The Impact of Perceived Nurses' Workload on the Quality of Care in Saudi Arabia

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Abstract
This literature review systematically synthesizes the academic evidence on the impact of perceived nurses' workload on the quality of care in Saudi Arabia (KSA)**.** Driven by the healthcare transformation goals of Saudi Vision 2030, the KSA nursing sector faces unique challenges, including a persistent nursing shortage and reliance on an expatriate workforce, which contribute to high-perceived workload. The review establishes that this high-perceived workload, a subjective measure of job demands, is a critical determinant of care quality. It is strongly associated with negative workforce outcomes, such as burnout and high turnover intention, and directly compromises patient safety. Specifically, high workload is a primary predictor of Missed Nursing Care (MNC)**,** increased medication errors, and a higher incidence of adverse events like patient falls and Healthcare-Associated Infections (HAIs). Furthermore, it erodes the patient experience by reducing time for essential communication and negatively affects clinical outcomes, including increased Length of Stay and readmission rates. To mitigate these threats, the review recommends a shift to acuity-based, quality-driven staffing models**,** the implementation of mandatory minimum staffing standards, the strategic use of technology to eliminate non-nursing tasks, and a national mandate for standardized workload measurement tools. Addressing the perceived workload of nurses is essential for the Kingdom of Saudi Arabia to successfully deliver on its promise of excellent healthcare.
Keywords: Perceived Workload, Nurses, Quality of Care, Saudi Arabia

Introduction
The provision of high-quality healthcare hinges on the nursing workforce, and the relationship between nurses' workload and the quality of care delivered is a global concern (Aiken et al., 2002). Excessive workload is consistently linked to adverse outcomes, including increased patient mortality, medical errors, and diminished patient satisfaction (Needleman et al., 2002). This challenge is particularly relevant in the Kingdom of Saudi Arabia (KSA), where the ambitious healthcare transformation under Saudi Vision 2030 (National Center for Health Information, 2023) is challenged by persistent nursing issues, such as a reliance on expatriate staff and a recognized shortage of national nurses (World Health Organization, 2020). These factors contribute to an environment of high perceived workload, which threatens the quality and safety of patient care (Almalki, 2012).

Defining Key Concepts
To systematically explore this impact, this review focuses on Perceived Nurses' Workload**,** defined as the nurse's subjective appraisal of job demands relative to available resources (Al Mutair, 2022). This perception is a powerful predictor of stress and burnout, often outweighing objective measures. Quality of Care **is** broadly defined, encompassing patient safety, patient experience, and clinical effectiveness (The Joint Commission, 2018).

Aim of the Review
Despite the importance of the nursing workforce to Vision 2030, the workload-quality nexus in KSA is fragmented. Therefore, this review aims to systematically synthesize the current academic literature on the impact of perceived nurses' workload on the quality of care in Saudi Arabia, identifying critical gaps and informing policy to safeguard the workforce and patient outcomes.

Methodology
This review utilized a narrative synthesis approach, drawing exclusively on existing academic literature published on nursing workload and quality of care in Saudi Arabia. The content included in this review is entirely based on previously published studies cited throughout the text. No changes were made to the substantive content provided by the user; only the structural heading organization was modified to fit the required format.

Literature Review
Theoretical Frameworks and Conceptualization
The mechanism linking workload to care quality is mediated by psychological and organizational factors. Donabedian's Structure-Process-Outcome (S-P-O) framework (Donabedian, 1988) provides a foundation, where workload (Structure) compromises the care process, leading to poorer outcomes. Additionally, the Nurse Fatigue Model highlights that high perceived workload induces physical and mental fatigue, impairing cognitive function and decision-making (Proctor & Van Zandt, 2008). This impairment directly increases the likelihood of errors and compromises the thoroughness of care, linking the nurse's subjective experience to objective patient safety failures.

The Concept of "Perceived" Workload
The emphasis on perceived workload is critical as it captures psychological strain missed by objective measures. Even with acceptable nurse-to-patient ratios, the perception of overwhelming complexity, inadequate support, or the burden of non-nursing tasks (e.g., excessive documentation) (Al-Otaibi, 2025) drives stress and burnout. Studies in KSA confirm this subjective perception correlates strongly with low job satisfaction and a high intent to leave (Almalki, 2012), creating a vicious cycle of turnover that further degrades care quality.

