



Workplace Well-Being Among Hospital Nurses: Perspectives of Indonesian Staff Nurses

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ABSTRACT

Well-being is a unique phenomenon perceived by nurses. Nurses have their own definition of well-being based on their work experience. This study aimed to examine the nurses' workplace well-being from the perspective of Indonesian staff nurses within hospital settings. A qualitative interpretive descriptive design was employed in this study. Participants were recruited from a university hospital in Medan, Indonesia, comprising 10 staff nurses representing the emergency department, intensive care unit, and inpatient wards. Data were collected through a focus group discussion and analyzed using thematic analysis. Data analysis identified three overarching themes that encapsulate staff nurses perspectives on workplace well-being: the ideal concept of nurses workplace well-being, contributing factors to nurses' workplace well-being, and nurses expectations of hospital administrators to enhance nurses workplace well-being. Staff nurses hold distinct expectations regarding their workplace well-being, which are shaped by personal and professional factors. Several contributing elements influence their experiences, including organizational support, workload, and interpersonal relationships. The findings indicate that Indonesian staff nurses perceive workplace well-being as a multifaceted and challenging issue. They highlighted their hopes and expectations concerning workplace well-being across psychological, physical, financial, interprofessional relationship, and hospital facilities dimensions. It is imperative that nurse managers and hospital administrators give careful consideration to these concerns and implement evidence-based, targeted strategies to mitigate the challenges that adversely affect nurses' well-being.

Keyword: Hospitals, Nursing Staff, Well-being, Workplace



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1. Introduction

Well-being is a unique phenomenon perceived by nurses. Nurses defined well-being differently based on their work experience. Early-career nurses described well-being as more essential in professional practice compared to experienced nurses. It is perceived as a dynamic, subjective feeling experience over time, influenced by the working environment, work responsibility, professional relationships, and supportive leadership. Nurses emphasized work-life balance as the central aspect of well-being, even though every nurse had different ways to achieve it (Levido et al., 2025).

Recent studies underscore the concerning prevalence of inadequate well-being among nurses, with Su et al. (2025) reporting that 72.6% of surveyed nurses experienced suboptimal levels of occupational well-being. This finding highlights the urgent need to examine the workplace dynamics contributing to such outcomes. Salgado et al. (2025) further emphasized that factors such as perceived stress, resilience, social support, and job satisfaction substantially influence both nurses' psychological well-being and their overall quality of life, suggesting that well-being is shaped by a constellation of personal and environmental conditions.

Organizational support has emerged as a critical determinant of nurses' workplace well-being. Li et al. (2024) found significant positive correlations between perceived organizational support and work-related well-being, while Zheng et al. (2024) demonstrated a direct positive effect on professional well-being. Despite these insights, many nurses continue to face overwhelming job demands, including emotional pressures, time constraints, and resource limitations. Such imbalances place nurses at a heightened risk of burnout, reinforcing the need for targeted organizational interventions that acknowledge the realities of clinical practice (Portoghesi et al., 2025).

The National Institute for Health and Care Excellence (NICE) in the United Kingdom emphasized the essential role of the organizational approach in supporting mental well-being at workplace for health care professionals (NICE, 2024). However, a scoping review study found that most of the interventions to improve nurses' well-being targeted a personal, psychological approach rather than organizational strategies. The personal interventions focused on resilience training, mindfulness, cognitive-behavioral therapy, and emotional regulation (Stewart et al., 2024).

Nurses with better psychological well-being demonstrated higher work ability. In order to improve nurses' psychological well-being, an organization should provide a decent work environment for nurses, characterized by respected and appreciated feeling in the workplace (El-Gazar et al., 2025). Moreover, poor well-being correlates with increased medical errors and high turnover. Improving nurse well-being is an essential strategy for achieving healthcare quality and safety (Melnyk & Hsieh, 2025). Transformational leadership has shown promise in fostering fairness and improving the quality of work life, reinforcing the pivotal role of organizational justice in promoting sustained nurse well-being (Alruwaili, 2025).

Previous studies particularly addressing nurses' well-being in Indonesia have not yet been conducted comprehensively. However, several studies related to nurses' psychosocial issues have been carried out both during and after COVID-19 pandemic. During the pandemic in Indonesia, healthcare workers, including nurses, experienced significant psychological challenges such as stress, anxiety, fear, depressive symptoms, and burnout (Asa et al., 2022; Ni'matuzahroh et al., 2021; Rahmat et al., 2023; Sunjaya et al., 2021). Meanwhile, a recent post-pandemic study reported that more than half of 900 nurses from 22 hospitals in Indonesia experienced stress, and approximately one in every hundred nurses was at high risk of complete burnout (Juanamasta et al., 2024). Another study conducted in intensive care units found that extended workloads among nurses were significantly associated with higher levels of burnout, confirming workload as a major contributor to burnout among ICU nurses (Badriyah et al., 2025). Given that most of the aforementioned studies have employed quantitative approaches, with only a few utilizing qualitative methodologies to examine nurses' workplace well-being, a critical gap remains. The use of a qualitative approach enables an in-depth exploration and offers a rich understanding of staff nurses' experiences, allowing these to be comprehensively mapped and informing targeted solutions to address workplace well-being. Therefore, the purpose of this article is to explore staff nurses' perceptions of their workplace well-being.

2. Methods

A qualitative interpretive descriptive methodology was employed to explore the staff nurses' workplace well-being through their work experiences. The study was conducted in October 2022 at a university hospital in Medan, North Sumatera Province, Indonesia. The population of this study comprised of staff nurses drawn from the emergency department, intensive care unit, and inpatient wards. Purposive sampling was used to recruit participants. Nurse managers from the emergency department, intensive care unit, and inpatient wards were asked to delegate staff nurses to participate in a Focus Group Discussion (FGD). A total of 10 staff nurses took part in the FGD session. The guiding questions included: (1) "How do you personally define nurses' workplace well-being?", (2) "What are your experiences related to workplace well-being during your time working in the hospital?", and (3) "What factors contribute to nurses' workplace well-being in this context?". These questions were used as flexible prompts, allowing participants to respond in a conversational and comfortable manner. Prior to the FGD session, participants received an informed consent form and completed

a demographic data survey. The collected demographic variables included age, gender, religion, ethnicity, education level, marital status, employment status, and years of work experience.

