



Nurses' Experiences in Maintaining Patient Safety During High Workload Conditions in Public Hospitals

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Abstract

Purpose - This study explored nurses' experiences of maintaining patient safety during high workload conditions in a public hospital, focusing on risk recognition, care prioritization, teamwork, adaptation, and organizational support.

Methodology - A qualitative descriptive phenomenological design involved 15 registered nurses from adult inpatient units in a Type B regional public hospital in Central Java, Indonesia. Data were collected from January to March 2026 through semi-structured interviews, six non-participant observation sessions, and document review. Colaizzi's method guided analysis, supported by NVivo 14.

Findings - Five themes emerged: simultaneous and unpredictable demands, dynamic prioritization of safety-critical care, teamwork and communication as a safety buffer, hidden personal costs of maintaining safe care, and dependence on organizational resources. Nurses maintained safety by repeatedly reassessing risks, reorganizing tasks, sharing responsibilities, and protecting time-critical care.

Implications - Hospitals should strengthen staffing flexibility, workload escalation procedures, structured handovers, leadership support, teamwork, and monitoring of delayed or unfinished nursing care.

Originality - The study identifies adaptive prioritization as a key process linking workload with patient safety and integrates the Job Demands-Resources perspective with the Missed Nursing Care Model.

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Introduction

Patient safety remains a fundamental indicator of healthcare quality because preventable harm can occur at different stages of hospital care. Nurses occupy a central position in patient safety because they provide continuous surveillance, administer medications, identify clinical deterioration, coordinate care, communicate patient information, and respond to unexpected changes in patients' conditions. These responsibilities require sustained attention and accurate clinical judgment. Li et al. (2024) found that nurse burnout was associated with poorer safety climate, medication errors, patient falls, infections, adverse events, and lower perceived quality of care. The problem therefore extends beyond nurses' occupational well-being and directly concerns the capacity of health systems to provide safe care. Drennan et al. (2024) further

showed that lower nurse staffing was generally associated with poorer quality-of-care outcomes in emergency departments.

The workload experienced by nurses involves more than the numerical ratio between nurses and patients. Workload includes the number of patients requiring care, differences in acuity, simultaneous clinical demands, documentation, medication administration, admissions and discharges, communication, unexpected emergencies, and emotional demands. [Ahmed et al. \(2023\)](#) found that fatigue among critical care nurses was associated with poorer perceptions of patient safety. In Indonesia, [Cahya Sawitri et al. \(2024\)](#) identified significant relationships between work stress, fatigue, workload intensity, and patient safety incidents among hospital nurses. These findings indicate that workload should be understood as a multidimensional condition that affects nurses' physical, cognitive, and emotional capacity to sustain safe care.

High workload can influence safety through nursing activities that are postponed, incompletely performed, or omitted. This phenomenon is commonly described as missed nursing care. [Edfeldt et al. \(2024\)](#) found that missed care in surgical settings affected fundamental and person-centred nursing activities and represented a potential threat to patient safety. [Duhalde et al. \(2023\)](#) showed that emergency departments face similar concerns because unpredictable patient flow and competing clinical demands can leave essential nursing activities unfinished. [Alanazi et al. \(2023a\)](#) further demonstrated that safety culture, staffing, and missed care interact in shaping pressure injury outcomes. In another study, [Alanazi et al. \(2023b\)](#) found that patient falls were also associated with combinations of safety culture, care quality, missed care, and staffing.

Patient safety also depends on organizational culture, communication, teamwork, and the capacity to learn from safety incidents. [Kyriakeli et al. \(2025\)](#) identified staffing as one of the weakest dimensions of hospital patient safety culture perceived by nurses. Indonesian evidence also shows that incident reporting depends on organizational conditions. [Pramesona et al. \(2023\)](#) found that understanding of reporting procedures, organizational culture, feedback, training, facilities, and perceived consequences affected nurses' incident-reporting practices. [Listiwati et al. \(2023\)](#) additionally showed that patient engagement in safety requires organizational support and partnership among healthcare professionals, patients, and families.