The Saudi Arabian Contextual Influences
The unique KSA context modulates this relationship. Reliance on expatriate nurses introduces challenges like cultural adjustment and language barriers, adding to perceived workload (World Health Organization, 2020). The persistent nursing shortage and the push for Saudization (Kattan, 2025) mean existing staff work under immense pressure. The quality of the nursing practice environment including supportive leadership and interprofessional

collaboration is a key mediating factor, and its deficiencies amplify the negative effects of high-perceived workload on care quality (Alghamdi, 2017).

The State of Nursing Workload in Saudi Arabia
The assessment of nursing workload in Saudi Arabia reveals a complex picture of quantifiable staffing challenges and significant subjective distress. The literature points to a system under strain where healthcare demands often outpace available human resources.

Objective Measures and Staffing Challenges
Objectively, nurse-to-patient ratios and staffing levels are the primary indicators. Localized studies, such as those in Riyadh, indicate that staffing is frequently below optimal standards, creating high-intensity work environments (Saeed & Al-Ghamdi, 2022). The increasing volume and acuity of patients further translate seemingly adequate ratios into high workloads (Alharbi, 2019). A critical factor is the persistent nursing shortage in KSA, which the Saudization initiative (Alhindi, 2024) aims to address. Studies show that current staffing calculation methods often fail to reflect actual care demands, leading to chronic understaffing (Alhindi, 2024). This objective deficit forces existing staff to manage a greater number of patients and broader responsibilities.

Subjective Measures: The Perception of Overload
The objective challenges are amplified by the nurses' **subjective perception of overload**. Studies on the Quality of Nursing Work Life (QNWL) consistently report moderate to high levels of perceived workload (Al Mutair, 2022), which strongly predicts negative psychological outcomes like **burnout** and **occupational stress** (Alharbi, 2019). This high-perceived workload is often driven by the burden of **non-nursing tasks,** such as excessive documentation, administrative duties, and logistical coordination (Al-Otaibi, 2025). These time sinks detract from direct patient care, increasing the perception of overall workload even if the nurse-to-patient ratio is stable. Therefore, optimizing the work environment to allow nurses to focus on core competencies is as crucial as increasing staffing.

Consequences for the Nursing Workforce
The high-perceived workload has detrimental consequences for the nursing workforce, which directly affects care quality. It is a primary driver of **job dissatisfaction** and a high **intent to leave** (Almalki, 2012). Studies in Riyadh confirm high workload is a significant factor in lower job satisfaction and turnover intention (Saeed & Al-Ghamdi, 2022). This high turnover is a critical organizational issue, leading to a loss of experienced staff and further destabilizing the remaining workforce, thus intensifying the workload cycle. Furthermore, the strain affects the **Quality of Nursing Work Life (QNWL).** Research shows that while overall QNWL is moderate, the elements related to workload and stress are consistently rated poorly (Al Mutair, 2022). This constant pressure erodes the nurse's professional fulfillment (Alharbi, 2019). The relationship is direct: a fatigued, stressed, and dissatisfied nurse is less likely to be vigilant, empathetic, and meticulous in their practice (Alharbi, 2025).

Impact of Perceived Workload on Quality of Care
The most critical consequence of high-perceived nursing workload is the direct degradation of care quality, manifesting across patient safety, clinical outcomes, and patient experience.

The literature from Saudi Arabia supports the global evidence that a strained nursing workforce is a compromised safety barrier.

A. Patient Safety Outcomes
High-perceived workload compromises vigilance and adherence to safety protocols, increasing adverse events.

1. Medication Errors and Adverse Events
The link between fatigue, high workload, and medical errors is well-established in KSA (Saeed & Al-Ghamdi, 2022). When nurses are rushed and stressed, the likelihood of a lapse in medication administration increases. Cognitive overload reduces the capacity for double-checking and critical thinking, which are essential safeguards. Pressure to complete tasks quickly can lead to shortcuts, such as bypassing essential safety checks, directly contributing to adverse patient outcomes (Mrayyan & Al-Zoubi, 2008).

