

Nursing Practice Today

2025; Volume 12, No 3, pp. 221-236



Review Article

Nurses' perception of reasons for turnover: Thematic synthesis of qualitative research studies

Martina Tomagová^{1*}, Dominika Kohanová², Katarína Žiaková¹

¹Department of Nursing, Jessenius Faculty of Medicine, Comenius University Bratislava, Martin, Slovak Republic ²Department of Nursing, Faculty of Social Sciences and Health Care, Constantine the Philosopher University, Nitra, Slovak Republic

ARTICLE INFO

ABSTRACT

Received 01 February 2025 Accepted 23 April 2025 Available online at: http://npt.tums.ac.ir	 Background & Aim: Nurse turnover has long been considered a serious and global issue, contributing significantly to the nursing shortage in healthcare institutions around the world. This study aimed to synthesise evidence from qualitative studies concerning nurses' perceptions of the reasons for their turnover in clinical practice. Methods & Materials: A literature review of qualitative studies was performed according to the PRISMA statement. A systematic search of the literature was
Keywords: nurses; personnel turnover; qualitative research; literature review	performed on five academic databases, specifically Scopus, ProQuest, PubMed, Web of Science, and OVID Nursing. The search identified 10 relevant qualitative studies published between 2013–2024. Primary studies were critically evaluated using the CASP checklist, and thematic synthesis was applied according to the method described by Thomas and Harden. Results: Four analytical themes synthesized from twelve descriptive themes any synthesized from twelve descriptive themes.
Corresponding Author: Martina Tomagová, Department of Nursing, Jessenius Faculty of Medicine, Comenius University Bratislava, Martin, Slovak Republic. E-mail: martina.tomagova@uniba.sk	 expressing nurses' experiences with their reasons for turnover were synthesized from the primary studies included in this literature review. These reasons were reflected in the following themes: Obstacles in achieving and maintaining professional role; Threatened well-being of nurses in everyday practice; Lack of teamwork and collaboration; Ineffective leadership. Conclusion: The identified themes suggest that nurses experience a wide range of interconnected reasons influencing their decision to leave their positions. These themes highlight actionable areas for healthcare organizations, including leadership reform and burnout mitigation. Addressing these reasons requires a detailed analysis
DOI: 10.18502/npt.v12i3.18973	of them, setting long-term strategies at multiple levels with systemic solutions, with a clear vision of how to reduce nurse turnover. The findings of thematic synthesis suggest topics for further research in a deeper understanding of nurse turnover.

Introduction

Nurses are an essential workforce, forming the largest professional group within the healthcare system (1). Retaining an adequate number of nurses is critical for the optimal functioning of healthcare facilities, which worldwide face increasing pressure to provide high-quality services to a growing number of patients while reducing costs (2). An overall shortage of nurses has been identified as a central challenge in healthcare systems across the world (3). Numerous studies (4, 5, 6) have highlighted the imbalance between the demand for retaining sufficient nurses and their high turnover rates. global nurse turnover rate The was approximately 16%, implying an urgent need for efforts to reduce nurse turnover (1). Nurse turnover is linked to serious challenges nurses face, such as the impact of the COVID-19

pandemic, worsening chronic disease rates, and an ageing population in many countries, occupational fatigue, stress, and burnout, which ages the workforce in some countries (7). The estimated shortage of nursing personnel in 2030 to 4.5 million staff (7, 8, 9). This phenomenon negatively impacts healthcare organizations' quality of care provided, patient outcomes, and nurses themselves (6, 10).

Turnover is broadly defined as the separation of an employee from a job or organization (11). It is one of several concepts under the umbrella of "work outcomes" used to examine job-related trends in the nursing workforce (12). Turnover includes various forms of movement: nurses may leave the hospital entirely or transfer to other units within the same organization. It encompasses both

Copyright © 2025 Tehran University of Medical Sciences. Published by Tehran University of Medical Sciences. This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 International license (https:/creativecommons.org/licenses/by-nc/4.0/). Noncommercial uses of the work are permitted, provided the original work is properly cited

Please cite this article as: Tomagová M, Kohanová D, Žiaková K. Nurses' perception of reasons for turnover: Thematic synthesis of qualitative research studies. Nursing Practice Today. 2025; 12(3):221-36.

voluntary and involuntary transitions, as well as internal and external transitions (11). However, research highlights that the characteristics of nurse turnover differ between operational practice and academic studies, often employing varying conceptualisations of the phenomenon (13, 14).

Nurse turnover is influenced by a range of reasons, which can be categorized into individual-related factors, professional characteristics, work environment factors, and organizational and political influences (15, 16). Various research designs have been employed to explore nurse turnover, including quantitative and qualitative approaches (6, 13, 17).

Qualitative studies have provided information on the different meanings of nurse turnover from the perspectives of hospital nurses (18) and those working in long-term care services (19, 20). These studies also explore experiences with turnover from the points of view of nurse managers (18, 21) and family members of patients (19). However, few studies (22, 23) synthesize the experiences of nurses regarding the reasons for their turnover. This gap in the literature provides an opportunity for a thematic synthesis of qualitative studies on nurse turnover in the clinical setting. This allows for a deeper understanding of the context, meaning, and interpretation of the reasons for turnover from the perspective of nurses. Compared to review studies synthesising predictors and factors for nurse turnover into groups (10, 12, 15), this study focuses on nurses' unique, interconnected experiences with the reasons for their turnover. This literature review aimed to synthesise evidence from qualitative studies on

nurses' experiences with the reasons behind their turnover. The research question was framed using the PICo (Population, Interest, and Context) format as follows: What reasons do nurses perceive for their turnover in clinical practice?

Methods

This study utilized a narrative literature review approach to qualitative evidence, following the framework outlined by Green et al. (2006) and adhering to the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA) guidelines (25). Primary studies were critically evaluated using the CASP checklist (2024), and thematic synthesis was applied based on the method described by Thomas and Harden (2008). By integrating findings from selected primary studies identified through systematic searches and employing a 'best-evidence synthesis,' this narrative review offers a meaningful addition to the existing body of knowledge (24).

Search process

A systematic search of the literature was performed on five academic databases. Scopus, ProQuest, PubMed, Web of Science, and OVID Nursing, covering all available records from their inception to June 2024. These databases were selected based on their accessibility through the institution. A consistent set of keywords was used for all searches, combined with Boolean operators (AND, OR) to ensure comprehensive coverage. The search strategy is outlined in Table 1.

