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Moderating role of relationships between workloads, job burnout, turnover intention, and healthcare quality among nurses

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Abstract

Background In Jordan, nurses consider a primary providers of direct patient care, and play a multifaceted role in ensuring healthcare quality. The study aimed to examines the moderating effect of job satisfaction in the relationship between workload and healthcare quality, job burnout and healthcare quality, and turnover intention and healthcare quality.

Methods A cross-sectional research approach was adopted among 311 from Registered Nurses (RN) across Jordanian hospitals. Job satisfaction, workload scale and job burnout scale were shared between March and April 2023.

Results The overall findings indicate that workload, job burnout, and turnover intention are negatively and significantly related to healthcare quality, and that job satisfaction moderates the relationship between workload and healthcare quality, job burnout and healthcare quality, and turnover intention and healthcare quality. These findings have broad implications for healthcare organizations, emphasizing the pivotal role of job satisfaction in mitigating the negative effects of workload, burnout, and turnover intentions among nurses.

Consulsion Strategies to enhance job satisfaction, such as reducing work-related stress and fostering supportive work environments, should be prioritized by healthcare policymakers and institutions to ensure the delivery of high-quality patient care.

Keywords Healthcare quality, Public health management, Job burnout, Turnover intention, Job satisfaction

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Introduction

The foundation of healthcare is quality of care [1]. The quality of care is determined by how well health services are provided to residents and their communities, increasing the likelihood of desired health outcomes while adhering to established ethical standards and being safe, effective, timely, equitable, and people-centred [2]. The nurse-reported quality of care refers to nurses' subjective evaluations of the perfection of nursing care provided to meet patients' requirements and demands [3].

Nurses are the heartbeat of the healthcare system, and their dedication to patient-centered care, clinical expertise, and commitment to quality assurance are central to maintaining and elevating healthcare quality standards [4, 5]. Hospital nurses in several nations, including Jordan, have been found to have a higher incidence of job burnout, workload, and intention to leave [6]. Poor work performance among nurses may result in high rates of intention turnover and lack of nurses, which would lower hospitalised patients' quality of care [7]. In addition, the global scarcity of nurses is becoming a significant worry, and attention to the job satisfaction of nurses is rising everywhere, including in Jordan [8]. For example, A descriptive correlational cross-sectional study conducted among 170 Jordanian registered nurses, the study indicated higher turnover intentions [9]. In another study, burnout, self-evaluation, and professional status are all found to be at moderate levels among 350 Jordanian registered nurses [10]. The Jordanian nurses exhibited high levels of burnout as demonstrated by their high scores for Emotional Exhaustion (EE) and Depersonalization (DP) and moderate scores for Personal Accomplishment (PA) [11]. There has been a demand on nurse managers and hospital administrators to discover strategies for lowering nurses' turnover rates without compromising the quality of care.

Research on the connections between nurses' job satisfaction, care quality, job burnout, intention to leave, and workload is also necessary, as evidenced by the shift towards evidence-based practice [1]. A Jordanian study revealed a statistically-significant negative relationship between job satisfaction and turnover intention [12]. A leadership had a negative direct impact on Jordanian nurse turnover intention [13]. In another study, Authentic leadership and a favorable work environment were significantly associated with lower job burnout [14]. Finding practical solutions to improve care quality and lessen nurses' job discontent, burnout, workload, and desire to leave is crucial.

However, it has been observed that hospital nurses in various countries, such as Jordan, experience elevated levels of job burnout, heavy workloads, and a propensity to consider leaving their positions. The suboptimal performance of nurses in their roles can potentially lead

to an increased intention to leave, resulting in nursing shortages that could compromise the quality of care provided to hospitalized patients [7]. Moreover, the global shortage of nurses has emerged as a growing concern, prompting a heightened focus on the job satisfaction of nurses not only in Jordan but worldwide [8]. Nurse managers and healthcare administrators are facing the pressing challenge of devising strategies to reduce nurse turnover rates while upholding healthcare quality standards. Research into the intricate interplay between nurses' job satisfaction, the quality of care, job burnout, intention to leave, and workload is imperative, especially in light of the increasing shift towards evidence-based practice [1]. Discovering practical solutions to enhance the quality of care and alleviate nurses' job dissatisfaction, burnout, workload, and desire to leave has become an essential endeavor.