The FGD recordings were transcribed verbatim for analysis. Thematic analysis was conducted following the six-phase approach outlined by Braun and Clarke (Byrne, 2022). The first five phases of the thematic analysis focused on the analytical process, while the sixth involved reporting the findings. The procedure of data analysis was as follows: *Phase 1*. Researchers repeatedly reviewed the FGD transcripts to develop familiarity with the content and contextual nuances. *Phase 2*. The particular words or phrases observed in the data were systematically coded by focusing on the research objective. *Phase 3*. The codes were classified into potential themes, and then the sub-themes pertained to each potential theme were identified. *Phase 4*. A thematic map was arranged by using all themes and sub-themes of the codes. The process of re-analyzing the data was performed to remove or replace certain themes and sub-themes. *Phase 5*. The final themes were confirmed and consolidated. *Phase 6*. The writing process of the result was performed involving all identified themes and sub-themes. This study adhered to COnsolidated criteria for REporting Qualitative research (COREQ) checklist (Tong et al., 2007). Detailed information regarding the COREQ checklist is available in the Supplementary File. The Ethics Review Committee of the Faculty of Nursing, Universitas Indonesia, approved the conduct of the study (Number: Ket-230/UN2.F12.D1.2.1/PPM.00.02/2021), dated 22 September 2021.

To enhance the trustworthiness of this study, the researchers maintained a comprehensive audit trail and systematically documented detailed notes, while continuously evaluating data interpretation, coding procedures, and thematic development. Transferability of the findings was strengthened by grounding codes, sub-themes, and overarching themes in relevant literature. In addition, the researchers provided rich descriptions of the study participants, data collection methods, and reporting processes, supported by thorough documentation and data records. Confirmability was ensured through adherence to the COREQ Checklist.

3. Results

3.1 Demographic characteristics

Table 1 outlines the demographic characteristics of the study participants. The mean age was 34.80 years (SD=4.66). The majority of the participants were female (90%), Muslim (70%), married (70%), and had more than five years of work experience (80%). Half of the participants held a bachelor's degree in nursing and were employed as permanent civil servants (Aparatur Sipil Negara/ASN). Additionally, more than half of the participants (60%) were Batakne.

Table 1 Demographic profile of participants (n = 10)

Characteristics	Frequency	Percentage
Age (years; mean, standard deviation)	34.80 (4.66)	
Gender		
Male	1	10
Female	9	90
Religion		
Islam	7	70
Christianity (Protestants)	3	30
Ethnicity		
Batakne	6	60
Javanese	2	20
Karonese	1	10
Minang	1	10
Education		
Bachelor's Degree	5	50
Diploma Degree	4	40
Master's Degree	1	10
Marital status		
Married	7	70
Unmarried	3	30
Employment status		
Permanent civil servants (ASN)	5	50
Non-permanent civil servants (Non-ASN)	5	50
Work experience		
More than 5 years	8	80
1-5 years	2	20

3.2 Overview themes and sub-themes

Reflexive thematic analysis of the data generated three overarching themes and twenty-two sub-themes (table 2) that reflect staff nurses' perspectives on workplace well-being: (a) the ideal concept of nurses' workplace well-being (psychological needs requirement of well-being; physical needs requirement of well-being; financial needs requirement of well-being; inter-professional relationships requirement of well-being; and hospital facilities requirement of well-being) ; (b) contributing factors to nurses' workplace well-being (financial/salary concerns; work-related stress, pressure and high job demands; intimidation from patients' families; excessive demands from exceptional patients' families; extended working hours; staffing shortages leading to increased workloads; assignment of non-nursing tasks; assignment of cross-professional tasks; consequences of other professional's negligence; inadequate infection prevention measures/facilities within the hospital; limited access to medical equipment, facilities, and medications; increased risk of healthcare-associated infections; and unfair institutional policies affecting nurses); and (c) nurses' expectations of hospital administrators to enhance nurses' workplace well-being (fair and adequate salaries or financial incentives aligned with workload and unit risk level; sufficient staffing of both nurses and interdisciplinary professionals; implementation of regular health examinations for nurses; and clear policies on visiting hours for patients' families).

Table 2 Themes and sub-themes

Themes	Sub-themes
Theme 1: The ideal concept of nurses' workplace well-being	Psychological needs requirement of well-being Physical needs requirement of well-being Financial needs requirement of well-being Inter-professional relationship requirement for well-being <u>Hospital facility requirement for well-being</u>
Theme 2: Contributing factors to nurses' workplace well-being	Financial/salary concerns Work-related stress, pressure and high job demands Intimidation from the patients' families Excessive demands from the exceptional patients' families Extended working hours Staffing shortages leading to increased workloads Assignment of non-nursing tasks Assignment of cross-professional tasks Consequences of other professional's negligence Inadequate infection prevention measures/facilities within the hospital Limited access to medical equipment, facilities, and medications Increased risk of healthcare-associated infections <u>Unfair institutional policies affecting nurses</u>
Theme 3: Nurses' expectations of hospital administrators to enhance nurses' workplace well-being.	Fair and adequate salaries or financial incentives aligned with the workload and unit risk level Sufficient staffing of both nurses and interdisciplinary professionals Implementation of regular health examinations for nurses <u>Clear policies on visiting hours for patients' families</u>

Theme 1: The ideal concept of nurses' workplace well-being

Sub-theme 1: Psychological needs requirement of well-being

Participants stated that there were several psychological conditions that needed to be met for accomplishing the state of well-being. Feeling happy, enjoying work, working comfortably and without burdened feeling were the indications of the psychological needs requirement of well-being.

“...according to me, the definition of nurses' workplace well-being is a condition of psychological and physical needs are met, so that we do not feel overwhelmed or stressed...” (Participant 2)

“...in my view, well-being at the workplace means beginning the shift enjoyably, working through the shift peacefully, and finishing the shift without feeling mentally or emotionally burdened...” (Participant 4)

“...at the workplace, we must always smile, even though we are feeling sad...” (Participant 6)

Sub-theme 2: Physical needs requirement of well-being

Participants emphasized the physical needs requirement of well-being by uttering the importance of a healthy body during the work-hour and adequate time for nutrition and elimination needs fulfillment.

“...feeling enjoy, healthy, able to eat and urinate during work time, and go home without any burdened...” (Participant 4)

Sub-theme 3: Financial needs requirement of well-being

Considering the financial aspect of well-being, participants highlighted the need for salary and financial compensation to align appropriately with the duration of working hours and the intensity of job demand.