Table 1. The search process in the scientific databases

Search words	Number of searched studies	
("Nurses" [Mesh]) AND ("Attitude" [Mesh] OR "Opinions" [Mesh] OR "Perception" [Mesh] OR		
"Feelings" [Mesh] OR "Viewpoint" [Mesh] OR "experience*" OR "sense*" OR "view*" OR		
"impression*" OR "belief*" OR "concern*" OR "understanding" OR "cognition" OR "value*" OR		
"action*" OR "response*" OR "behavio*") AND ("Personnel Turnover" [Mesh] OR "Employee	PubMed: 270	
Turnover" [Mesh] OR "staff renewal rate" OR "staff resignation*" OR "rate of replacement" OR		
"turnover rate") AND ("Professional Practice" [Mesh] OR ("clinical practice" OR "clinical		
setting" OR "clinical environment" OR "nursing practice")		
("nurse*") AND ("experience*" OR "attitude*" OR "perception*" OR "sense*" OR "feeling*" OR		
"opinion*" OR "viewpoint*" OR "view*" OR "impression*" OR "belief*" OR "concern*" OR	Scopus: 37	
"understanding" OR "cognition" OR "value*" OR "action*" OR "response*" OR "behavio*")	ProQuest: 473	
AND ("turnover" OR "staff renewal rate" OR "staff resignation*" OR "rate of replacement" OR	Web of Science: 1355	
"turnover rate") AND ("professional practice" OR "clinical practice" OR "clinical setting" OR	OVID Nursing: 230	
"clinical environment" OR "nursing practice")		
Total	2335	

Inclusion and exclusion criteria

The search was restricted to peerreviewed articles and scholarly journals published in English.

Studies were included if they met the following criteria: a) empirical qualitative research of any design; b) focused on nurses working in clinical practice; c) explored experiences, or perceptions of reasons to turnover, specifically from the perspective of nurses. Studies were excluded if they were quantitative research, mixed-method research, reviews, editorials, case studies, discussion papers, expert opinions, or did not focus on the perspectives of nurses. Additionally, the exclusion criteria included a focus on nurses' experience with turnover intention, managers' experience with nurse turnover, and nurses' experience with reasons for retention in the workplace.





Study retrieval

The search identified a total of 2335 papers (473 from ProQuest, 37 from Scopus, 1355 from Web of Science, 230 from OVID Nursing, and 270 from PubMed). Two independent researchers (DK, MT) systematically conducted data extraction using the PRISMA flow diagram (Figure 1). The Rayyan QCRI® program (28) was employed during both phases of the review process. After removing 701 duplicates, 1634 papers were screened at the title and abstract level against the inclusion criteria in the first phase. In the second phase, 16 papers underwent full-text analysis. All researchers reached consensus on the inclusion of studies, resulting in 16 papers meeting the inclusion criteria for quality appraisal.

Quality appraisal of included studies

The rigor, credibility, and relevance of the included studies were assessed using the CASP – Qualitative Checklist (26). Six papers were excluded due to poorly described methods of qualitative data analysis, unclearly stated rigor of the study, unclearly stated recruitment of participants, and inaccurately stated respect for ethical aspects, leaving 10 papers that fulfilled the reviewers' inclusion criteria (Table 2). Any discrepancies between the reviewers were resolved by consensus.

Table 2. Characteristics of synthesized quantative studies									
Autors, year, country	Aim	Sample	Methodology	Data collection	Data analysis	CASP			
Backström et al., 2024, Sweden (29)	To explore why RNs in Sweden choose to quit their jobs in hospitals	11 nurses	Descriptive qualitative design	Semi- structured interviews	Systematic text condensation by Malterud	10			
Campbell et al., 2020, Canada (30)	To explore and describe factors that contribute to the recruitment, retention, and turnover of public health nurses	28 nurses	Interpretive descriptive approach	Semi- structured interviews	Interpretive description was used to analytic decisions	10			
Chachula et al., 2015, Canada (31)	To explore the factors and basic psychosocial process involved in the decisions of newly graduated registered nurses in Western Canada who permanently exit the nursing profession within five years	8 nurses	Qualitative Glaserian grounded theory approach	Unstructured and semi- structured interviews	Glaserian grounded theory method	10			
Çamveren et al., 2020, Turkey (32)	To reveal the reasons for young nurses' leaving their organization	15 nurses	Descriptive design	Semi- structured interviews	Content analysis	10			
Flinkman 2013, Finland (33)	To gain a deeper understanding of young nurses' career transition processes	3 nurses	Longitudinal interpretative qualitative study	Narrative interview	Holistic-content method developed by Lieblich et al.	10			
Hayward et al., 2016, Canada (34)	To explore the personal and environmental factors that influenced experienced nurses' decisions to leave a practice setting and seek an alternate position in nursing	12 nurses	Qualitative approach grounded in Thorne's interpretative description design	Conversation al style individual interviews	Inductive analytic approach, based on Thorne's approach	10			
Kox et al., 2020, Netherlands (35)	To unravel Dutch former novice nurses' reasons, experiences and the circumstances that contributed to their professional turnover within two years after graduation	17 nurses	Exploratory qualitative study	Semi- structured interviews	Thematic Analysis	10			
Roth et al., 2022, Germany (36)	To gain understanding of the factors that keep German nurses in nursing and explore their perceptions of factors that contribute to nurses leaving or staying in the profession	21 nurses	Explorative qualitative study	Semi- structured interviews	Qualitative content analysis	10			
Zhu et al., 2014, Canada, China, United Kingdom (37)	To understand why nurses, leave nursing practice by exploring the decision-making process of registered nurses who have exited clinical care in China	19 nurses	Qualitative study with grounded theory approach	In-depth interviews	Constant comparative analysis	10			
Zhu et al., 2021, China (38)	To understand the experiences of nurses who resigned because of limited available career development opportunities and of the possible reasons for their resignation	9 nurses	Husserl phenomenological research	Semi- structured interviews	Content analysis	10			

Table 2. Characteristics of synthesized qualitative studies

Data extraction and thematic synthesis

Participant quotations served as the primary data for analysis. Thematic synthesis was conducted following the three-stage process described by Thomas and Harden (2008): free line-by-line coding of the data; development of descriptive themes; and generation of analytical themes (27). In the first stage, two of the authors (MT, DK) of this study independently performed codes generation to discern the meaning of each sentence while repeated reading the results of each qualitative study. Based on mutual content, 184 primary codes were generated. Subsequently, in the second stage, codes were systematically generated by all authors by summarising, analysing, and organising into 12 descriptive themes. In the third stage, analytical themes presenting integrated interpretations were extracted by synthesizing the descriptive themes by all authors.

Finally, the entire research team worked together to discuss and ensure the consistency and adequacy of the thematic interpretations.

Data organization and analysis were facilitated using ATLAS.ti 9 software.