Burnout is characterised by a diminished sense of personal achievement, negativity, and emotional tiredness [2]. Burnout is common among nursing professionals worldwide [3]. In recent meta-analysis showed that the global prevalence of nursing burnout was 30.0% [15]. A scoping review, showed three categories of burnout that impact ICU nurses during SARS-CoV-2 Pandemic that included emotional exhaustion, depersonalisation dimension and a lack of personal accomplishment [16]. Physical and mental exhaustion caused by ongoing work stress and workload is also known as job burnout [4].

Job burnout is characterised by extreme physical and mental exhaustion, poor work enthusiasm, and emotional exhaustion from one's job duties [5]. Nurses are particularly vulnerable to job burnout under these circumstances. Numerous studies have shown that medical staff members experienced significant rates of job burnout [6–8].

Furthermore, the concept of "workload" is made up of two words: "load", which denotes the quantity of nursing performance needed in a given length of time to undertake nursing activities, and "work," which represents the actions and activities that nurses perform on behalf of the patient [17]. According to O'Brien-Pallas & Baumann, workload is the quantity of medical professional resources required for a patient during a work shift [18]. The workload is also defined by Casner and Gore, in three ways, which are cognitive function, physical exertion (e.g., walking distance, biomechanical load); and time constraints [19]. The quality of care and nurses' health is directly impacted by an intense workload brought on by high demands.

An overload of nurses causes depression, injuries and musculoskeletal disorders (WMSD), burnout, higher error rates, eroding worker morale, and poor performance, in addition to overtime and absenteeism [20, 21]. Increased workloads have detrimental repercussions on

employees, such as overtime and absenteeism, which can ultimately result in WMSD or job burnout [1]. All of these things add up to inadequate nursing care. Excessive workloads directly affect nurses' decision-making ability, making them essential for patient safety and the standard of care they provide [22]. Previous research has demonstrated that some pressures harm care quality. For example, Van et al., discovered that a high workload had a detrimental impact on the standard of care [23]. Additionally, Bautista et al., found a negative correlation between workload and care quality [24].

Excessive workloads for nurses directly affect their decision-making, which influences patient safety and the quality of care [6]. Workers constantly exposed to high workloads become exhausted, and their performance has been compared to that of drunk individuals [17]. Additionally, Weigl et al., found a negative relationship between workload and the quality of care [25]. As a result, conditions with a high workload may contribute to medical errors [1]. Significant relationships have been found in a large body of research to date between nursing workload, care quality, and job satisfaction [19, 20]. Moreover, the extent to which workers enjoy their work and feel positively or negatively about their occupations is known as job satisfaction. It is an agreeable or affirmative emotional response to a person's assessment of their employment or work experience [10]. According to Li et al., job satisfaction is also measured by how much people enjoy their jobs and how well they respond to their employment [26].

Research has shown a negative correlation between employee turnover intention and work satisfaction [22]. The association between job desire and turnover intention assignment was also mediated by job satisfaction [9]. In-depth video and telephone interviews study were performed to describe how nurses managed patient care under workload pressure, the results presented four key theme compromising care; incongruity between professional standards and organisational resources; emotional exhaustion; and depersonalization [27]. A cross-sectional mixed-methods among 1742 nurses to assess organisational predictors of nurses' satisfaction/ dissatisfaction, the study showed that majority of nurses were demoralised, and perceived lack of support [28].

In the healthcare, the intricate relationship between nurses' job dissatisfaction, heavy workloads, and job burnout is well-documented. When nurses experience dissatisfaction with their work environment or the demands placed upon them, coupled with the emotional and physical exhaustion associated with job burnout, it significantly increases their propensity to entertain the idea of leaving their positions [29]. This intention to leave, often referred to as turnover intention, can have far-reaching consequences for the healthcare system.

The study aimed to examine the moderating effect of job satisfaction in the relationship between workload and healthcare quality, job burnout and healthcare quality, and turnover intention and healthcare quality, with following hypotheses were developed:

1. Workload has a negative effect on healthcare quality.

The Job Demand-Resources (JD-R) model posits that high job demands, such as heavy workloads, can lead to strain and decreased job performance, including the quality of care provided by healthcare professionals. Empirical studies have shown that excessive workloads are associated with increased medical errors and lower patient satisfaction. [30]

2. Job burnout has a negative effect on healthcare quality.

According to Maslach's Burnout Theory, burnout is characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. These symptoms can diminish a healthcare worker's capacity to provide high-quality care. Numerous studies have linked burnout to lower patient satisfaction, increased medical errors, and reduced quality of care [31].