Quantitative indicators can identify whether workload correlates with safety outcomes, but they cannot fully explain how nurses recognize emerging risks, choose between competing tasks, redistribute work, request assistance, communicate unfinished care, or modify routines during high-demand periods. [Benjamin et al. \(2025\)](#) found that inpatient nurses described workload as an interaction among patient acuity, task complexity, interruptions, organizational expectations, and the ability to provide meaningful care. [Moore and Knutsen Glette \(2023\)](#) similarly found that nurses working under pressure recognized threats to care quality and developed strategies to maintain performance. These findings support investigation of workload as a lived professional experience rather than only as a numerical measure.

Qualitative evidence has begun to illuminate these processes, but it remains fragmented across settings. [Nikolaisen et al. \(2023\)](#) found that patient safety during transfers from intensive care to general wards depended on preparedness, information quality, resource availability, and the capacity to manage stress. [Rochman et al. \(2024\)](#) reported that workload pressures could affect medication delivery, patient repositioning, double checks, communication, rapport, and surveillance. [Alanazi et al. \(2023c\)](#) also showed that staffing, missed care, and nurses' safety attitudes were connected with healthcare-associated infections. These findings indicate that safety is produced through interactions among workload, resources, communication, and clinical decision making.

The literature gap is therefore not primarily whether workload is associated with safety, but how safety is produced, negotiated, protected, and sometimes compromised during routine high-workload situations. [Imam et al. \(2023\)](#) noted that missed nursing care remains

insufficiently studied in low- and middle-income settings despite substantial workforce and resource constraints. This study therefore explores nurses' lived experiences of maintaining patient safety during high workload conditions in a public hospital. It focuses on workload perceptions, risk recognition, care prioritization, communication, teamwork, adaptive strategies, and organizational resources. The study contributes theoretically by integrating the Job Demands-Resources perspective with the Missed Nursing Care Model and contributes practically by identifying conditions that can support safer staffing, workload management, communication, leadership, and nursing practice.

Literature Review

Patient Safety in Nursing Practice

Patient safety refers to organized efforts to minimize preventable harm associated with healthcare delivery. Nursing contributes to safety through continuous assessment, medication administration, infection prevention, patient identification, fall prevention, pressure injury prevention, communication, documentation, and early recognition of deterioration. [Chang and Manojlovich \(2023\)](#) found that patient safety competency and systems thinking were related to missed nursing care, demonstrating that safety depends on both professional capability and an understanding of the broader care system.

Patient safety cannot be separated from the environment in which nurses work. [Lee and Jang \(2023\)](#) found that professionalism, work environment, and communication with health professionals were associated with patient safety culture. [Yuk and Yu \(2023\)](#) similarly reported that professional autonomy and the nursing work environment supported patient safety activities. These findings position safe nursing practice as the product of interactions among competence, autonomy, communication, leadership, and organizational structures.

Safety culture is also shaped by interpersonal and organizational conditions. [Membrillo-Pillpe et al. \(2023\)](#) identified an association between nursing practice environments and perceptions of patient safety culture. [Alquwez \(2023\)](#) found that workplace incivility was associated with hospital safety culture, suggesting that poor interpersonal environments can weaken conditions required for safe care.

High Workload and the Job Demands-Resources Perspective

Nursing workload includes physical, mental, temporal, emotional, and organizational demands. Patient numbers provide only one dimension because workload also depends on dependency, severity of illness, frequency of interventions, unpredictability, administrative duties, clinical interruptions, staffing, and coordination requirements. [Hong \(2025\)](#) found that patient safety management activities themselves contributed to perceived workload among shift nurses, demonstrating that safety work requires additional cognitive and temporal resources.

The Job Demands-Resources perspective provides a useful explanation. Job demands require sustained effort and can generate strain when they remain high, while job resources facilitate performance, learning, motivation, and coping. [Wang et al. \(2024\)](#) showed that the nursing practice environment influenced patient safety attitudes directly and through job stress, illustrating how resources may alter the effects of occupational demands.

Staffing represents a central organizational resource. [Dall'Ora et al. \(2022\)](#) concluded from longitudinal evidence that lower registered nurse staffing was associated with poorer patient outcomes. [Simonetti et al. \(2022\)](#) found that hospital work environment and nurse staffing were also associated with missed nursing care. Workload therefore reflects a balance between clinical demands and the resources available to meet them.

Missed Nursing Care

Missed nursing care refers to required nursing activities that are delayed, partially completed, or omitted. [Al Muharraq et al. \(2022\)](#) showed that missed care occurs in complex

clinical environments where nurses must repeatedly prioritize competing activities. The concept is relevant to high workload because nurses may face more required care than can reasonably be completed within available time.