“...I wish the salary and financial rewards are appropriate and more than enough...” (Participant 8)

“...the working hours should be reduced, the salary should be appropriate, job demand should not be too much...” (Participant 3)

Sub-theme 4: Inter-professional relationship requirement for well-being

Recognizing the inter-professional relationships factor of well-being, participants emphasized the vital contributions of all professional roles within the hospital environment to ensure high-quality patient care.

“...the role of other professions, such as the security, is very important...” (Participant 1)

“...since we have five professional healthcare providers, we are expected to communicate effectively and collaborate as a team...” (Participant 6)

Sub-theme 5: Hospital facility requirement for well-being

Participants highlighted the significance of adequate hospital facilities as a critical aspect of workplace well-being, particularly the availability of medical equipment and essential medications.

“...related to nurses’ well-being, during providing nursing care, the facilities and equipment, should be fully supported. However, in fact, we have a lack of facilities, including the medical equipment and medications...” (Participant 4)

Theme 2: Contributing factors to nurses’ workplace well-being

Sub-theme 1: Financial/salary concerns

Participants expressed that adequate and appropriate salary and financial compensation contribute significantly to nurses’ workplace well-being.

“...okay, so, well-being should be happened when we get the appropriate compensation or salary, so that we may work without emotional burden or overthinking due to financial concerns...” (Participant 6)

Sub-theme 2: Work-related stress, pressure and high job demands

Participants highlighted the importance of minimizing workplace stressors, particularly those that are preventable. They also emphasized the need to keep job demands within reasonable limits to prevent excessive pressure and maintain psychological well-being during working hours.

“...since many workplace stressors are avoidable, they should be minimized. By doing so would help reduce stress during working hours...” (Participant 2)

“...job demand should not be too much...” (Participant 3)

Sub-theme 3: Intimidation from the patients’ families

Participants described the encounters between nurses and patients/families that often lead to the intimidation by expressing their anger toward nurses. The situations were reported to negatively impact nurses’ workplace well-being.

“...we often experience intimidation from patients’ family members...” (Participant 2)

“...due to misunderstandings about health insurance policies, the patient and family angry with us...” (Participant 3)

“...yes, they often express anger toward us...” (in emergency department) (Participant 1)

“...some families did not know that certain medical treatments were not covered by their insurance, and then, they became angry and said that they had been ignored and neglected because they had no money to pay...” (Participant 1)

Sub-theme 4: Excessive demands from the exceptional patients' families

Participants highlighted the over-pressure tasks from exceptional patient's family, which negatively contributed to nurses' workplace well-being. The nurses should be aware of the family background, such as when a family member holds a position of social or professional significance, staff reported feeling compelled to offer more attentive or elevated care.

“...so we need to take into account the family background of certain patients...”
(Participant 7)

“...when we had already known that a patient's family member held an important position at the university, we felt the need to provide additional attention and care compared to other patients...” (Participant 7)

“...in the pediatric unit as well, we need to consider patients' family backgrounds...”
(Participant 10)

Sub-theme 5: Extending working hours

Participants emphasized the importance of reducing excessive working hours and of managing appropriate schedules to support nurses' workplace well-being.

“...the working hours are excessive, sometimes reaching up to 190 hours per month...”
(Participant 7)

“...the working hours should be reduced...” (Participant 3)

“...I think the working hours should be appropriate...” (Participant 8)

Sub-theme 6: Staffing shortages leading to increased workloads

Participants expressed serious concerns regarding workloads due to inadequate staffing and the impact on both patient care and nurses' well-being.

“...the management obliged us to accept new patients even-though we had a lack number of nurses in the unit. This resulted in an unmanageable workload, which directly impacted the quality of nursing care. In this case, if errors occurred due to workload, we will be blamed...” (Participant 5)

“...we have already reported this workload issue with management, but there has been slow response, as a result, the issue remains unresolved, and the burden continues...”
(Participant 6)

“...in the NICU, we also have inadequate staffing. We have had situations where one nurse was responsible for three infants at once. We felt overwhelmed and worried about the risk of human-error in delivering care...” (Participant 10)

“...in the pediatric care unit, sometimes during afternoon and night shifts, only two nurses are responsible for up to 20 patients. On one occasion, the patient's family complained because no nurse was available at the nurse station. In fact, both nurses were occupied providing care in a patient room at the time...” (Participant 7)

Sub-theme 7: Assignment of non-nursing tasks

Participants highlighted challenges related to workloads due to non-nursing tasks. This situation negatively contributed to nurses' workplace well-being.

“...I feel overwhelmed by the new online documentation system. It appears that nurses are responsible for confirming numerous aspects of patient treatment. I think the confirmation should be directly reported to the physicians...” (Participant 6)

“...for example, a patient, who was scheduled for surgical treatment, had to wait a long time for the physician. During that period, the patient sought information about the treatment. Therefore, the nurses took time to provide explanations. Additionally, nurses were responsible for manually completing the prescription forms...” (Participant 7)

“...there is no pharmacy department within our unit, so when a patient needs to have urgent medications, nurses must go downstairs to reach the hospital's central pharmacy in order to get the medications...” (Participant 6)

Sub-theme 8: Assignment of cross-professional tasks

Participants reported instances where nurses were being demanded to perform other professionals' tasks outside their authorized scope of practice. These experiences negatively contributed to nurses' workplace well-being.

“...we felt pressured to perform tasks that were beyond our professional authority...”
(Participant 1)

“...for example, if a nurse performs an invasive procedure and complications such as bleeding occur, the nurses will be blamed...” (Participant 8)

Sub-theme 9: Consequences of other professional's negligence

Participants emphasized that ensuring that all professionals follow established guidelines is essential to support nurses' workplace well-being.

“...sometimes in the emergency department, the security officers are not available during chaotic situations, increasing the risk of violence from patients' families toward nurses...”
(Participant 1)

“...although hospital policy requires the attending physician to visit the ward within 24 hours, specifically before 14:00, this is not always followed for any reasons. If every professional obeys the rule, everything will be fine...” (Participant 9)

Sub-theme 10: Inadequate infection prevention measures/facilities within the hospital

Participants underscored the effect of inadequate infection prevention in hospital facilities on their workplace well-being and the need for ensuring a safe working environment.

“...I feel very sad, the condition of the ward is actually poor and unsuitable for treating patients with infectious diseases...” (Participant 8)

“...there are times when I notice that the ward's exhaust fan is not functioning properly...”
(Participant 8)

Sub-theme 11: Limited access to medical equipment, facilities, and medications

Participants identified a consistent concern regarding the inadequacy of hospital resources, including both equipment and medications. These resource constraints negatively affected nurses' well-being and the quality of patient care.