Results

Four analytical themes expressing nurses' experiences with their reasons for turnover were synthesized from the primary studies included in the literature review, as follows: Obstacles in achieving and maintaining professional role; Threatened well-being of nurses in everyday practice; Lack of teamwork and collaboration; Ineffective leadership (Graph 1).



Graph 1. Analytical and descriptive themes expressing nurses' experiences with their reasons for turnover

Obstacles in achieving and maintaining a professional role

The analytical theme was synthesized from the descriptive themes: Challenging adaptation process, Lack of recognition and appreciation, Limited professional growth, and restricted autonomy. These themes reflected the impact of complex professional socialization on nurses' turnover.

Challenging adaptation process

The descriptive theme highlighted how unmet professional goals related to the adaptation process contributed to nurses' turnover (30, 31, 32, 33, 35, 37, 38). When nurses lacked a genuine aspiration to pursue a nursing career, "nursing career was never a dream job for me..." or had unrealistic expectations about the profession, they often left the field after graduation (33). Turnover is also encouraged when nursing is chosen as a stepping stone for unrelated goals, such as "nursing could be a stepping stone for *becoming a physician*" (33). If a graduate nurse realizes they have chosen the wrong profession, they may experience despair, as expressed in sentiments like "I feel at a real loss... perhaps the job is not fitting for me... I am lost and uncertain about what the future holds..." (38). Early-career nurses often fear whether they are adequately prepared to assume responsibility

for the care they provide (35), which leads to anxiety, uncertainty, and self-doubt about their professional competence (33). This insecurity is exacerbated by the perceived *"difference between what you are trained for and what you really do in practice"* (35). Support from senior colleagues and mentors is crucial for novice nurses during their adaptation to the profession (31). However, the absence of such support complicates professional socialization and contributes to turnover (31, 32, 35). In addition, overly critical feedback from mentors (31) and the lack of acceptance of their opinions (35) are seen by novice nurses as significant triggers for turnover.

Absence of recognition and appreciation is a reason for doubts about remaining in the profession

The descriptive theme explored nurses' experiences with turnover driven by the lack of recognition for their role (29, 33, 35, 36, 37, 38). Nurse turnover often results from a lack of acknowledgement of their performance and professionalism by colleagues, supervisors, healthcare organizations, and society at large (29, 33, 35, 37, 38). When nurses feel their work is undervalued, they may question its worth and view turnover to find betterappreciated employment (38). Nurses perceive it as degrading when managers fail to respect their education and professional opinions. "Easiest for managers that all [nurses] are the same... like just a name on the schedule, or should we be seen as competent" (29), and assign tasks without considering their diverse skills and knowledge. Low wages, limited prospects for raises, and the absence of moral recognition are seen by nurses as signs of employer indifference. When nurses feel undervalued by their healthcare organizations, they are more likely to leave. "Actually, they did not care to lose nurses; there are plenty of young nurses available to replace us" (37). Public perception of nursing as a submissive and non-autonomous profession, "Nurses are physicians' handmaids in the hospital..." (33), contributes to doubts about staying in the profession. Media portrayals also play a role, with nurses describing the profession as having

been *"dragged through the mud and degraded"* (36). These demeaning views, whether from the public or patients, diminish the social prestige of nursing and exacerbate turnover (33, 36).

Limited professional growth and restricted autonomy

The descriptive theme highlights how limited professional growth contributes to nurses' turnover (32, 33, 35, 36, 37, 38). A lack of opportunities for intellectual development, creativity, and professional growth reduces nurses' motivation at work (33, 36) It also diminishes job satisfaction, fosters feelings of uncertainty and stagnation, and leads to despair about their career trajectory "I am down and depressed because I could not clearly see the direction of future career development" (38). Barriers to professional growth include workloads excessive (32), insufficient managerial support (33), and an unfavourable workplace atmosphere (38). Nurses often aspire to grow professionally, expressing concerns about being confined to a static role "I find it kind of terrible to think that you graduate as a nurse and then you will be a nurse for the rest of your life" (33). As a result, they prefer to work in healthcare facilities that offer opportunities for further education and development (32). Such opportunities allow nurses to experience recognition and a sense of accomplishment. "We will feel happy if our overall capabilities can be improved... to gain get recognition and а sense of accomplishment" (38). Additionally, nurses wish to demonstrate autonomy in clinical practice, rather than merely following physicians' directives. When this autonomy is lacking, nurses are more likely to consider leaving the profession "...it feels a bit like a dead end, and then what?" (35).

Threatened well-being of nurses in everyday practice

The analytical theme was synthesized from four descriptive themes, more specifically: complexity of patients, Barriers to providing proper care, Burnout syndrome, and reevaluating life goals. These express how the complexity of patient care leads to nurse turnover. Threats to nurses' well-being due to physical and psychological exhaustion, often resulting from prolonged work-related stress, lead them to reassess their life goals. If these goals cannot be fulfilled in conjunction with work life, nurses therefore decide to fluctuate.

Complexity of patients

The descriptive theme highlights how the demanding nature of patient care drives nurse turnover (30, 31, 33, 34, 35). Caring for complex and critically ill patients, often under significant workloads, leads to exhaustion. "Some of those people were screaming all night long... two of us nurses and over forty patients on the wards. That was totally insane" (33). Experienced nurses are frequently tasked with more acute cases, compounding their stress and workload, which is further aggravated by unpredictable violence from patients or relatives: "The mental workload and aggression, I didn't see that coming" (35). The constant threat of violence creates a pervasive sense of danger, increasing turnover. New nurses face additional emotional challenges, including fear, trauma, and stress, particularly when dealing with patient mortality. These experiences accumulate over time, leading to emotional exhaustion. "Most people never go to a morgue, or have to bag a dead body ... You often bring the emotional side of things [home] with you" (31). The cumulative toll of these factors often prompts nurses to leave the profession.

Barriers to providing proper care

The descriptive theme underscored how excessive workloads prevent nurses from providing the quality care they aim for, leading to frustration and turnover (29, 33, 34, 35, 36, 37). Nurses expressed distress over incomplete care, which they felt compromised patient wellbeing and their professional standards. "Not being able to offer the care that you would like to offer... was really gnawing at me" (35). Exhaustion and pressure negatively impacted their interactions with patients, leading nurses to question their ability to help. "At some point... I cannot spend 24 hours here... I just have to do the bare minimum, and that's not why I'm a nurse" (36). Critical moments, such as end-of-life care, heightened feelings of failure when dignified and humane care was unattainable, prompting emotional distress and resignations, "I cannot, I feel like nobody takes good care of these patients" (33). Additionally, time constraints often left essential tasks incomplete, creating self-doubt and reinforcing feelings of inadequacy. Nurses felt unfairly blamed for unmet patient needs despite working beyond their capacity. "Your good intention is to help patients, but...nurses are often blamed" (37). Guilt from mistakes caused by overwhelming workloads further pushed nurses to leave (33, 35).