The Missed Nursing Care Model explains the phenomenon through patient-care demands, labor resources, material resources, and communication or relationship factors. [Cartaxo et al. \(2024\)](#) demonstrated that missed care could not be explained by staffing shortages alone because different configurations of demands, material resources, labor resources, and communication contributed to omissions. [Peng et al. \(2024\)](#) reached a comparable conclusion in a qualitative meta-synthesis, identifying workload, time, communication, skill mix, organizational structures, and physical environments as interconnected causes of missed care.

Workload may affect quality through multiple mechanisms. [Maghsoud et al. \(2022\)](#) found that implicit rationing of nursing care and emotional exhaustion helped explain the relationship between workload and care quality. [Srulovici and Yanovich \(2022\)](#) identified an energetic pathway in which workload, exhaustion, and missed care were linked, while leadership and professional vigour represented important motivational resources.

Care Prioritization and Adaptive Nursing Practice

Prioritization becomes essential when several patients require attention simultaneously. [Guo et al. \(2025\)](#) developed a grounded theoretical explanation showing how nurses actively arrange and reorganize care when deciding what can or cannot be completed. Missed care therefore involves a decision process shaped by clinical urgency, risk, time, and available resources rather than a simple absence of action.

Nurses can respond through task redistribution, assistance seeking, combined activities, changes in sequence, temporary postponement of lower-priority care, and intensified surveillance of high-risk patients. [Janatolmakan and Khatony \(2022\)](#) found that nurses described management support, teamwork, professional responsibility, and resource availability as strategies for preventing missed care.

Adaptation has limits. [Stemmer et al. \(2022\)](#) identified relationships between unfinished nursing care and negative nurse outcomes such as burnout, job dissatisfaction, intention to leave, and turnover. [Mandal and Seethalakshmi \(2023\)](#) similarly showed that nurses' experience of missed care was closely linked with their working environment.

Teamwork, Communication, and Safety Culture

Teamwork can redistribute demands and support rapid responses to patient risk. [Safdari et al. \(2025\)](#) identified significant relationships among teamwork, workload, and missed nursing care in intensive care units. Communication functions in a similar way because clear exchange of information can reduce uncertainty, prevent duplication, and support explicit transfer of unfinished tasks.

The nursing practice environment shapes the capacity of teams to prevent unfinished care. [Labrague \(2022\)](#) found that practice environment, safety climate, and job-related conditions were associated with missed nursing care. [Assaye et al. \(2022\)](#) reported that staffing levels and missed nursing care were linked with patient safety outcomes in a low-income acute-care setting, highlighting the importance of context in resource-constrained systems.

Fatigue, Burnout, and Sustainability of Safe Practice

Sustained workload can produce fatigue and burnout that reduce the cognitive resources needed for safe nursing practice. [Pickup et al. \(2025\)](#) characterized healthcare worker fatigue as an under-recognized patient safety risk because it can influence alertness, decision making, and performance.

Organizational conditions determine whether nurses can recover from sustained demands. [Gurková et al. \(2022\)](#) found that the hospital work environment predicted missed

nursing care during a period of substantial healthcare pressure. Willis and Brady (2022) concluded that missed nursing care can have important consequences for adult patients, reinforcing the need to prevent conditions that normalize unfinished care.

Previous Qualitative Evidence and Research Gap

Moore and Knutsen Glette (2023) showed that nurses working under pressure developed coping behaviors while recognizing potential consequences for patient safety. Nikolaisen et al. (2023) demonstrated that resource limitations, preparedness, stress, and information quality shaped patient safety during transfers of care. Rochman et al. (2024) found that competing demands affected safety-sensitive activities including medication, repositioning, surveillance, communication, and double checking.

Benjamin et al. (2025) provides particularly relevant evidence because nurses described workload as multidimensional and difficult to capture through conventional workload measures alone. However, existing qualitative studies remain concentrated in specific clinical transitions, specialized units, emergency settings, or unusual periods of service pressure. Limited evidence explains how nurses in public hospitals maintain safety during routine but sustained workload escalation.