“...the potential problems came from the inadequate hospital facilities, including essential medications and equipment, such as infusion pumps. This condition directly impacts the quality of nursing performance...” (Participant 4)

“...the medical facilities and medications in this hospital are inadequate...” (Participant 4)

“...in the emergency department, we experience a shortage of intravenous catheter sizes, especially those suitable for pediatric patients...” (Participant 1)

Sub-theme 12: Increased risk of healthcare-associated infections

Participants highlighted concern about occupational exposure, which leads to health care-associated infections. The situation negatively contributed to nurses' workplace well-being.

“...when I get cough, I sometimes overthink and worry that I may have contracted my patients' diseases...” (Participant 8)

Sub-theme 13: Unfair institutional policies affecting nurses

Participants raised concerns regarding unfair policies for nurses, leading to feelings of discomfort and exclusion from decision-making processes.

“...I was rotated to a different unit without prior notice or consultation. I feel uncomfortable with this one-sided decision...” (Participant 2)

Theme 3: The nurses' expectations of hospital administrators to enhance nurses' workplace well-being

Sub-theme 1: Fair and adequate salaries or financial incentives aligned with the workload unit risk level

Participants emphasized the importance of fair and balanced compensation structures that reflect both the intensity of work schedules and the specific demands of different care settings.

“...actually, there should be a balance, if I got high salary, but the working hours are unreasonable, it can still lead to dissatisfaction...” (Participant 1)

“...we hope to receive additional financial compensation for working in the tuberculosis (TB) ward...” (Participant 8)

“...because the chemotherapy unit differs significantly from others in terms of exposure, we hope for extra compensation in recognition of such demands...” (Participant 6)

Sub-theme 2: Sufficient staffing of both nurses and interdisciplinary professionals

Management has recognized the issue regarding limited nurse staffing and security personnel, however, the feedback is still unsatisfactory.

“...typically, only one or two nurses are assigned during the afternoon and night shift. As a result, patients’ families have expressed concern about the unavailability of nurses. In fact, we were occupied providing care to other patients. We have formally requested additional nursing staff from the management, however, only one nurse was added, which remains insufficient to meet the needs of the ward. Additionally, we have asked for increasing the amount of security personnel to help manage and regulate the flow of patients’ families entering the ward...” (Participant 7)

“...management is indeed trying to overcome the nursing shortage issue and has stated that the process of recruiting additional staff is still in progress...” (Participant 6)

Sub-theme 3: Implementation of regular health examinations for nurses

Participants expressed concern regarding the lack of proactive occupational health measures for nursing staff. This gap highlights the need for more comprehensive health protection policies to safeguard nurses as front-line health care workers.

“...I think management shows limited concern for protecting of nursing personnel. For instance, there are no regular hepatitis screenings conducted for nurses...” (Participant 7)

Sub-theme 4: Clear policies on visiting hours for patients’ families

Clearly defined hospital visiting policies were seen as beneficial for maintaining order, minimizing disruptions, and supporting a more controlled care environment.

“...actually it depends on the hospital visiting policies. If we compare it to other hospitals, the regulation regarding visiting hours for patients’ families is strictly implemented. They do not let the family enter and exit the ward freely at any time. There is also a rule allowing only one visitor to accompany each patient...” (Participant 2)

4. Discussion

This study represents the first qualitative investigation into nurses’ hospital workplace well-being following the end of the COVID-19 pandemic. In contrast to previous studies, which predominantly employed quantitative approaches and did not examine nurses’ hospital workplace well-being as a central research variable, this study provides a novel perspective. By adopting a qualitative approach, the findings offer comprehensive insights into nurses’ workplace well-being and highlight additional aspects perceived as critical issues requiring improvement within hospital settings. Three key themes emerged from the analysis: the ideal concept of nurses’ workplace well-being, factors contributing to workplace well-being, and nurses’ expectations of hospital administrators in enhancing workplace well-being.

4.1 The ideal concept of nurses’ workplace well-being

This study highlights that psychological well-being among nurses is tied to feeling happy, comfortable, and unburdened at work. Such conditions foster focus and motivation, reducing mental strain, as echoed by Liao et al. (2023). However, unpredictable workloads and overcrowding often disrupted this balance, leading to stress and guilt, especially when care was compromised. This reflects cognitive dissonance and potential “care erosion,” consistent with Duhalde et al. (2025).

Despite emotional support, nurses’ well-being remained moderate, pointing to unmet needs in autonomy, growth, and purpose (Entrata & Nicomedes, 2025). This was particularly evident during the pandemic, where nurses, more than doctors, faced severe psychological distress (KC et al., 2024). Therefore, the role of leadership surfaced as a potential remedy. Ethical leadership, as discussed by Huang et al. (2021), showed a strong positive correlation with psychological well-being.

Participants emphasized that fulfilling basic physical needs, such as staying healthy, eating on time, and having breaks for elimination, is essential for well-being at work. However, these needs were often neglected due to intense workloads and time constraints. This reflects the deeper issue of “busyness,” which, as Govasli & Solvoll (2020) note, involves more than task volume, intolerable busyness at the workplace may threatens nurses’ health and emotional well-being, particularly when they lack adequate time to rest, eat, or attend to

basic physiological needs. The responsibility for ensuring that staff nurses work under conditions of tolerable busyness must be assumed by the management.

Participants stressed the importance of fair financial compensation that reflects both their workload and job demands. Inadequate pay contributes to burnout and secondary traumatic stress, regardless of the clinical setting. As Razmpour et al. (2025) emphasize, addressing nurses' financial strain through equitable policies and targeted support is critical for improving retention and overall well-being.

Participants highlighted that well-being is reinforced by strong inter-professional relationships, where each role is respected for its contribution to patient care. This aligns with Schwarzkopf et al. (2024), who found that collaborative settings, such as in palliative care, enhance staff well-being, reduce feelings of futility, and boost job satisfaction. A culture of mutual support and shared responsibility appears essential for sustaining both performance and morale.

Participants underscored the importance of a reliable hospital infrastructure as fundamental to workplace well-being. This aligns with Li & Mahyuddin (2025), who found that the quality of physical environments, including cleanliness, ergonomics, and facility design, directly affects healthcare workers' wellness and productivity, particularly during high-stress periods like pandemics.