Burnout syndrome

The descriptive theme highlighted how high workloads drive burnout and encourage nurses to leave their positions (29-38). High workloads arise from the accumulation of various factors, including unexpected patient deterioration despite significant efforts to improve their condition, limited resources for providing safe care, lack of team support, understaffing, poor managerial decisions, excessive paperwork, monotonous tasks, and lack of breaks (30, 31, 33, 38). Additional contributors include overtime, covering for absent colleagues, and shift work - particularly for new nurses "I worked days and nights, and it was killing me" (31). Nurses report experiencing various symptoms of burnout (29), including fear, uncertainty, helplessness, frustration, and depression (30, 34, 38). These intense emotional states often drive nurses to the decision to leave their jobs, "I've had enough" (29). Leaving is viewed as a necessary solution by many nurses: "If I were to do this indefinitely, I don't know if there would be a breakdown, or I would become physically unhealthy, or what would happen... I'm so close to the brink" (31). Burnout-related turnover is also understood as a way to protect patients from the negative effects of nurses' compromised behaviour. "Sometimes leaving feels like the right thing to do to ensure patient safety" (33).

Reevaluating life goals

The descriptive theme illustrated nurse turnover as a result of their efforts to achieve personal goals, prioritize their health, and enhance well-being (30, 31, 33, 34, 35, 38). The desire for self-realization through various social and personal activities may remain unfulfilled in their professional roles (30), leading to frustration and decisions to leave "The choice that I've clearly made intentionally has been to leave... because I've been thinking that it is possible to do things better" (33). For some nurses, leaving their job brings feelings of freedom, well-being, and satisfaction (31). Experiences of reduced job security, particularly in unstable workplaces, drive turnover as nurses seek stable employment (33). Poor health can also decrease job performance, which may not be accepted by colleagues and employers, prompting nurses to leave. "But actually, you have to take care of yourself first before you can take care of others" (35). Turnover may also occur to address serious family issues (30, 38). For nurses who are mothers, turnover is often shaped by internal conflicts between their professional roles and their desire to focus on motherhood (32). In some cases, turnover is associated with retirement, viewed as a natural conclusion to professional life, enabling nurses to pursue personal goals and activities (30, 38).

Lack of teamwork and collaboration

The analytical theme was synthesized from two descriptive themes: Absence of teamwork among colleagues, and Team atmosphere – toxic environment. It highlights how weak collaboration in a team influences nurse turnover.

Absence of teamwork among colleagues

The descriptive theme highlighted how poor collaboration contributed to nurse turnover (29, 30, 31, 34, 35, 36, 37). Generational differences often create friction, with older nurses resisting changes that younger nurses advocate for. "*Many of them just want to do their work in peace...the difficulty is to get the generations together*" (36). Lack of team support leaves nurses feeling isolated, frustrated, and overburdened, increasing turnover risk "... You have to take care of yourself first before you can take care of others" (35). This frustration is magnified during unclear communication between colleagues and reluctance to collaborate (34). Nurses often feel undervalued compared to physicians, and their contributions receive little moral recognition. Condescending behaviour from physicians, such as ignoring nurses' opinions, exacerbates this imbalance. "There was a hierarchy... 25 steps down the ladder, there were nurses" (31). Hierarchical pressures also create ethical dilemmas, such as when financial motives override patient care (37). This tension weakens teamwork and collaboration. Nurses being bullied by colleagues further isolate and diminish their confidence. In contrast, respectful and collaborative relationships between nurses and physicians, "Physicians worked so much with the nurses that it was such a good cohesive relationship," foster team cohesion and reduce turnover (31).

Team atmosphere – toxic environment

The descriptive theme highlights how a negative workplace atmosphere drives nurse turnover (31, 32, 34, 35, 37, 38). Financial penalties for early resignation, perceived as coercive, restrict autonomy and contribute to dissatisfaction. "I did not want to pay the 15,000 yuan penalty...but my parents said...the hospital might negatively influence my future" (37). These penalties also impact sick and maternity leave, disrupting family lives, and prompting nurses to leave despite financial consequences. A toxic team environment marked by distrust, gossip, bullying, and disrespect weakens collaboration, care quality, and morale. "I didn't have any support... the work environment was actually toxic... If I had more support... I probably would have stayed" (31). Hostile interactions and a lack of respect create insecurity and helplessness, especially among younger nurses. "It was so nasty, so sly, so underhanded" (35). The toxic atmosphere also inhibits professional growth, with intimidation and poor communication stifling new nurses. "You don't want to voice your opinion ... so that

inhibits communication" (34). Harassment and criticism erode focus and well-being, leading nurses to leave their roles to escape the harmful environment (34).

Ineffective leadership

The analytical theme was synthesized from three descriptive themes, more specifically: Responsible leader, Organizational challenges, and Lack of support. It highlights how poor leadership of nurses contributes to their turnover.

Responsible leader

The descriptive theme emphasized the critical role of leadership in nurse retention and how poor management drives turnover (29, 30, 34, 37, 38). A lack of transparency about organizational changes leaves nurses feeling uninformed and uncertain. "We had this joke that we were mushrooms; we were kept in the dark" Additionally. (30).ineffective management disrupts the work environment, with unaddressed issues like patient violence and ignored transfer requests fostering insecurity and dissatisfaction. "My heart sank when I heard that I had to go back to the ICU..." (37). Moreover, unfair shift allocations and biased evaluations erode trust. Dominant leaders who intimidate staff and discourage open communication create a toxic environment, prompting resignations. "I flatly submitted my resignation because our working atmosphere was really bad" (38). When management neglects academic and career development opportunities, nurses feel undervalued and leave for better prospects (29).

Organizational challenges

The descriptive theme highlighted how structural and administrative changes, such as restructuring, shifting priorities, and rigid scheduling, contribute to nurse turnover (29, 30, 36, 37). Organizational adjustments often displace nurses. leaving them feeling undervalued. Limited union support during transitions worsens feelings of insecurity and instability. Rigid scheduling policies further drive turnover, as nurses value flexibility to meet personal needs "It's really about flexibility ... people find themselves in different situations

during one's life cycle" (29). Moreover, nurse shortages exacerbate workloads, compromise care, and lead to exhaustion, prompting many to leave. "*Among the worst shifts is where you don't have time to see patients"* (29). Newly graduated nurses often experience a "reality shock" due to unclear recruitment expectations, leading to early departures when faced with unanticipated demands (30).

