigates 3 phenomena: occupational stress, burnout, and perceived nursing care quality at the same time. Although burnout has been noted as a key issue affecting a nurse's occupation in many studies, the present findings emphasize the significance of workplace stressors in general, which could be associated with quality of care (Babapour, Gahassab-Mozaffari et al. 2022). The findings indicate that enhancing nursing care quality should include a practical approach of organizational management that would promote the physical and psychosocial well-being of the nurse. To manage avoidable stressors and improve communication systems, nurse managers and hospital administrators should employ strategies that support nurses' ability to do their job effectively and to build strong communication with others in their work environment (Mabona, van Rooyen et al. 2022).

Limitations and Future Research

This study has several limitations. First, its cross-sectional design does not allow causal relationships among occupational stress, burnout, and perceived nursing-care quality to be established. Second, although validated instruments were used, the findings were based on self-

reported data and may have been affected by recall, response, or social-desirability bias. Third, the study included only nurses working in tertiary-care hospitals; therefore, the findings may not be generalizable to nurses in other healthcare settings. Moreover, potentially influential factors, including organizational support, leadership, staffing adequacy, and coping strategies, were not examined. Future research should use longitudinal and multicenter designs, recruit larger and more diverse samples, and incorporate patient-reported or objective indicators of nursing-care quality. Future studies should also evaluate whether organizational interventions, such as workload management, adequate staffing, supportive leadership, and workplace stress-reduction programmes, improve nurses' well-being and the quality and safety of patient care.

Conclusion

This study highlights the importance of nurses' occupational experiences in shaping their perceptions of nursing-care quality in tertiary-care hospitals. Higher occupational stress was associated with poorer perceived care quality and remained a significant predictor after burnout was included in the regression model. However, burnout was not a significant independent predictor of perceived care quality. These findings indicate that improving nursing-care quality requires attention not only to individual well-being but also to the organizational conditions that contribute to workplace stress. Healthcare organizations should promote supportive working environments, maintain appropriate staffing, and distribute workloads fairly. Addressing modifiable workplace stressors may protect nurses' well-being and support the delivery of safer, higher-quality patient care.

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