4.2 Contributing factors of nurses' workplace well-being

Participants emphasized that reducing preventable stressors and maintaining reasonable workloads are critical for preserving psychological well-being in the workplace. These insights align with findings by Zhang et al. (2024), who observed that ICU nurses working in psycho-socially supportive environments, with manageable demands, empowering leadership, and respectful interpersonal relationships, reported significantly higher workplace well-being. Such environments not only mitigate emotional exhaustion but also foster resilience and job satisfaction. The emphasis on proactively managing job stressors reflects a growing understanding that well-being is not solely an individual responsibility but a systemic outcome shaped by workplace design and organizational culture.

Participants noted that performing non-nursing tasks added to their workload and detracted from their core clinical responsibilities, negatively impacting their well-being. This challenge reflects broader inconsistencies in how nurses perceive their scope of practice. As Duhalde et al. (2025) observed, some emergency nurses viewed fundamental care, like hygiene and nutrition, as central to their role, while others believed such tasks should be delegated. These differing expectations contribute to role confusion and workload strain, underscoring the need for clearer task delineation and support systems.

Participants reported being tasked with duties beyond their professional scope, which contributed to stress and dissatisfaction. Despite the discomfort, many felt compelled to comply due to power dynamics or fear of reprisal. This aligns with Alhojairi et al. (2024), who found moderate levels of workplace silence among nurses, particularly driven by avoidance motives like fear of conflict or blame. Such pressures underscore the need for clear role delineation and safe avenues for speaking up.

Participants stressed that consistent adherence to clinical guidelines by all professionals is vital for maintaining nurses' psychological well-being. Unclear responsibilities and ethical dilemmas led to heightened anxiety, self-doubt, and moral distress, especially when nurses were pressured to act under uncertainty (Shabestari et al., 2024). Despite shared recognition of inter-professional collaboration's value, its inconsistent application—hindered by hierarchy and marginalization—further strained team dynamics. As Alzate-Moreno et al. (2025) highlight, structured, inclusive dialog and cultural shifts are essential to strengthen collaboration and reduce psychological burden.

Participants described frequent encounters with verbal intimidation from patients or their families, often expressed through anger or threats. These interactions undermined their emotional safety, inducing anxiety, fear, and feelings of helplessness. Such experiences are not isolated, Scallan et al. (2024) documented that nurses report most of workplace violence incidents, most commonly verbal abuse.

Even the perception of a bullying-prone environment imposes psychosomatic strain, as Maran et al. (2024) observed, prompting unhealthy coping behaviors. Power imbalances, unclear expectations, and normalized hostility within units further perpetuate these conditions (Gillespie et al., 2024). Nurses in this study echoed such dynamics, often feeling unable to seek support, especially when new to the unit or facing senior staff.

Violence in clinical settings, as shown by Kürtüncü et al. (2024), also stems from poor communication and the absence of legal or institutional safeguards. These conditions heighten vulnerability, leading to burnout, insecurity, and even legal anxiety. Empirical studies (Paustian-Underdahl et al., 2025; Pillay et al., 2023; Munn et al., 2025) further confirm that workplace violence is strongly linked to reduced job satisfaction, poorer

perceived care quality, somatic complaints, and heightened intent to leave. Addressing this issue requires a dual approach: building individual resilience and, more importantly, establishing systemic protections through leadership support, security protocols, and a zero-tolerance culture for violence (Huang et al., 2024).

Participants expressed concern about occupational exposure to healthcare-associated infections, which negatively affected their sense of safety and overall well-being. Inadequate infection prevention measures and uneven availability of essential resources, especially personal protective equipment (PPE), heightened anxiety, particularly regarding risks to family members (Wahyuni et al., 2024). These findings reflect broader evidence from Whiteing et al. (2023), who reported that PPE shortages and inequitable distribution significantly undermined staff confidence and psychological security. Ensuring a safe, well-equipped work environment remains a fundamental component of nurses' well-being.

Participants consistently emphasized that fair and appropriate financial compensation plays a vital role in supporting their workplace well-being. When salary fails to reflect the intensity of patient care demands or the extended working hours, it contributes to emotional fatigue, job dissatisfaction, and eventual turnover. This observation is strongly supported by Munn et al. (2025), who found that nurses who perceived their compensation as fair reported significantly lower burnout levels, even in high-acuity or high-volume settings. Moreover, Xie et al. (2025) demonstrated that it is often workplace conditions, rather than personal factors, that drive nurses to leave, with poor pay, excessive workloads, and limited advancement opportunities cited as major contributors.

Zheng et al. (2024) further reinforced that perceptions of "decent work", including fair wages, recognition, and growth potential, are powerful predictors of nurses' well-being. Addressing financial inequities is thus not merely a matter of satisfaction but also of sustainability. Equitable, transparent compensation models are essential for retaining skilled staff, minimizing burnout, and cultivating a resilient nursing workforce.

Participants warned that chronic understaffing and relentless workloads erode both patient safety and nurses' mental health. They called for capped shift lengths, guaranteed rest breaks, and more flexible rosters to curb fatigue and preserve well-being. These concerns mirror those of Xie et al. (2025), who found that heavy workloads, staffing shortages, and inflexible schedules are the leading drivers of nurse turnover. Paustian-Underdahl et al. (2025) added that the true protection of nurse well-being demands both system-level staffing reforms and individual resilience-building interventions.

Participants consistently reported that shortages of essential equipment and medications compromised both their well-being and patient care quality. These organizational constraints, ranging from supply deficits to systemic inefficiencies, fueled frustration and eroded nurses' intentions to stay in the profession (Enwereuzor et al., 2023). Empirical evidence shows that physical environments featuring modern technology, competent staffing, and adequate service conditions (hygiene, ventilation, thermal comfort) significantly bolster healthcare workers' well-being, yet only 30% of respondents rated ventilation and 20% rated hygiene as satisfactory in their hospitals (Li & Mahyuddin, 2025). Jordanian ICU nurses similarly reported only moderate satisfaction with their physical work environments (mean = 3.36/5.00), highlighting an urgent need for facility upgrades to support staff health and retention (Al-Bsheish et al., 2023).

Participants reported that unfair institutional policies fostered feelings of exclusion and discomfort, undermining their voice in workplace decisions. Perceiving higher organizational status, through respect, recognition, and prestige, served as a psychological resource that strengthened commitment and retention (Enwereuzor et al., 2023). Moreover, genuine well-being support and formal recognition were linked to greater engagement, while a psychologically safe environment, where nurses felt free to speak up, correlated with reduced burnout and increased engagement (Munn et al., 2025).