Lack of support

The descriptive theme underscores how insufficient managerial and peer support drives nurse turnover (29, 30, 32, 34, 35, 37, 38). Newly hired nurses are often assigned undesirable shifts without consent, fostering feelings of manipulation and dissatisfaction "When there is a new colleague... we'll use her to fill the holes everywhere" (35). Managers' nurses' indifference to well-being and contributions erodes morale, while inconsistent supervisor support leads to uncertainty and burnout "Always being questioned... it was a long time coming, but I had to leave" (34). Poor managerial presence, unresponsiveness, and lack of recognition further undermine nurses' self-esteem, fuelling turnover. For nurses in remote areas, isolation and minimal team support intensify stress "If you don't have that, I think there is a lot that is missing" (29). Broken promises of career development and lack of teamwork, guidance, and communication from leadership diminish motivation, pushing nurses to seek supportive environments (29, 30, 32, 35, 36, 37, 38).

Discussion

The aim of this study was to synthesise nurses' experiences from qualitative studies of the reasons for their turnover in clinical practice. This experience is linked to interrelated reasons regarding obstacles to achieving and maintaining professional roles; threatened nurses' well-being in daily practice; lack of teamwork and collaboration; and ineffective nurse leadership.

The challenges nurses face in adapting to their professional roles significantly influence turnover. The influence of nurses' professional identity on their turnover is also pointed out by Hu et al. (2022). New nurses often struggle with the transition, facing a reality that differs greatly from their expectations, leading to uncertainty and self-doubt (30, 33). In this regard, the results of Ha et al. (2023) suggest that the experience of academic-related stress reduces the professional socialisation of nursing students after graduation and increases their intention to turnover (40). The lack of structured mentorship programs further complicates this transition, emphasizing the need for effective mentoring to support professional socialization (3, 41). Limited opportunities for professional growth and contribute autonomy to dissatisfaction, highlighting the importance of creating clear pathways for career advancement and increasing nurses' decision-making authority in clinical practice (32, 38). Furthermore, ineffective leadership exacerbates these challenges by failing to implement strong mentorship programs, leading to gaps in professional development and increased turnover intentions (42). Leaders who do not advocate for structured career pathways indirectly contribute to dissatisfaction among nurses, further increasing attrition rates (43). Additionally, nurses often feel undervalued by colleagues, supervisors, and society, which diminishes job satisfaction and fosters intentions to leave (29, 39). Recognizing nurses' contributions through formal, informal acknowledgement, and respect can elevate their professional identity, elevate their professional status, and reduce turnover (44). Teamwork and collaboration play a crucial role in reinforcing or mitigating these challenges. Strong teamwork fosters a sense of support and recognition, alleviating feelings of undervaluation. Conversely, in toxic team environments where bullying and poor collaboration prevail, feelings of professional inadequacy intensify, further pushing nurses toward resignation (45). Additionally, in hierarchical healthcare systems, particularly in certain cultural and regional settings, nurses may experience greater difficulties asserting autonomy, further exacerbating dissatisfaction and increasing turnover rates. In contrast, settings that encourage nurse-led decisionmaking can mitigate these challenges (46).

The complexity of daily practice threatens the well-being of nurses, particularly when nurses face challenging patient care situations (29-38). Caring for critically ill patients or those with unpredictable behaviour often leads to emotional exhaustion and stress, especially among less experienced nurses (31, 36). For example, Kowalczuk et al. (2020) reported that nurses frequently cite excessive workloads and the emotional toll of patient mortality as reasons for leaving the profession (47). Furthermore, barriers to providing quality care, such as excessive workloads and time constraints. create moral distress and dissatisfaction (36, 37).

Threats to nurses' well-being, including burnout and the need to reassess life goals, are critical drivers of turnover (30, 36). Zheng et al. (2024) emphasize that burnout and its dimensions have a significant effect on turnover intention (48). Addressing burnout requires systemic interventions, such as optimizing nurse-to-patient ratios, reducing mandatory overtime, and ensuring adequate rest periods (49, 50). Dewanto and Wardhani (2018) suggested that burnout interventions must also include organizational support for mental health, such as resilience training and employee assistance programs (41). These interventions are important because many nurses often leave to prioritize personal well-being and family responsibilities over a significant workload (31-35, 38). Flexible scheduling and family-friendly workplace policies are essential strategies to help nurses balance their personal and professional lives, enhancing their commitment to the profession (33, 38). Notably, leadership plays a critical role in mitigating or exacerbating these issues. Leaders who do not address workload concerns or support nurses in high-stress situations perpetuate moral distress and dissatisfaction. Poor teamwork further compounds these burdens, as nurses lacking collaborative support must manage demanding situations alone, leading to greater stress, lowering morale, and higher turnover (51, 52). Furthermore, regional and cultural differences in workplace expectations and support structures influence burnout levels (53). These challenges are magnified in regions where chronic understaffing, resource constraints, or weak government support, emphasizing the need for context-specific retention strategies (52, 54).

Teamwork is the subject of research in the nursing workforce in relation to turnover for decades several (12). Teamwork and collaboration significantly impact nurses' job retention satisfaction and (55). Poor collaboration, generational differences, and hierarchical tensions often result in isolation and frustration (36). Additionally, a toxic work environment, characterized by bullying, poor communication, favouritism, and disrespect, significantly contributes to nurse turnover by undermining job satisfaction and mental wellbeing. Such environments promote stress, burnout, and emotional exhaustion, making nurses feel undervalued and unsupported. This not only affects their ability to deliver highquality patient care, but also drives many to leave in search of healthier workplaces (56). Leadership plays a crucial role in shaping team dynamics. When leadership is ineffective address workplace failing to toxicity, favouritism, or poor communication - team dysfunction intensifies, leading to heightened turnover. In addition, ineffective leadership weakens professional development and neglects daily practice challenges. As a result, leadership deficiencies reinforce a cycle of dissatisfaction and attrition (42).

Conversely, strong leadership that promotes inclusivity and conflict resolution strengthens teamwork, reducing attrition rates (57). Healthcare managers play a key role in promoting nurses' intention to stay by increasing organizational support, promoting psychological well-being, and enhancing organizational commitment (58). Addressing workplace toxicity requires zero-tolerance policies for harassment, leadership training, team-building initiatives, and mental health support programs to create a respectful, inclusive, and collaborative culture that enhances nurse retention and overall organizational performance (31, 35, 56). Cultural norms regarding workplace hierarchy also shape team dynamics, influencing communication and collaboration in different healthcare environments Training (59).

programs for nurse leaders should prioritize inclusivity, transparency, and trust to foster positive work environments (60). By critically examining the interconnections between leadership and nurse turnover, it becomes clear that ineffective leadership acts as a key driver that influences multiple dimensions of nurse turnover, while teamwork and well-being are deeply intertwined. However, competing interpretations suggest that systemic workload issues may be an equally dominant factor, mediating the effects of leadership interventions (5). Future research should explore these complexities further, particularly in lowresource settings where both leadership and structural deficits compound turnover risks. Furthermore, the broader implications suggest that global healthcare systems, particularly in low-resource regions, need tailored interventions that address workforce shortages, career advancement limitations, and cultural expectations about leadership. Therefore, addressing nurse retention requires an integrated approach that recognises these relationships and implements comprehensive strategies that target multiple factors simultaneously.