2. Missed Nursing Care (MNC)
The most direct consequence is **Missed Nursing Care (MNC)**—omitted, partially completed, or delayed required care (Al Muharraq & Alallah, 2022). High workload is consistently identified as the primary predictor of MNC in Saudi Arabian hospitals (Al Muharraq & Alallah, 2022). Frequently missed activities include **ambulation and turning** (increasing falls/pressure ulcers), **patient education** (increasing readmissions), **emotional support**, and **documentation** (compromising continuity of care) (AbuAlRub, 2025). The cumulative effect is a significant decline in care quality. In KSA Intensive Care Units (ICUs), high workload has been shown to compromise patient safety culture, with essential care frequently left undone (Alrabae & Aboshaiqah, 2021). This is a critical concern in high-acuity settings where timely intervention is paramount.

3. Patient Falls and Pressure Ulcers
High workload indirectly contributes to adverse events by preventing timely preventative measures. **Patient falls and pressure ulcers** are strongly associated with inadequate staffing and high perceived workload (Al-Kandari & Thomas, 2009). When nurses are managing too many patients, they lack the time for frequent rounds, assisting high-risk patients, or repositioning immobile patients. The perception of being too busy to perform these fundamental tasks is a direct manifestation of workload pressure, resulting in a clear failure in the quality of basic nursing care (Al-Kandari & Thomas, 2009).

B. Patient Experience and Satisfaction
High perceived workload significantly erodes the patient experience by reducing the nurse's capacity for meaningful interaction. Time constraints force nurses into a task-oriented approach, prioritizing procedures over relational care (Alharbi, 2019). This reduces time for crucial activities like active listening, emotional support, and thorough patient education. In the Saudi Arabian context, where cultural sensitivity and clear communication are paramount, this reduction in interaction time is particularly detrimental to patient satisfaction (Alharbi, 2025). Patients may perceive the rushed interaction as a lack of care or empathy. The nurse's ability to be responsive and empathetic is directly correlated with their perceived level of stress and workload (Alharbi, 2025).

C. Clinical Outcomes
The impact of perceived workload extends to hard clinical outcomes, affecting system efficiency.

1. Length of Hospital Stay and Readmission Rates
High workload indirectly contributes to increase **Length of Hospital Stay (LOS).** Overwhelmed nurses may delay essential care processes like timely documentation and care coordination (Al Muharraq & Alallah, 2022). Conversely, incomplete or rushed discharge planning, a form of missed care, is a significant predictor of **readmission rates** (Al Muharraq & Alallah, 2022). Patients discharged without full understanding of their care plan are more likely to experience complications. This costly and inefficient cycle directly affects the financial sustainability goals of Saudi Vision 2030.

2. Infection Rates
High-perceived workload compromises fundamental infection control practices, increasing **Healthcare-Associated Infections (HAIs). Hand hygiene,** the most basic measure, is often compromised when nurses are rushed (Zaghari, 2021). Meticulous care for invasive devices (e.g., central lines, urinary catheters) can be neglected under time pressure. The literature suggests that in understaffed units, the incidence of preventable infections like CLABSI and CAUTI rises, representing a serious failure in care quality directly attributable to workload pressures (Zaghari, 2021).

Findings
The impact of workload varies across settings. ICUs pose a unique challenge due to high patient acuity. Studies on KSA ICU nurses show a strong association between high workload and compromised patient safety culture (Alrabae & Aboshaiqah, 2021). The critical nature of the care means missed care has immediate, severe consequences. The nurse's perception of being overworked in these settings is a powerful signal of a system at risk of failure (Ghabi et al., 2024).

PHCs are the frontline of the Saudi healthcare system. Nurses here manage a high volume of diverse patients. Perceived workload is often driven by administrative tasks and lack of support staff, limiting time for essential health education and preventative care, which ultimately affects the long-term health outcomes of the population (Al-Otaibi, 2025).

The high-perceived nursing workload in Saudi Arabia is a significant threat to care quality, requiring a multi-pronged approach across organizational, individual, and policy levels.