3. Turnover intention has a negative effect on healthcare quality.

The Theory of Planned Behavior suggests that intentions to leave a job can predict actual turnover. High turnover rates disrupt team cohesion and continuity of care, which can negatively impact healthcare quality. Research has shown that turnover intentions are associated with lower patient satisfaction and poorer clinical outcomes [32].

4. Job satisfaction moderates the relationship between workloads and healthcare quality.

Herzberg's Two-Factor Theory distinguishes between job satisfiers (motivators) and dissatisfiers (hygiene factors). Job satisfaction can buffer the negative effects of high workloads by enhancing motivation and engagement, thus preserving healthcare quality. Studies have found that job satisfaction can mitigate the adverse effects of workload on performance [33, 34].

5. Job satisfaction moderates the relationship between job burnout and healthcare quality.

The Conservation of Resources (COR) theory suggests that individuals strive to obtain, retain, and protect their resources. Job satisfaction can serve as a valuable resource that helps healthcare workers cope with burnout, thereby maintaining the quality of care. Empirical evidence supports the role of job satisfaction in reducing the negative impact of burnout on job performance [35].

6. Job satisfaction moderates the relationship between turnover intention and healthcare quality.

Social Exchange Theory posits that job satisfaction fosters positive reciprocal relationships between employees and their organizations. Satisfied employees are less likely to act on turnover intentions, which helps maintain stable and high-quality care. Research indicates that job satisfaction can reduce the likelihood of turnover and its negative impact on healthcare quality [36].

Methodology

Study design a cross-sectional research approach were adopted.

Sample size

A sample size of 380 registered nurses (RN) was chosen to stand for the entire population of 35,829 RN in Jordan. Based on an estimated effect size of $(d)=0.7$, $\alpha = 0.05$, $power=0.95$, the required sample size was estimated at 380 to run a paired sample t-test. Thus, 380 questionnaires were distributed to the respondents using purposive sampling technique. The requirements for inclusion are as follows: [1] possess a registered nurse certificate; [2] treat patients during the investigation period; [3] have been employed as a registered nurse for more than six months; and [4] willingly participate. Two categories of nurses are excluded from consideration: [1] those on leave throughout the investigation and [2] those who had worked for less than six months. The selection of hospital type (i.e., governmental, or private) from each region was made according to the percentage of each type in each region. Hospitals with a capacity of fewer than 60 beds were excluded because of the small number of registered nurses on their duty schedules, and they tended to be peripheral hospitals as well. However, only 311 questionnaires were returned and usable for data analysis, representing a valid response rate of 82%. In line with the viewpoint of Sekaran [25], which indicated that

a minimum response rate of 30% is adequate for a survey research, it can therefore be stated that this study's response rate is appropriate and adequate for further analysis.

Measurement of variables

Workload scale (Caplan et al.,) was adapted to quantify nurses' workload [37]. The four elements on the scale measured the volume and speed of work assignments given to nurses. A 5-point Likert scale, where 0 represents never and 5 represents very frequently was used. Cronbach's $\alpha=0.854$.

As for job burnout scale, four questionnaire items were adapted from the Maslach Burnout Inventory [38], which are: "My profession has rendered me indifferent.", "Every day when I leave work, I feel worn out.", "I don't feel like I'm making progress at work." A 5-point rating system was used for responses, with 1 denoting not at all satisfied and 5 denoting total satisfaction. Cronbach's $\alpha=0.839$.

Turnover intention measures were adapted from Mobley Model of Employee Turnover Behaviour [39]. Three items constitute the scale employed in this study: "I've thought about leaving my current job," "In the upcoming year, I intend to look for a new job," and "If offered the chance, I would gladly take a new and better job." The scale has a 5-point Likert scale with Cronbach's $\alpha=0.847$, ranging from 1 (strongly disagree) to 5 (strongly agree).

Job satisfaction measures were adapted from six-item scale developed by Weiss et al., [40]. The scale was based on the Minnesota Satisfaction Questionnaire (MSQ). Job satisfaction encompassed contentment with the work itself, management, compensation, and the work environment. "You will be satisfied with the workplace" "How satisfied are you with your work?" are a few examples of the items. A 5-point rating system was used for responses, with 1 denoting not at all satisfied and 5 denoting total satisfaction. Cronbach's $\alpha=0.883$.

Healthcare quality measures were adapted from Van Bogaert et al.'s [23] five items. Among the items are the following: "The level of care you have given during the last six months has been," "How would you rate the overall standard of nursing care provided to patients in your unit?"; "How would you characterise the standard of nursing care you provided during your most recent shift?" A five-point Likert scale, with 1 denoting a poor reaction and 5 denoting an excellent response, was used by respondents to indicate their response. Cronbach's $\alpha=0.800$.