Study limitations

Several limitations should be acknowledged. First, our review is limited to scientific databases accessible through institutional access. Although these databases are comprehensive in terms of health care, some relevant studies may not have been searched and included in the thematic synthesis. Second, the exclusion of non-English qualitative studies may introduce a linguistic bias. Third, the original included qualitative studies report nurses' experiences of reasons for turnover in the healthcare systems of eight countries. It is also necessary to acknowledge the fact that differences in the organization of healthcare in the countries where the qualitative studies analysed were conducted could have influenced the identified results. This may introduce cultural bias into our interpretation. Given the above limitations, our findings cannot be transferred to different cultural or healthcare contexts. Fourth, the absence of data analysis

on the reasons for nurse turnover and the effectiveness of measures to reduce it also limits the ability to assess this causality. Lastly, the review also does not account for organizational or managers' perspectives, narrowing its scope to nurses' viewpoints.

Conclusion

The identified analytical themes suggest that nurses have experience with a wide range of interconnected reasons for turnover. The results of our thematic synthesis point out the complex process of professional adaptation, failure to meet nurses' expectations of their professional role, barriers to career growth, and barriers to exercising autonomy, burnout, work-life imbalance, high workloads, emotional strain, poor teamwork, toxic environments, and ineffective leadership as reasons for nurse turnover.

The identified themes contribute to the discussion on the possibility of applying various appropriate strategies for nurses' retention in the healthcare system. Based on our results, these strategies can include, for example integrate resilience training into nursing curricula, structured mentoring programmes for support novice nurses in the adaptation process, support for nurses' professional development by healthcare organizations, open communication in the workplace, expressions of appreciation to nurses, and mandating nurse-to-patient ratios in legislation. Addressing these reasons requires a detailed analysis of them, setting long-term strategies at multiple levels with systemic solutions, with a clear vision of how to reduce nurse turnover. This is currently considered a major challenge in healthcare systems around the world. The findings of our thematic synthesis suggest topics for further research in a deeper understanding of the reasons for nurse turnover and their effective solutions.

Relevance to clinical practice

Although existing reviews predominantly focus on clusters of factors influencing nurse turnover from quantitative studies, this study uniquely focuses on nurses' reasons for nurse turnover from qualitative studies. The findings of this review have significant implications for nursing practice. To address the high rates of turnover, healthcare organizations must prioritize creating supportive environments that foster professional continuous growth, and collaboration among nursing staff. Structured mentorship programs should be implemented to guide novice nurses through the adaptation process reduce early-career and disillusionment. Recognizing and appreciating nurses' contributions through fair compensation, public acknowledgment, and opportunities for professional development can improve job satisfaction and reinforce commitment to the profession. At the same time, protect the mental, physical health and well-being of healthcare Additionally. addressing professionals. burnout through adequate staff levels, manageable workloads, and regular time for recovery and rest. Nurses should also have greater autonomy in clinical decision making, which improves their sense of professional and motivation. Promoting identity teamwork by cultivating inclusive and respectful workplace cultures, alongside zero-tolerance policies for bullying and harassment, can strengthen interprofessional collaboration and morale. Leadership plays a pivotal role in these efforts. Nurse leaders be trained in effective should communication, transparent decisionmaking, and responsive management practices to build trust and support within their teams. Flexible scheduling and familyfriendly policies should also be adopted to accommodate the evolving personal and professional needs of nurses. It is important to implement strategies to improve working conditions, including reasonable workload and work-life balance, positive workplace culture, supportive management, career advancement, and workplace safety. By integrating these strategies, nursing practice can address the root causes of turnover, improve nurse retention, and ultimately enhance patient outcomes.

Funding statement

This study was supported by VEGA 1/0123/24: Work motivation and its impact on nurse turnover: sequential explanatory mixed-method study.

Conflict of interest

The authors declare that they have no potential conflict of interest.

References

1. Ren H, Li P, Xue Y, Xin W, Yin X, Li H. Global prevalence of nurse turnover rates: A meta-analysis of 21 studies from 14 countries. Journal of Nursing Management. 2024 Jun;2024:5063998.

https://doi.org/10.1155/2024/5063998

2. Falatah R, Salem OA. Nurse turnover in the Kingdom of Saudi Arabia: An integrative review. Journal of Nursing Management. 2018 Sep;26(6):630-8.

https://doi.org/10.1111/jonm.12603

3. Brook J, Aitken L, Webb R, MacLaren J, Salmon D. Characteristics of successful interventions to reduce turnover and increase retention of early career nurses: A systematic review. International Journal of Nursing Studies. 2019 Mar;91:47-59.

https://doi.org/10.1016/j.ijnurstu.2018.11.003 4. Adams R, Ryan T, Wood E. Understanding the factors that affect retention within the mental health nursing workforce: A systematic review and thematic synthesis. International Journal of Mental Health Nursing. 2021 Dec;30(6):1476-97.

https://doi.org/10.1111/inm.12904

5. Pressley C, Garside J. Safeguarding the retention of nurses: A systematic review on determinants of nurse's intentions to stay. Nursing Open. 2023 May;10(5):2842-58. https://doi.org/10.1002/nop2.1588

6. Wu F, Lao Y, Feng Y, Zhu J, Zhang Y, Li L. Worldwide prevalence and associated factors of nursing staff turnover: A systematic review and meta-analysis. Nursing Open. 2024 Jan;11(1):e2097.

https://doi.org/10.1002/nop2.2097

7. Buchan J, Catton H. Recover to rebuild: investing in the nursing workforce for health system effectiveness [Internet]. International Council of Nurses; 2023 [cited 2025 Feb 16]. Available from:

https://www.icn.ch/sites/default/files/2023-07/ICN_Recover-to-Rebuild_report_EN.pdf 8. Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: A threat to equity and 'universal' health coverage? BMJ Global Health. 2022 Jun;7(6):e009316.

https://doi.org/10.1136/bmjgh-2022-009316

9. World Health Organization. State of the world's nursing 2020: investing in education, jobs and leadership [Internet]. Geneva: World Health Organization; 2020 [cited 2025 Feb 16]. Available from: https://iris.who.int/bitstream/handle/10665/3316