The present study integrates the Job Demands-Resources perspective and the Missed Nursing Care Model as complementary sensitizing frameworks. High workload, patient complexity, time pressure, interruptions, and simultaneous responsibilities represent job demands, while staffing, teamwork, leadership, competence, communication, and material support function as resources. These conditions shape risk recognition, prioritization, adaptation, care completion, delay, or omission. Because the design is qualitative, these concepts guide interpretation without being treated as predetermined statistical variables.

Research Methods

Research Design

This study employed a qualitative descriptive phenomenological design to explore nurses' lived experiences of maintaining patient safety during high workload conditions. Descriptive phenomenology was selected because the study sought to understand how nurses perceived, interpreted, and responded to workload pressures rather than to test predetermined relationships among variables. Shorey and Ng (2022) found that descriptive phenomenology is widely used in nursing research to investigate what individuals experience and how those experiences occur. Abraham and Padmakumari (2025) further emphasize the importance of philosophical consistency, transparent procedures, and alignment between research objectives and phenomenological analysis.

Research Setting and Period

The study was conducted at a Type B regional public hospital in Central Java, Indonesia, from January to March 2026. The hospital provides referral, inpatient, emergency, surgical, intensive, and specialist services. The research focused on adult inpatient units in which nurses routinely encountered variations in patient occupancy, clinical acuity, admissions, discharges, medication schedules, documentation, and interprofessional coordination. Interviews were conducted in a private meeting room away from direct patient-care areas to protect confidentiality and minimize interruptions.

Participants and Sampling

Participants were 15 registered nurses directly involved in adult inpatient care. Purposive sampling was used because participants were required to have direct experience of high workload and patient safety responsibilities. Inclusion criteria were registered nurses who had worked in the hospital for at least one year, actively provided direct patient care, participated in clinical shifts, and had experienced shifts they perceived as involving high workload. Nurses working exclusively in administrative positions, nurses on extended leave, and nurses who did not complete an interview

were excluded. Clinical experience ranged from approximately 2 to 18 years, with variation sought across medical, surgical, neurological, and high-dependency units.

Recruitment continued until the fifteenth interview, when the dataset provided sufficient informational depth and later interviews no longer produced substantively new dimensions concerning workload, prioritization, communication, teamwork, adaptive strategies, and safety. [Rahimi and Khatooni \(2024\)](#) emphasize that saturation should be judged according to research aims, information richness, participant heterogeneity, and analytical depth rather than by a fixed numerical threshold.

Data Collection

Data were collected primarily through individual semi-structured in-depth interviews. The interview guide was developed from the research objective, patient safety literature, the Job Demands-Resources perspective, and the Missed Nursing Care Model. Open-ended questions asked participants to describe particularly demanding shifts, patient safety risks they recognized, how they decided what required immediate attention, what activities became difficult to complete, what strategies they used to prevent errors, and what support helped or hindered safe care. Follow-up probes encouraged detailed descriptions of events, decisions, and consequences.

Each interview lasted approximately 45-65 minutes and was conducted face-to-face in Indonesian by the principal researcher. With written permission, interviews were digitally audio-recorded and transcribed verbatim within 48 hours. Field notes documented pauses, emotional expressions, contextual circumstances, and preliminary reflections. Two participants completed short follow-up interviews of approximately 15-20 minutes to clarify descriptions of task prioritization and teamwork.

Contextual Observation and Documentation

Six non-participant observation sessions were conducted across morning, afternoon, and night shifts, each lasting approximately 90-120 minutes. Observations focused on nursing workflow, interruptions, handovers, simultaneous patient-care demands, communication, teamwork, and responses when several activities required attention at the same time. The researcher did not evaluate individual competence and did not record identifiable patient information. Supporting document review covered non-confidential shift arrangements, general staffing information, patient safety procedures, handover protocols, and aggregated occupancy information when accessible.

Data Analysis

Data were analyzed using Colaizzi's descriptive phenomenological approach. Analysis began with repeated reading of all interview transcripts to develop an overall understanding of participants' accounts. Significant statements concerning high workload, risk recognition, patient prioritization, incomplete care, teamwork, interruptions, organizational resources, and adaptive strategies were identified. Meanings were formulated while remaining close to participants' language, then compared and clustered into categories, theme clusters, and overarching themes. Themes were repeatedly checked against complete transcripts, and divergent experiences were retained rather than removed to create artificial consistency.