The scale was translated from its original language into Arabic, followed by a back-translation process to ensure accuracy and consistency. Certain items were rephrased to align with local cultural nuances and organizational practices. This involved adjusting language to reflect

Table 1 Sociodemographic and work-related characteristics of the study sample

Variable	Total (n = 311)	
	Mean	SD
Age	33.14	4.61
Gender	N	(%)
Male	154	(49.5)
Female	157	(50.5)
Marital status		
Single	103	(33.0)
Married	179	(57.6)
Divorced	28	(8.4)
Educational level		
Bachelor	272	(87.5)
Master	35	(11.3)
PHD	4	(1.3)
Type of shift		
8 h	188 (53.1)	
12 h	129 (32.80)	

common terminology and expressions used in Jordanian workplaces. A panel of experts reviewed the translated items to ensure they were culturally appropriate and relevant. The internal consistency of the scale was assessed using Cronbach's alpha.

Data collection

The population of this study consists of registered nurses in Jordan between March and April 2023. Participants completed the questionnaire self-administered by the researchers with help from nursing administrators. The Jordanian Nursing Association, which consists of administrators of registered nurses from various locations in the country, were contacted by the researchers. The local hospital administrators and their registered nurses received the survey from the nursing administrators. Informed consent was obtained from all subjects and/or their legal guardian(s). An online survey platform was used to distribute the questionnaires via Whatsapp. The survey contained a link to the survey, along with a cover letter explaining the purpose of the study, the voluntary nature of participation, and assurance of confidentiality. Participants were informed about the confidentiality of their responses in the cover letter and in the introduction of the survey. They were assured that their participation was voluntary and that their data would be used solely for research purposes. Digital responses were stored on a secure, password-protected server.

Data Analysis

The data collected were analyzed using SPSS version 21 and Smart PLS 3 software packages, and the two-step approach as suggested by Chin et al., was adopted to obtain valid and reliable results [41]. Based on Hair et al.'s

Table 2 Internal consistency and convergent validity

Constructs	CA	rho_A	CR	AVE
Job Burnout (JB)	0.839	0.841	0.892	0.674
Job Satisfaction (JS)	0.883	0.887	0.913	0.638
Healthcare Quality (HQ)	0.800	0.807	0.862	0.557
Turnover Intention (TI)	0.847	0.852	0.907	0.766
Workload (WL)	0.854	0.861	0.901	0.695

proposition, the two-stage approach which includes the measurement model and structural model was undertaken [42, 43]. All methods were carried out in accordance with relevant guidelines and regulations. The partial least squares-structural equation model (PLS-SEM) was used in this study to analyze data using Smart PLS 3, as recommended by Hair et al. [42]. The two main approaches used in the current study to obtain valid and reliable results were measurement and structural models. The measurement model evaluates the relationship between the latent variables and their measures (indicators) and can be validated by examining items indicator reliability, internal consistency reliability, and convergent validity [41]. Indicator reliability explains the fittingness and reliability of each item loading in measuring a certain construct for a given research study [31]. Indicator reliability is satisfied as each item value for all the constructs loads above 0.6 [25]. Individual indicator reliability has been satisfactorily attained as items loading values range from 0.627 to 0.852.

Results

Table 1 shows the descriptive characteristics of the participants. A total of 311 nurses participated in the study with the mean age of 33.14 (SD=4.61). The female was present in study, $n=157$, (50.5%). More than half of the participants (57.6%, $n=179$) were married and smokers (57.9%, $n=180$). The majority of the participants (87.5%, $n=272$) have a Bachelor degree. More than half of the participants (53.1%, $n=188$) worked an 8 h shift.

Table 2 shows the internal consistency reliability of each construct (construct reliability). All constructs have CA and rho_A values above 0.80, indicating that the items within each construct are reliably measuring the same underlying concept and confirming the consistency. All CR constructs exceed 0.86, demonstrating that the constructs are measured with minimal error and that the indicators sufficiently represent the latent constructs. All constructs have AVE values above 0.55, with Turnover Intention (TI) having the highest at 0.766. This suggests that the constructs are well-represented by their items and that the constructs effectively capture the underlying theoretical concepts.