4.3 The nurses' expectations of hospital administrators to enhance nurses' workplace well-being

Participants stressed that financial salary and compensation must reflect both the intensity of work schedules and the unique demands of each care setting to protect the well-being of the nurses. Nursing administrators can advance this by reallocating resources, instituting recognition systems, offering staff development, providing mental health support, and integrating narrative nursing training (Li et al., 2024). At the organizational level, improving workplace conditions and benefits, reducing burnout, and enhancing compassion satisfaction, alongside guaranteeing fair compensation, respect, career growth, and job security, will strengthen professional quality of life, elevate care standards, and curb turnover (Zheng et al., 2024). Finally, because financial hardship independently predicts burnout and secondary traumatic stress, health systems must enact policy reforms, adopt equitable compensation models, and implement targeted interventions to bolster nurse retention and wellness (Razmpour et al., 2025).

Participants noted, that although management acknowledges staffing and security shortages, the proposed solutions remain inadequate. To improve well-being, organizations must boost job satisfaction, strengthen social support, and tackle workload and career-development barriers (Su et al., 2025). Both staff and managers agree that emotionally intelligent, supportive leadership is vital for team well-being and care quality, underscoring the need for nurse managers to embody these roles (Aydogdu, 2024). Therefore, ensuring adequate nurse staffing must be paired with initiatives that strengthen the work environment and foster a positive safety climate, as these measures directly lower mortality and alleviate occupational stress that contributes to turnover intention (Fernández-Sánchez et al., 2025). Evidence also indicates that implementing minimum nurse staffing policies leads to improvements in staffing levels, nurse well-being, job satisfaction, and overall quality of care and patient safety within intervention hospitals (Lasater et al., 2025).

Participants raised concerns over the lack of proactive occupational health measures, highlighting the need for comprehensive policies to protect nurses as frontline workers. Organizational investment in nurse well-being not only creates safer, more supportive environments but also leads to better staff outcomes. Key strategies include reducing job stressors and bolstering recognition, dignity, and safety at work (Pignatiello et al., 2023).

5. Conclusion

This study identified three overarching themes of staff nurses' perspectives on workplace well-being: the ideal concept of nurses' workplace well-being, contributing factors to nurses' workplace well-being, and nurses' expectations of hospital administrators to enhance nurses' workplace well-being. Nurses' workplace well-being emerges as a multifaceted construct shaped by psychological, physical, social, financial, and organizational forces. Feeling supported, through manageable workloads, clear role boundaries, adequate resources, and fair compensation, underpins both mental health and quality of care. Strong inter-professional collaboration and ethical, emotionally intelligent leadership foster engagement and resilience, while safe environments (from robust infection control to zero-tolerance for violence) protect nurses' security and dignity. System-level reforms (staffing ratios, equitable pay models, proactive occupational health policies) must be paired with individual support (stress-management training, recognition programs, career development) to sustain a thriving workforce. By addressing these intertwined domains, healthcare organizations can bolster nurse retention, enhance patient outcomes, and cultivate a culture of genuine well-being. In the context of policy implementation, a deeper understanding of nurses' experiences of workplace well-being enables nurses and their leaders, particularly in Indonesia, to formulate policies that promote healthy and safe work environments.

Limitations

Considering the small number of participants and only in one particular university hospital is the limitation of this research, in terms of generalizability. However, the authentic results of this study can be a valuable source as additional information about nurses' workplace well-being, particularly in the South-east Asian community and the context of developing countries. Future research could focus on designing and evaluating targeted interventions, grounded in this study's results, to strengthen nurses' workplace well-being.

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Author Contribution

Achmad Fathi: Writing - review and editing, Writing - original draft, Data collection, Data analysis, Conceptualization. *Hanny Handiyani*: Writing - review and editing, Writing - original draft, Data analysis, Conceptualization. *Tuti Afriani*: Writing - review and editing, Writing - original draft, Data analysis, Conceptualization. *Dwi Tyastuti*: Writing - review and editing, Writing - original draft, Data analysis, Conceptualization.

Declaration of interest

The authors declare no conflicts of interest.

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References

Al-Bsheish, M., Jarrar, M., Al-Mugheed, K., Zubaidi, F., Almahmoud, H., & Ashour, A. (2023). The association between workplace physical environment and nurses' safety compliance: A serial mediation of psychological and behavioral factors. *Heliyon*, 9(11). <https://doi.org/10.1016/j.heliyon.2023.e21985>

Alhojairi, H. M., Elseesy, N. A. M., Mahran, S. M., Banakhar, M. A., & Alsharif, F. (2024). Assessment of nurses' workplace silence behaviour motives: A cross-sectional study. *International Journal of Nursing Sciences*, 11(5), 553–562. <https://doi.org/10.1016/j.ijnss.2024.10.006>

Alruwaili, A. N. (2025). Transformational nurse leaders and nurse well-being: Examining mediating influences of organizational justice and quality of work life mixed methods study. *Journal of Nursing Management*, 2025. <https://doi.org/10.1155/jonm/4577350>

Alzate-Moreno, M., Calderón-Brenosa, B., Miguel, K. R.-S., & Sarasa-Monreal, M. del M. (2025). Colaboración interprofesional en las sesiones clínicas de una unidad de cuidados intensivos: Percepción de enfermeras y médicos. Una revisión sistemática de la literatura. *Enfermería Intensiva*, 36. <https://doi.org/10.1016/j.enfi.2024.03.002>

Asa, G. A., Fauk, N. K., Ratu, M., & Ward, P. R. (2022). The impact of working in COVID-19 hospital on Indonesian nurses' mental health and wellbeing: A qualitative study. *BMC Nursing*, 21(1), 345. <https://doi.org/10.1186/s12912-022-01131-6>

Aydogdu, A. L. F. (2024). Nurses' perceptions of nursing management: A metaphorical analysis. *Collegian*, 31, 333–341. <https://doi.org/10.1016/j.colegn.2024.06.005>

Badriyah, F. L., Mundakir, M., Rohita, T., Lee, B.-O., & Tonapa, S. I. (2025). The mediating role of self-efficacy in the relationship between spirituality and burnout among intensive care unit nurses: A pathway analysis. *Applied Nursing Research*, 86, 152005. <https://doi.org/10.1016/j.apnr.2025.152005>

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, 56(3), 1391–1412. <https://doi.org/10.1007/s11135-021-01182-y>