NVivo 14 was used to organize transcripts, coding, field notes, analytical memos, and theme development. The software supported data management but did not replace researcher interpretation. [Vignato et al. \(2022\)](#) explain that computer-assisted qualitative analysis can improve organization and transparency when its use remains consistent with phenomenological reasoning.

Trustworthiness and Reflexivity

Credibility, dependability, confirmability, and transferability were addressed through purposive recruitment, detailed interviews, repeated engagement with transcripts, methodological triangulation, member checking, peer review of emerging interpretations,

reflexive journaling, and an audit trail. Six participants from different inpatient settings reviewed concise summaries of preliminary themes and clarified interpretations related to task prioritization, shift communication, and requests for assistance. Ahmed (2024) identifies triangulation, member checking, reflexivity, transparent documentation, and audit trails as important strategies for strengthening qualitative trustworthiness.

Bracketing was maintained by documenting prior assumptions about staffing shortages, workload, missed care, and patient safety before data collection and revisiting them throughout analysis. Interpretations were repeatedly compared with participants' actual statements, while theoretical frameworks functioned as sensitizing concepts rather than rigid coding categories.

Ethical Considerations

Ethical review and formal institutional permission preceded participant recruitment. The name of the approving Health Research Ethics Committee, approval number, and approval date must correspond exactly to the official ethics certificate before submission. All participants received written and verbal explanations concerning study procedures, audio recording, confidentiality, voluntary participation, and the right to withdraw without employment consequences. Written informed consent was obtained before each interview. Participant identities were coded N01-N15, and identifiable information was removed from transcripts and quotations. Digital recordings, transcripts, field notes, and analytic files were stored in encrypted password-protected storage accessible only to the research team.

Results and Discussion

Analysis of interview transcripts, contextual observations, and supporting documents produced five interconnected themes describing how nurses maintained patient safety during high workload conditions. The themes were experiencing workload as simultaneous and unpredictable demands, protecting safety through dynamic prioritization, using teamwork and communication as a safety buffer, absorbing the hidden costs of maintaining safe care, and depending on organizational resources to sustain patient safety. Table 1 summarizes the thematic structure.

Table 1. Main Themes, Categories, and Central Meanings of Nurses' Experiences in Maintaining Patient Safety During High Workload Conditions

Main Theme	Key Categories	Central Meaning
Experiencing workload as simultaneous and unpredictable demands	Patient surges; clinical deterioration; admissions and discharges; interruptions; documentation	Workload emerged from overlapping demands rather than patient numbers alone
Protecting safety through dynamic prioritization	Risk assessment; unstable patients; medications; surveillance; postponement of lower-priority care	Nurses ranked care according to urgency and potential harm
Teamwork and communication as a safety buffer	Delegation; asking for help; handover; double checking; informal coordination	Collective work reduced individual cognitive and physical overload
Absorbing the hidden costs of maintaining safe care	Delayed documentation; missed breaks; fatigue; emotional tension; unfinished care	Immediate safety was partly maintained by shifting pressure onto nurses and less urgent care
Depending on organizational resources to sustain patient safety	Staffing; leadership; equipment; senior nurses; safety culture	Individual adaptation was sustainable only when organizational resources were available

Source: Authors' thematic analysis of interview, observation, and document data (2026).

Experiencing Workload as Simultaneous and Unpredictable Demands

Participants described high workload not simply as having many patients but as facing several demands that required attention at nearly the same time. Workload intensified when routine activities overlapped with new admissions, medication schedules, deterioration, physician rounds,

family questions, documentation, and unexpected procedures. Observations showed repeated shifts between direct care, communication, call bells, medication preparation, documentation, and assistance to colleagues.

"It is not always because there are too many patients. Sometimes the number is normal, but two patients deteriorate, a new patient comes in, medication is due, and the doctor is asking for something at the same time. That is when we feel the workload becomes very heavy." (N04)

"At the beginning of the shift, we already have a plan. But if one patient suddenly becomes unstable, everything changes. The other activities have to wait, and we have to reorganize who does what." (N09)

The finding corresponds with [Benjamin et al. \(2025\)](#), who described perceived nursing workload as a multidimensional combination of task volume, complexity, unpredictability, interruptions, and organizational expectations. The present analysis adds that high workload was experienced as a loss of temporal control because nurses repeatedly had to reconstruct the sequence of planned care.