To conclude the assessment of measurement model, discriminant validity was also checked through the heterotrait-monotrait ratio (HTMT). As depicted in Table 3,

Table 3 Discriminant validity among variables

Constructs	JB	JS	HQ	TI	WL
JB					
JS	0.653				
QC	0.740	0.592			
TI	0.703	0.749	0.732		
WL	0.682	0.539	0.735	0.582	

Job Burnout (JB); Job Satisfaction (JS); Healthcare Quality (HQ); Turnover Intention (TI); Workload (WL)

Table 4 Inner Model Assessment among variables

Constructs	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
JB -> HQ	-0.245	0.244	0.074	3.331	0.000
JS -> HQ	-0.031	0.033	0.067	1.960	0.023
TI -> HQ	-0.287	0.287	0.070	4.123	0.000
WL -> HQ	-0.315	0.316	0.057	5.508	0.000
JS.JB -> HQ	0.135	0.134	0.041	4.841	0.000
JS.TI -> HQ	0.107	0.106	0.070	3.323	0.000
JS.WL -> HQ	0.115	0.114	0.057	4.008	0.000

Job Burnout (JB); Job Satisfaction (JS); Healthcare Quality (HQ); Turnover Intention (TI); Workload (WL)

the HTMT values of all pairings of constructs in the matrix are less than 0.90. Thus, the constructs validity of this study has been established.

Table 4 specifically shows both the direct path and moderation effects' paths. The direct path results (i.e., $\beta = -0.315$, $t = 5.508$, $p < 0.001$; $\beta = -0.245$, $t = 3.331$, $p < 0.01$; $\beta = -0.287$, $t = 4.123$, $p < 0.01$) demonstrate that workload, job burnout, and turnover intention are negatively and significantly related to healthcare quality. Thus, the three direct hypotheses earlier stated in this study were empirically supported.

The results in Table 4 indicate that all the three moderation-based hypotheses are supported as the result ($\beta = -0.115$, $t = 4.008$, $p < 0.01$; $\beta = 0.135$, $t = 4.841$, $p < 0.01$; $\beta = 0.107$, $t = 3.323$, $p < 0.01$) shows that job satisfaction moderates the relationship between workload and healthcare quality, job burnout and healthcare quality, and turnover intention and healthcare quality respectively. Furthermore, the effect size in the structural model evaluation indicates that healthcare quality is explained by the four independent variables reasonable effect size values (f^2). Overall, the result emphasizes the significant effects of workload, job burnout, turnover intention, job satisfaction on healthcare quality.

Discussion

Job satisfaction among nurses is a critical aspect of healthcare as it directly impacts patient care, staff retention, and overall workplace morale [44]. Flexible scheduling, manageable shift lengths, and support for personal life commitments are crucial for maintaining a healthy work-life balance, which boosts job satisfaction [45]. The

study aimed to examine the moderating effect of job satisfaction in the relationship between workload and healthcare quality, job burnout and healthcare quality, and turnover intention and healthcare quality.

The noteworthy discovery in this study is the moderating role of job satisfaction. It appears that when nurses experience higher levels of job satisfaction, the negative impacts of heavy workloads, burnout, and turnover intention on healthcare quality are alleviated [37]. This suggests that enhancing job satisfaction among nursing staff can serve as a potent buffer against the adverse consequences of workplace stressors [38]. It implies that interventions aimed at improving job satisfaction, such as fostering a supportive work environment, providing opportunities for skill development, and acknowledging the importance of nurses' contributions, can contribute significantly to maintaining and even elevating the quality of healthcare services [39]. Moreover, nurse managers and administrators should actively engage in creating supportive work environments that acknowledge the unique challenges faced by nursing staff and provide opportunities for professional growth [40]. Policymakers in the healthcare sector should also take note of these results as they make decisions regarding healthcare workforce planning and resource allocation [46, 47]. Ultimately, the positive moderating effect of job satisfaction uncovered in this study underscores the need for a holistic approach to healthcare quality, one that values the well-being and satisfaction of nursing staff as integral components of delivering high-quality patient care [48].

It is evident from the data analysis that excessive workloads, the experience of job burnout, and the intention to leave one's nursing position all have detrimental effects on healthcare quality. These outcomes are not surprising given the physical and emotional demands placed on nurses, which can lead to decreased performance and, ultimately, a diminished quality of care (4. Regularly survey nurses to assess their job satisfaction levels and identify areas for improvement and establish recognition programs to celebrate the achievements and contributions of nurses [49]. Use evidence-based staffing models to ensure appropriate nurse-to-patient ratios. Introduce flexible scheduling options to help nurses balance their work and personal life [50]. Adopt technology solutions such as electronic health records (EHRs) and automated administrative tools to reduce the administrative burden on nurses. Research indicates that addressing these factors can lead to higher job satisfaction among nurses, which in turn can lead to better patient outcomes, reduced turnover rates, and a more positive work environment overall. [51].