Strategic organizational changes are the most direct way to alleviate workload. Firstly, a critical focus is on **optimizing staffing models and nurse-to-patient ratios** (Yin & Al-Mutairi, 2023). This requires moving beyond simple headcount to adopting acuity-based staffing systems that dynamically adjust the number of nurses based on patient needs. Implementing mandatory minimum staffing ratios, as suggested by the literature, could serve as a powerful policy lever to ensure a baseline level of safety and reduce chronic understaffing (Zhu & Al-Mutairi, 2024). Secondly, hospitals must leverage **technology for workload management** and to reduce the burden of non-nursing tasks. User-friendly Electronic Health Records (EHRs) and the introduction of support staff to handle logistical and administrative duties are essential

(Yin & Al-Mutairi, 2023). By offloading these peripheral tasks, nurses can dedicate more time to direct patient care, reducing perceived workload and missed care.

Unit-level interventions can significantly improve the nurse's ability to cope. Hospitals should invest in **stress management and resilience programs** tailored to KSA nurses, focusing on practical coping mechanisms and promoting a healthy work-life balance (Alharbi, 2025). These efforts require a culture that destigmatizes seeking help. Furthermore, improving the **nursing practice environment** is paramount. This involves fostering **supportive leadership** that involves nurses in decision-making (Alghamdi, 2017). Strong interprofessional collaboration, where nurses feel respected and valued, can also significantly reduce the psychological burden of perceived workload, leading to a more cohesive and effective care team (Alghamdi, 2017).

The national challenge of nursing workload requires a coordinated policy response. **Saudi Vision 2030** provides a clear mandate for addressing workforce challenges. Policymakers must develop a national strategy that not only increases the number of Saudi nurses (Saudization) but also ensures that working conditions are attractive and sustainable for all nurses (Kattan, 2025). This includes competitive compensation, clear career pathways, and a commitment to a safe and supportive work environment. Finally, there is a critical need for the **standardization of workload measurement tools** across KSA (Alhindi, 2024). The lack of uniform, validated tools hinders data comparison and evidence-based staffing policies. A national mandate for standardized, acuity-based measurement systems would provide the necessary data infrastructure to monitor the workload-quality relationship and hold organizations accountable for safe staffing levels.

Conclusion
This literature review has systematically examined the critical relationship between **perceived nurses' workload** and the **quality of care** in Saudi Arabia. The evidence is unequivocal: high-perceived workload is a pervasive issue strongly associated with a significant degradation in care quality and safety. The problem stems from objective staffing challenges (e.g., nursing shortage, reliance on expatriate staff) and subjective factors (e.g., non-nursing task burden, compromised quality of nursing work life). The consequences are far-reaching, directly impacting patient safety through increased **Missed Nursing Care (MNC)**, higher medication errors, and adverse events. Furthermore, high workload erodes the patient experience and negatively affects clinical outcomes like longer hospital stays and higher readmission rates.

Limitations of the Current Literature
While the existing research provides a strong foundation, limitations exist. Much of the current literature is cross-sectional, limiting the ability to establish definitive cause-and-effect relationships or track the long-term impact of workload interventions. Research is often concentrated in major urban centers, leaving a gap in understanding the workload-quality nexus in rural areas and primary healthcare settings. There is also a critical need for more standardized, validated tools to measure both perceived workload and quality of care outcomes across different regions of KSA, which would allow for more robust comparative analysis.

Implications for Practice and Future Research
The findings carry significant implications for policymakers, hospital administrators, and researchers committed to Saudi Vision 2030's healthcare goals. For **practice and policy**, the immediate priority is to shift from a cost-driven to an **acuity-based, quality-driven staffing model**. This requires mandatory minimum staffing standards, strategic use of technology to eliminate non-nursing tasks, and improving the nursing practice environment. Investing in nurse well-being is a direct investment in patient safety and quality of care. For **future research**, there is a clear need for **longitudinal studies** to track the impact of workload interventions on patient outcomes. Research should also be expanded to include a broader geographical and institutional representation. Finally, studies should explore the effectiveness of culturally tailored resilience and stress-management programs for the diverse nursing workforce in KSA. In conclusion, the perceived workload of nurses in Saudi Arabia is a critical determinant of healthcare quality. Addressing this challenge through evidence-based policy and organizational change is essential for the Kingdom to deliver on its promise of excellent care.

Conflicts of Interest
 All authors declare that they have no conflict of interest.

Availability of Data and Materials
Data supporting the findings of this study are available from the corresponding author upon reasonable request.

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