Protecting Safety Through Dynamic Prioritization

Nurses protected patients by continually determining what required immediate attention. Prioritization was based on patient stability, potential deterioration, medication urgency, risk of harm, dependency, and whether an activity could be postponed without an immediate consequence.

"When everything comes at once, I first look at which patient can become critical if we are late. Medication that must be given on time and an unstable patient come first. Things that can still wait for a short time are moved later." (N02)

"We cannot do everything at exactly the same moment. The important thing is knowing what cannot be delayed. If a patient's condition changes, I leave the documentation for later and focus on the patient first." (N11)

This finding provides a process-oriented explanation for missed nursing care. [Cartaxo et al. \(2024\)](#) showed that missed care results from combinations of care demands, labor resources, material resources, and communication conditions. In the present study, delayed care was embedded in protective prioritization. A safety concern emerged when high workload persisted long enough that postponed activities accumulated and could not be recovered.

Teamwork and Communication as a Safety Buffer

Teamwork was one of the strongest resources for maintaining safety. Nurses described informal redistribution of work, requests for assistance, rapid communication, mutual checking, and detailed handovers. Participants particularly valued colleagues who recognized increasing workload without waiting for formal instructions.

"If we work individually, it becomes dangerous when the ward is very busy. Usually, if my colleague sees that I am dealing with an unstable patient, she will help with another patient's medication or answer the call bell." (N06)

"The important thing is to tell the team. If I cannot finish something, I have to say it clearly. The risk is higher when everyone assumes someone else has already done it." (N13)

[Nikolaissen et al. \(2023\)](#) similarly identified information quality, preparedness, resource availability, and communication as important to patient safety. The current findings extend this interpretation by showing that communication did not merely transfer information. It also redistributed responsibility and workload across the nursing team.

Absorbing the Hidden Costs of Maintaining Safe Care

Participants frequently described delaying breaks, completing documentation after urgent care, remaining beyond the most demanding period of the shift, and increasing their pace of work. These strategies protected time-sensitive care but transferred part of the workload burden onto nurses themselves.

"Sometimes the patients remain safe because we sacrifice our break. We continue first because there are still medications or observations that cannot wait." (N08)

“At the beginning I can still concentrate, but after several hours without stopping, I start feeling tired. That is when I become more careful because I know I can make a mistake.” (N15)

Cahya Sawitri et al. (2024) identified significant relationships among workload intensity, fatigue, work stress, and patient safety incidents. The qualitative findings suggest how this relationship may develop: nurses initially maintain safety through additional personal effort, but sustained compensation gradually reduces cognitive and physical resources. Li et al. (2024) likewise found that burnout was associated with poorer patient safety, more adverse events, and missed nursing care.

Depending on Organizational Resources to Sustain Patient Safety

Participants emphasized that professional competence alone was insufficient during prolonged workload pressure. Staffing adequacy, experienced colleagues, responsive supervisors, functional equipment, available supplies, and clear procedures shaped whether nurses could safely manage increasing demands.

“The same number of patients can feel very different. If the team is complete and there is a senior nurse who can help when a patient deteriorates, we can manage it. If several staff are absent, everything becomes more difficult.” (N03)

“When the head nurse understands the condition and helps rearrange staff or asks another nurse to assist, we feel safer. The problem is when the workload is high but we are expected to manage it as if everything is normal.” (N10)

This theme supports the Job Demands-Resources perspective because similar clinical demands produced different experiences depending on available resources. The relationship was therefore not that high workload automatically produced unsafe care. Risk increased when demands remained high while staffing, teamwork, leadership, equipment, and time resources were insufficient.

Integrated Interpretation and Discussion

Taken together, the themes reveal a recurring process. High workload began with simultaneous demands and reduced control over planned workflow. Nurses responded through risk recognition and dynamic prioritization. When individual capacity became insufficient, they relied on teamwork and task redistribution. They also compensated through additional personal effort. The sustainability of these adaptations depended on organizational resources. The central phenomenon can therefore be described as maintaining patient safety through continuous adaptive prioritization under constrained resources.

The findings strengthen the Job Demands-Resources perspective by showing that workload is not a fixed exposure. Its safety consequences depend on the balance between moment-to-moment demands and resources. Teamwork, senior expertise, adequate staffing, functioning equipment, and responsive leadership increased nurses' ability to manage high-demand situations. Conversely, when resources were constrained, identical clinical demands became more difficult to absorb safely.