77/9789240003279-eng.pdf

10. Bae SH, Kim S, Myung H. Mediating effects of workgroup processes on the relationship between nurse turnover and nurse outcomes in hospitals. Frontiers in Public Health. 2023 Nov;11:1255983. https://doi.org/10.3389/fpubh.2023.1255983

11. Hom PW, Lee TW, Shaw JD, Hausknecht JP. One hundred years of employee turnover theory and research. Journal of Applied Psychology. 2017 Mar;102(3):530-45. https://doi.org/10.1037/apl0000103

12. Woodward KF, Willgerodt M. A systematic review of registered nurse turnover and retention in the United States. Nursing Outlook. 2022 Jul-Aug;70(4):664-78. https://doi.org/10.1016/j.outlook.2022.04.005

13. Elangovan AR, Kar A, Steinke C. Meaningful moves: A meaning-based view of nurses' turnover. Health Services Management Research. 2022 Feb;35(1):48-56. https://doi.org/10.1177/09514848211010427

14. Bae SH. Noneconomic and economic impacts of nurse turnover in hospitals: A systematic review. International Nursing Review. 2022 Sep;69(3):392-404.

https://doi.org/10.1111/inr.12769

15. Albalawi AM, Pascua GP, Alsaleh SA, Sabry W, Ahajan SN, Abdulla J, et al. Factors influencing nurses turnover in Saudi Arabia: A systematic review. Nursing Forum. 2024 Jul;2024:4987339.

https://doi.org/10.1155/2024/4987339

Villamin P, Lopez V, Thapa DK, Cleary M. Retention and turnover among migrant nurses: A scoping review. International Nursing Review. 2024 Sep;71(3):541-55.

https://doi.org/10.1111/inr.12861

17. McIntyre N, Crilly J, Elder E. Factors that contribute to turnover and retention amongst emergency department nurses: A scoping review. International Emergency Nursing. 2024 Jun;74:101437.

https://doi.org/10.1016/j.ienj.2024.101437

18. Ervariawati T, Yetti K, Novieastari E, Kuntarti K. The perception discrepancy of nurse turnover in hospital. Enfermería Clínica. 2019 Sep;29(S2):780-784.

https://doi.org/10.1016/j.enfcli.2019.04.118

19. Krein SL, Turnwald M, Anderson B, Maust DT. "Sometimes it's not about the money... it's the way you treat people...": A qualitative study of nursing home staff turnover. Journal of the American Medical Directors Association. 2022 Jul;23(7):1178-84. https://doi.org/10.1016/j.jamda.2021.11.036

20. Choi SPP, Yeung CCY, Lee JKL. A phenomenological study of the work environment in long-term care facilities for older adults. Journal of Applied Gerontology. 2020 Jun;39(6):651-9.

https://doi.org/10.1177/0733464818776786

21. Randa MB, Phale JM. The effects of high nurses' turnover on patient care: perspectives of unit managers in critical care units. International Journal of Africa Nursing Sciences. 2023 Jun;19:100580.

https://doi.org/10.1016/j.ijans.2023.100580

22. McDermid F, Mannix J, Peters K. Factors contributing to high turnover rates of emergency nurses: A review of the literature. Australian Critical Care. 2020 Jul;33(4):390-6. https://doi.org/10.1016/j.aucc.2019.09.002

23. Bahlman-van Ooijen W, Malfait S, Huisman-de Waal G, Hafsteinsdóttir TB. Nurses' motivations to leave the nursing profession: A qualitative meta-aggregation. Journal of Advanced Nursing. 2023 Dec;79(12):4455-71. https://doi.org/10.1111/jan.15696

24. Green BN, Johnson CD, Adams A. Writing narrative literature reviews for peer-reviewed journals: Secrets of the trade. Journal of Chiropractic Medicine. 2006 Autumn;5(3):101-17.

https://doi.org/10.1016/S0899-3467(07)60142-6

25. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. BMJ. 2021 Mar;372:n71. https://doi.org/10.1136/bmj.n71

26. Critical Appraisal Skills Programme. CASP checklist: for qualitative research [Internet]. 2024 [cited 2024 Aug 10]. Available from: https://casp-uk.net/casp-checklists/CASPchecklist-qualitative-2024.pdf

27. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in

systematic reviews. BMC Medical Research Methodology. 2008 Jul;8:45. https://doi.org/10.1186/1471-2288-8-45

28. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan-a web and mobile app for systematic reviews. Systematic Reviews. 2016 Dec;5:210. https://doi.org/10.1186/s13643-016-0384-4

29. Bäckström J, Pöder U, Karlsson A. I was merely a brick in the game: A qualitative study on registered nurses' reasons for quitting their jobs in hospitals. Journal of Nursing Management. 2024 Mar;2024:6662802.

https://doi.org/10.1155/2024/6662802

30. Campbell KA, Van Borek N, Marcellus L, Landy CK, Jack SM; British Columbia Healthy Connections Project Process Evaluation Research Team. "The hardest job you will ever love": nurse recruitment, retention, and turnover in the Nurse-Family Partnership program in British Columbia, Canada. PLoS One. 2020 Sep;15(9):e0237028.

https://doi.org/10.1371/journal.pone.0237028

31. Chachula KM, Myrick F, Yonge O. Letting go: How newly graduated registered nurses in Western Canada decide to exit the nursing profession. Nurse Education Today. 2015 Jul;35(7):912-8.

https://doi.org/10.1016/j.nedt.2015.02.024

32. Çamveren H, Arslan Yürümezoğlu H, Kocaman G. Why do young nurses leave their organization? A qualitative descriptive study. International Nursing Review. 2020 Dec;67(4):519-28.

https://doi.org/10.1111/inr.12633

33. Flinkman M, Isopahkala-Bouret U, Salanterä S. Young registered nurses' intention to leave the profession and professional turnover in early career: A qualitative case study. ISRN Nursing. 2013 Aug;2013:916061. https://doi.org/10.1155/2013/916061

34. Hayward D, Bungay V, Wolff AC, MacDonald V. A qualitative study of experienced nurses' voluntary turnover: Learning from their perspectives. Journal of Clinical Nursing. 2016 May;25(9-10):1336-45.

https://doi.org/10.1111/jocn.13210

35. Kox JHAM, Groenewoud JH, Bakker EJM, Bierma-Zeinstra SMA, Runhaar J, Miedema HS, et al. Reasons why Dutch novice nurses leave nursing: A qualitative approach. Nurse Education in Practice. 2020 Aug;47:102848.