Duhalde, H., Bååth, C., Hommel, A., & Bjuresäter, K. (2025). Emergency nurses' perceptions of nursing care in an emergency department: A phenomenographic study. *Journal of Emergency Nursing*, 1–10. <https://doi.org/10.1016/j.jen.2025.03.018>

El-Gazar, H. E., Ali, A. M., Shawer, M., Serag, R. M., & Zoromba, M. A. (2025). Decent work and nurses' work ability: A cross-sectional study of the mediating effects of perceived insider status and psychological well-being. *International Journal of Nursing Studies Advances*, 8. <https://doi.org/10.1016/j.ijnsa.2024.100283>

Entrata, P., & Nicomedes, C. J. (2025). Emotional intelligence and perceived social support as predictors of psychological well-being among nurses in hospitals in metro manila : Basis for psychological wellness program. *Archives of Psychiatric Nursing*, 49, 140–148. <https://doi.org/10.1016/j.apnu.2024.02.012>

Enwereuzor, I. K., Echa, J. U., Ekwesaranna, F., Ibeawuchi, W. E., Ogu, P. U., & Uche, P. (2023). Interplay of organizational constraints and workplace status in intent to stay of frontline nurses caring for patients with COVID-19. *International Journal of Africa Nursing Sciences*, 18. <https://doi.org/10.1016/j.ijans.2023.100567>

Fernández-Sánchez, J. D., Andrés-Pretel, F., Ortiz-Díaz, V., Molina-Alarcón, M., & Lozano-Hernández, C. M. (2025). Relationship between the nurse–patient ratio and adverse events in conventional hospitalization units in a third-level hospital. *Journal of Nursing Management*, 2025(1), 8885593. <https://doi.org/10.1155/jonm/8885593>

Gillespie, G. L., Tamsukhin, S. M., Galloway, E., Garde, D., & Grubb, P. L. (2024). Don't be nasty: A phenomenological study of newly licensed nurses and workplace bullying. *Teaching and Learning in Nursing*, 19(2), 164–169. <https://doi.org/10.1016/j.teln.2024.02.020>

Govasli, L., & Solvoll, B.-A. (2020). Nurses' experiences of busyness in their daily work. *Nursing Inquiry*, 27, 1–8. <https://doi.org/10.1111/nin.12350>

Huang, H., Li, F., & Jiang, Y. (2024). Connor Davidson resilience scores, perceived organizational support and workplace violence among emergency nurses. *International Emergency Nursing*, 75. <https://doi.org/10.1016/j.ienj.2024.101489>

Huang, N., Qiu, S., Yang, S., & Deng, R. (2021). Ethical leadership and organizational citizenship behavior: Mediation of trust and psychological well-being. *Psychology Research and Behavior Management*, 14, 655–664. <https://doi.org/https://doi.org/10.2147/PRBM.S311856>

Juanamasta, I. G., Aungsuroch, Y., Gunawan, J., Dino, M. J., & Polsook, R. (2024). Prevalence of burnout and its determinants among Indonesian nurses: A multicentre study. *Scientific Reports*, 14(1), 31559. <https://doi.org/10.1038/s41598-024-63550-6>

KC, S., Gooden, T. E., Aryal, D., Koirala, K., Luitel, S., Haniffa, R., & Beane, A. (2024). The burden of anxiety, depression, and stress, along with the prevalence of symptoms of PTSD, and perceptions of the drivers of psychological harms, as perceived by doctors and nurses working in ICUs in Nepal during the COVID-19 pandemic: A mixed method e. *BMC Health Services Research*, 24. <https://doi.org/10.1186/s12913-024-10724-7>

Kürtüncü, M., Kurt, A., Özdemir, S., Akkoç, B., & Uzuntarla, E. (2024). Perceptions of pediatric emergency nurses and parents presenting to the emergency department regarding violence: A qualitative study. *Journal of Pediatric Nursing*, 79, e177–e185. <https://doi.org/10.1016/j.pedn.2024.10.018>

Lasater, K., Aiken, L., Douglas, C., Windsor, C., Yates, P., Smith, H. L., & McHugh, M. D. (2025). Minimum nurse staffing policy intervention in Queensland Australia improved nurse wellbeing and patient safety: A quasi-experimental intervention study. *International Journal of Nursing Studies*, 171. <https://doi.org/10.1016/j.ijnurstu.2025.105178>

Levido, A., Coyer, F., Keogh, S., & Crowe, L. (2025). Wellbeing as perceived and experienced by intensive care unit nurses: An interpretive qualitative analysis. *Australian Critical Care*, 38. <https://doi.org/10.1016/j.aucc.2025.101202>

Li, H., & Mahyuddin, N. (2025). The impact of physical environment on health-care workers' well-being in Chinese hospitals during COVID-19 pandemic. 41(11), 675–690. <https://doi.org/10.1108/F-10-2021-0102>

Li, Y., Kang, L., Zhang, R., Hu, Y., Zhang, L., Zeng, X., Wu, F., He, X., Zhang, Y., Liu, J., & Tang, S. (2024). Relationship between perceived organizational support, work well-being, and medical narrative ability among nurses: A cross-sectional multicenter study. *Journal of Nursing Management*, 2024, 1–13. <https://doi.org/10.1155/jonm/4466721>

Liao, Y., Wei, W., Fang, S., Wu, L., Gao, J., Wu, X., Huang, L., Li, C., & Li, Y. (2023). Work immersion and perceived stress among clinical nurses: A latent profile analysis and moderated mediation analysis. *BMC Nursing*, 22. <https://doi.org/10.1186/s12912-023-01467-7>

Maran, D. A., Giacomini, G., Scacchi, A., Bigarella, R., Magnavita, N., & Gianino, M. M. (2024). Consequences and coping strategies of nurses and registered nurses perceiving to work in an environment characterized by workplace bullying. *Dialogues in Health*, 4. <https://doi.org/10.1016/j.dialog.2024.100174>

Melnyk, B. M., & Hsieh, A. P. (2025). Making the business case for evidence-based practice and nurse/clinician well-being to improve health care quality, safety, patient outcomes, and costs. *Nurse Leader*, 23(3), 244–248. <https://doi.org/10.1016/j.mnl.2025.01.006>

Munn, L. T., O'Connell, N., Huffman, C., McDonald, S., Gibbs, M., Miller, C., Danhauer, S. C., Reed, M., Mason, L., Foley, K. L., Stopryra, J., & Gesell, S. B. (2025). Job-related factors associated with burnout and work engagement in emergency nurses: Evidence to inform systems-focused interventions. *Journal of Emergency Nursing*, 51(2), 249–260. <https://doi.org/10.1016/j.jen.2024.10.007>