Challenges such as resource constraints, financial limitations, resistance to change, operational disruptions, and the need to prioritize initiatives significantly impact

the work environment of nurses [52]. Overcoming the challenges will facilitate a smoother implementation process and lead to sustainable improvements. Addressing these challenges requires a comprehensive approach that involves strategic planning, effective communication, and strong leadership. By focusing on these areas, healthcare organizations can create a more supportive and efficient work environment for nurses, ultimately leading to better patient care and improved job satisfaction [53, 54]. According to Hair et al. [42], both Cronbach Alpha and Composite Reliability values are expected to be 0.7 or above. Both Cronbach Alpha and Composite Reliability values in this study are correspondingly above the minimum threshold values of 0.7. Hence, consistency reliability has been satisfactorily confirmed. More so, convergent validity was assessed via AVE value. Its value is placed at 0.5 or above. Hair et al. define HTMT as the ratio of between-trait correlations to within-trait correlations and the rule of thumb is that HTMT values of all pairings of constructs in the matrix should be less than 0.90. [51]

Limitations

The study only includes participants from certain of nurses or geographic locations, the findings might not be generalizable to all settings. In self-reported measures, there is always a risk of recall bias, where participants may not accurately remember or may selectively report past experiences or workload levels. A significant limitation of cross-sectional studies is that they capture data at a single point in time, making it difficult to infer causal relationships. Cross-sectional studies do not track changes over time. This limitation means that any fluctuations in workload, job satisfaction, or healthcare quality cannot be observed. Longitudinal studies, in contrast, can provide insights into how these variables interact over time and establish causal links.

Practical implications

The findings of this study offer several practical implications for improving job satisfaction and healthcare quality within Jordanian hospitals and potentially other healthcare settings. Implementing structured recognition programs and providing continuous professional development opportunities can significantly boost job satisfaction among nurses, enhancing morale and reducing turnover rates. Ensuring adequate nurse-to-patient ratios through effective workforce planning and introducing flexible scheduling options can help manage workload and reduce stress, contributing to better work-life balance [55]. Investing in the physical work environment, promoting teamwork, and fostering a collaborative work culture can enhance the overall work experience for nurses. Providing access to mental health support

services and promoting mental health care as a normal part of workplace wellness can help nurses cope with the emotional demands of their job. Developing and implementing standardized care protocols and establishing key performance indicators for regular monitoring can ensure consistent quality of care, leading to better patient outcomes and higher levels of patient satisfaction. Policymakers can use these findings to inform health policy reforms, such as legislating for better staffing ratios and professional development requirements, and consider allocating sufficient budgets to support these initiatives. By addressing these practical implications, Jordanian hospitals can create a more supportive and effective healthcare environment, ultimately improving both job satisfaction among nurses and the quality of patient care.

Conclusion

The findings of this study provide compelling evidence that workload, job burnout, and turnover intention are significantly and negatively related to healthcare quality. These negative effects underscore the critical challenges faced by healthcare organizations in maintaining high standards of care amidst demanding work environments. The study highlights the pivotal role of job satisfaction in moderating these relationships. Job satisfaction was found to buffer the adverse impacts of workload, burnout, and turnover intention on healthcare quality. This suggests that enhancing job satisfaction among healthcare professionals can be an effective strategy to mitigate the negative effects of high workloads, prevent burnout, and reduce turnover intentions. In conclusion, this study underscores the importance of a holistic approach to healthcare management that considers both the structural and psychological needs of healthcare workers. By focusing on job satisfaction as a key lever, healthcare organizations can not only improve the well-being of their staff but also ensure better healthcare outcomes for their patients.

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Author contributions

Ol; Z M: Conceptualization"; Methodology" M K; AL AAS: Validation; formal analysis SMF A; AM. Writing, Data curation HA; AL T: formal analysis; Writing.

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Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the Institutional Review Board (IRB) in Al-Zaytoonah University of Jordan with number 12\2023. Written informed consent was obtained from all participants. All methods were carried out in accordance with relevant guidelines and regulations—Declaration of Helsinki. Written informed consent was obtained from all participants. A statement was written to inform the participants that their responses will be treated confidentially. They were also informed that participation was voluntary.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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