https://doi.org/10.1016/j.nepr.2020.102848

36. Roth C, Wensing M, Breckner A, Mahler C, Krug K, Berger S. Keeping nurses in nursing: a qualitative study of German nurses' perceptions of push and pull factors to leave or stay in the profession. BMC Nursing. 2022 Feb;21(1):48. https://doi.org/10.1186/s12912-022-00822-4

37. Zhu J, Rodgers S, Melia KM. A qualitative exploration of nurses leaving nursing practice in China. Nursing Open. 2014 Dec;2(1):3-13. https://doi.org/10.1002/nop2.11

38. Zhu H, Xu C, Jiang H, Li M. A qualitative study on the experiences and attributions for resigned nurses with career plateau. International Journal of Nursing Sciences. 2021 May;8(3):325-31. https://doi.org/10.1016/j.ijnss.2021.05.006

39. Hu H, Wang C, Lan Y, Wu X. Nurses' turnover intention, hope and career identity: The mediating role of job satisfaction. BMC Nursing. 2022 Feb;21(1):43.

https://doi.org/10.1186/s12912-022-00821-5 40. Ha TTT, Thuy LT, Thanh DTH. Factors affecting career turnover intention after graduation among nursing students: A crosssectional study in Central Vietnam. Nursing Practice Today. 2023;10(3):229-38. https://doi.org/10.18502/npt.v10i3.13432

41. Dewanto A, Wardhani V. Nurse turnover and perceived causes and consequences: A preliminary study at private hospitals in Indonesia. BMC Nursing. 2018 Dec;17(Suppl 2):52. https://doi.org/10.1186/s12912-018-0317-8

42. Gularte-Rinaldo J, Baumgardner R, Tilton T, Brailoff V. Mentorship ReSPeCT Study: A nurse mentorship program's impact on transition to practice and decision to remain in nursing for newly graduated nurses. Nurse Leader. 2023 Apr;21(2):262-7. https://doi.org/10.1016/j.mnl.2022.07.003

43. Ofei AMA, Poku CA, Paarima Y, Barnes T, Kwashie AA. Toxic leadership behaviour of nurse managers and turnover intentions: The mediating role of job satisfaction. BMC Nursing. 2023 Oct;22(1):374.

https://doi.org/10.1186/s12912-023-01539-8 44. Zhong Y, Ma H, Zhang CC, Jiang QY, Li J, Liao CJ, et al. Professional identity, job satisfaction, and turnover intention among Chinese novice nurses: A cross-sectional study. Medicine (Baltimore). 2024 Jan;103(3):e36903. https://doi.org/10.1097/MD.000000000036903 45. Edmonson C, Zelonka C. Our own worst enemies: The nurse bullying epidemic. Nursing Administration Quarterly. 2019 JulSep;43(3):274-9.

https://doi.org/10.1097/NAQ.00000000000035 3

46. Mabona JF, van Rooyen D, Ten Ham-Baloyi W. Best practice recommendations for healthy work environments for nurses: An integrative literature review. Health SA Gesondheid. 2022 Apr;27:1788. https://doi.org/10.4102/hsag.v27i0.1788

47. Kowalczuk K, Krajewska-Kułak E, Sobolewski M. Working excessively and burnout among nurses in the context of sick leaves. Frontiers in Psychology. 2020 Feb;11:285. https://doi.org/10.3389/fpsyg.2020.00285

48. Zheng J, Feng S, Feng Y, Wang L, Gao R, Xue B. Relationship between burnout and turnover intention among nurses: A network analysis. BMC Nursing. 2024 Dec;23(1):921. https://doi.org/10.1186/s12912-024-02624-2

49. Kelly LA, Gee PM, Butler RJ. Impact of nurse burnout on organizational and position turnover. Nursing Outlook. 2021 Jan-Feb;69(1):96-102.

https://doi.org/10.1016/j.outlook.2020.06.008

50. Turunç Ö, Çalışkan A, Akkoç İ, Köroğlu Ö, Gürsel G, Demirci A, et al. The impact of intensive care unit nurses' burnout levels on turnover intention and the mediating role of psychological resilience. Behavioral Sciences. 2024 Sep;14(9):782.

https://doi.org/10.3390/bs14090782

51. Gyekye MB. Nursing leadership and management of nursing staff burnout during the COVID-19 pandemic. Open Access Library Journal. 2023 Apr;10(4):e9754. https://doi.org/10.4236/oalib.1109754

52. Boudreau C, Rhéaume A. Impact of the work environment on nurse outcomes: A mediation analysis. Western Journal of Nursing Research. 2024 Mar;46(3):210-8. https://doi.org/10.1177/01939459241230369

53. Fish JA, Sharplin G, Wang L, An Y, Fan X, Eckert M. Cross-cultural differences in nurse burnout and the relationship with patient safety: An East-West comparative study. Journal of Advanced Nursing. 2022 Apr;78(4):1001-11. https://doi.org/10.1111/jan.15024

54. Martin B, Kaminski-Ozturk N, O'Hara C, Smiley R. Examining the impact of the COVID-19 pandemic on burnout and stress among U.S. nurses. Journal of Nursing Regulation. 2023 Apr;14(1):4-12. https://doi.org/10.1016/S2155-8256(23)00063-7 55. Sasso L, Bagnasco A, Catania G, Zanini M, Aleo G, Watson R, et al. Push and pull factors of nurses' intention to leave. Journal of Nursing Management. 2019 Jul;27(5):946-54. https://doi.org/10.1111/jonm.12745

56. Nonehkaran EA, Mozaffari N, Iranpour S, Soola AH. Identifying the predictors of turnover intention based on nurse managers' toxic leadership behaviors among nurses in Iran: a cross-sectional correlational study. BMC Health Services Research. 2023 Nov;23(1):1201. https://doi.org/10.1186/s12913-023-10046-0

57. Labrague LJ. Influence of nurse managers' toxic leadership behaviours on nurse-reported adverse events and quality of care. Journal of Nursing Management. 2021 May;29(4):855-63.

https://doi.org/10.1111/jonm.13228

58. Duong CH, Ho YH, Hoang TKT. Perceived organizational support and its impact on nurses' intention to stay in Vietnam: Psychological well-being and organizational commitment as mediators. Nursing Practice Today. 2024;11(3):249-58.

https://doi.org/10.18502/npt.v11i3.16172 59. Kim M, Oh S. Assimilating to hierarchical culture: A grounded theory study on communication among clinical nurses. PLoS One. 2016 Jun;11(6):e0156305. https://doi.org/10.1371/journal.pone.0156305 60. Poku CA, Donkor E, Naab F. Impacts of nursing work environment on turnover intentions: The mediating role of burnout in Ghana. Nursing Research and Practice. 2022 Feb;2022:1310508. https://doi.org/10.1155/2022/1310508