NICE. (2024). Mental wellbeing at work. National Institute for Health and Care Excellence, March 2022. <https://www.nice.org.uk/guidance/ng212> (Accessed 02/06/2025)

Ni'matuzahroh, Ningrum, V., Widayat, Dyah Artaria, M., & Suen, M. (2021). The COVID-19 pandemic and healthcare workers psychological well-being: A cross-sectional survey in Indonesia. *Nursing Open*, 8(6), 3212–3221. <https://doi.org/10.1002/nop2.1034>

Paustian-Underdahl, S., Li, Y., Whyte, J., & Haye, D. La. (2025). The effects of bullying on nurses' turnover intentions, patient care, and somatic health complaints: Examining the importance of staffing adequacy and stress mindsets. *Nursing Outlook*, 73(3). <https://doi.org/10.1016/j.outlook.2025.102398>

Pignatiello, G. A., Cuccia, A., & Boston-leary, K. (2023). The relationships between the healthy nurse, Healthy Nation program, RN perceptions of their work system, and health-related quality of life. *Nursing Outlook*, 1, 1–11. <https://doi.org/10.1016/j.outlook.2023.101983>

Pillay, L., Coetzee, S. K., Scheepers, N., & Ellis, S. M. (2023). The association of workplace violence with personal and work unit demographics , and its impact on nurse outcomes in the KwaZulu-Natal

Province. International Journal of Africa Nursing Sciences, 18. <https://doi.org/10.1016/j.ijans.2023.100571>

Portoghese, I., Min, A., & Galletta, M. (2025). Latent profiles of job demands and job resources and their association with work wellbeing among nurses in South Korea. *Scientific Reports*, 15. <https://doi.org/10.1038/s41598-025-01479-0>

Rahmat, I., Pawestri, F., Saputro, R. A., Widianingrum, S., & Hanifah, T. (2023). Psychosocial Problems among Psychiatric Nurses for Caring Patients with Mental Disorders during the COVID-19 Pandemic. *Nursing Research and Practice*, 2023, 1–8. <https://doi.org/10.1155/2023/3689759>

Razmpour, O., Cimiotti, J. P., Hagopian, C. O. P., Cunningham, T., Bouvier, M., & Giordano, N. A. (2025). The impact of financial hardship on the well-being of nurses. *Nursing Economic\$*, 43(2). <https://doi.org/10.62116/NEC.2025.43.2.77>

Salgado, R., Sampaio, F., Jubin, J., Delmas, P., Bachmann, A. O., Gilles, I., & Bucher, C. O. (2025). Quality of life and professional wellbeing of Portuguese nurses during the COVID-19 pandemic: A longitudinal study. *BMC Public Health*, 25, 787. <https://doi.org/10.1186/s12889-025-22037-3>

Scallan, R. M., Speciale, A., Kasen, K. E. M., Martin, D., Byon, H. Do, Quatrara, B. A., & Charlottesville. (2024). A quality improvement project to enhance emergency nurse workplace violence reporting. *Journal of Emergency Nursing*, 50(5), 591–600. <https://doi.org/10.1016/j.jen.2024.07.001>

Schwarzkopf, D., Bloos, F., Meißner, W., Rüddel, H., Thomas-rüddel, D. O., & Wedding, U. (2024). Perceptions of quality of interprofessional collaboration, staff well-being and nonbeneficial treatment: A comparison between nurses and physicians in intensive and palliative care. *Healthcare*, 12. <https://doi.org/10.3390/healthcare12060602> Academic

Shabestari, M. M., Tabrizi, F. J., Roshangar, F., Ghahramanian, A., Zamanzadeh, V., Sarbakhsh, P., & Agom, D. A. (2024). Nurses' perception of uncertainty in clinical decision-making: A qualitative study. *Heliyon*, 10(16), e36228. <https://doi.org/10.1016/j.heliyon.2024.e36228>

Stewart, C., Bench, S., & Malone, M. (2024). Interventions to support critical care nurse wellbeing: A scoping review. *Intensive & Critical Care Nursing*, 81(January), 103613. <https://doi.org/10.1016/j.iccn.2023.103613>

Su, P.-P., Chen, S. M., Chang, F., Feng, H., Feng, X., Wen, L., Hu, H., Ouyang, J., & Wu, X. (2025). Latent profile analysis and influence factor study of well-being among nurses in China: A cross-sectional study. *BMJ Open*, 15. <https://doi.org/10.1136/bmjopen-2024-095858>

Sunjaya, D. K., Herawati, D. M. D., & Siregar, A. Y. M. (2021). Depressive, anxiety, and burnout symptoms on health care personnel at a month after COVID-19 outbreak in Indonesia. *BMC Public Health*, 21(1), 227. <https://doi.org/10.1186/s12889-021-10299-6>

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>

Wahyuni, S.E., Keliat, B.A., Susanti, H., & Besral. (2024). Risk and protective factors of anxiety in nurses during the COVID-19 pandemic: A systematic review. *Caring: Indonesian Journal of Nursing Science*, 6(2), 59-67. <https://doi.org/10.32734/ijns.v6i2.17828>

Whiteing, N., Massey, D., Rafferty, R., Penman, O., Samios, C., Bowen, K., Stephens, A., & Aggar, C. (2023). Australian nurses' and midwives' perceptions of their workplace environment during the COVID-19 pandemic. *Collegian*, 30(1), 39–46. <https://doi.org/10.1016/j.colegn.2022.06.007>

Xie, A., Xu, H. (Grace), & Duff, J. (2025). Factors influencing perioperative nurses' retention and turnover decisions: A qualitative analysis. *Perioperative Care and Operating Room Management*, 40. <https://doi.org/10.1016/j.pcorm.2025.100503>

Zhang, X., Zhang, C., Gou, J., & Lee, S. Y. (2024). The influence of psychosocial work environment, personal perceived health and job crafting on nurses' well-being: A cross-sectional survey study. *BMC Nursing*, 23, 1–10. <https://doi.org/10.1186/s12912-024-02041-5>

Zheng, J., Feng, S., Gao, R., Gong, X., Ji, X., Li, Y., Wang, X., & Xue, B. (2024). The relationship between organizational support, professional quality of life, decent work, and professional well-being among nurses: A cross-sectional study. *BMC Nursing*, 23. <https://doi.org/10.1186/s12912-024-02114-5>