Dynamic prioritization emerged as the primary mechanism through which nurses protected patients. This extends the Missed Nursing Care Model by identifying a temporal distinction between temporary protective postponement and persistent missed care. Delaying a lower-priority activity can initially be clinically rational when an unstable patient requires immediate attention. However, if workload remains high and delayed activities cannot later be completed, protective postponement can become missed care.

The findings also show that teamwork functions as a practical safety buffer. Safdari et al. (2025) found that teamwork was related to workload and missed nursing care in intensive care settings. In the present study, teamwork expanded the resources available to an individual nurse by allowing rapid assistance, transfer of unfinished activities, and mutual checking. This mechanism is important for public hospitals because staffing levels alone do not capture whether available staff can coordinate effectively during workload escalation.

A further contribution is the identification of hidden compensatory costs. Nurses maintained immediate safety partly by postponing breaks, accelerating work, and shifting documentation or less urgent care to later periods. These adaptations resemble resilience, but they may also conceal structural weaknesses when they become routine. [Pickup et al. \(2025\)](#) warn that healthcare worker fatigue is an under-recognized patient safety risk, which supports the interpretation that organizations should not rely indefinitely on individual self-sacrifice.

The results have direct practical implications. Public hospitals should use workload escalation procedures that consider patient acuity, admissions, discharges, dependency, time-sensitive procedures, and interruptions rather than relying only on nurse-to-patient ratios. Structured handovers should explicitly identify unstable patients, pending activities, delayed care, and tasks requiring follow-up. Hospitals should also monitor delayed or unfinished nursing care as an early indicator of system strain.

The study has limitations. It was conducted in one Type B public hospital and used purposive recruitment of 15 nurses, so the findings are contextually grounded rather than statistically generalizable. Participants may also have moderated accounts of safety-sensitive experiences because workload and incident discussions can be professionally sensitive. Observation and document review improved contextual understanding, but they could not eliminate the interpretive nature of phenomenological analysis. Detailed descriptions of setting and participants are therefore provided to support judgments of transferability.

Future research should examine whether these themes occur across different public and private hospitals, emergency departments, intensive care units, and primary healthcare settings. Longitudinal qualitative studies could clarify when temporary adaptive prioritization develops into sustained missed care, while mixed-method research could examine the relationships among staffing adequacy, workload intensity, teamwork, fatigue, adaptive prioritization, missed care, and patient safety outcomes.

Conclusion

This study shows that nurses maintain patient safety during high workload conditions through continuous adaptive prioritization. High workload was experienced not only as a large number of patients but also as simultaneous clinical demands, interruptions, unpredictable changes in patient conditions, documentation requirements, and limited time. Five interconnected themes emerged: workload as simultaneous and unpredictable demands, dynamic prioritization of safety-critical care, teamwork and communication as a safety buffer, the hidden personal costs of maintaining safe care, and dependence on organizational resources. These findings demonstrate that nurses actively interpret risk, reorganize tasks, communicate unfinished care, and redistribute responsibilities to protect patients. The study contributes to the literature by showing that workload affects patient safety through a dynamic process of risk appraisal, prioritization, adaptation, and resource use rather than through staffing ratios alone.

The findings support integration of the Job Demands-Resources perspective and the Missed Nursing Care Model by positioning adaptive prioritization as the process linking workload conditions with completed, delayed, or omitted care. Public hospitals should strengthen staffing adequacy, workload escalation mechanisms, team communication, structured handovers, leadership support, and access to functional clinical resources. Hospital policies should also recognize fatigue, missed breaks, and unfinished nursing care as early indicators of safety pressure rather than normal consequences of professional commitment. Future studies should examine these processes across different hospital types and clinical units and use longitudinal or mixed-method designs to determine when short-term adaptation develops into persistent missed care or increased patient safety risk.

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Conflict of Interest

The authors declare that they have no conflict of interest related to this manuscript.

Statement on the Use of Artificial Intelligence

The authors used ChatGPT (OpenAI) to support language refinement, grammatical correction, structural organization, and improvement of manuscript readability. AI-assisted tools were not used to generate, modify, fabricate, or interpret primary research data, participant responses, interview transcripts, or research findings. All AI-assisted output was reviewed and verified by the authors, who take full responsibility for the originality, scientific reasoning, data integrity, citation verification, confidentiality, and final content of the manuscript.

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