

Factors and Organisational Strategies Associated with Nurse Retention and Turnover Intention in Public Healthcare Settings: A Systematic Literature Review

Lotfi Anuar¹, Nomahaza Mahadi^{1*}, Darween Rozehan Shah Iskandar Shah²

¹Azman Hashim International Business School, Universiti Teknologi Malaysia, 54100 Kuala Lumpur, Malaysia

²School of Medicine, Perdana University, 50490, Kuala Lumpur, Malaysia

*Corresponding Author's Email : nomahaza.kl@utm.my

ABSTRACT

Background: Nurse retention is a critical workforce priority as public healthcare systems face staffing shortages, increasing service demands, and continuing workforce pressures. High turnover can disrupt continuity of care, increase workload among remaining staff, and impose additional recruitment and training costs. **Objectives:** This systematic literature review aimed to (1) synthesise evidence on factors and organisational strategies associated with nurse retention and turnover intention among nurses in public healthcare settings and (2) develop a thematic framework to inform workforce sustainability. **Methods:** A systematic literature review was conducted using Scopus and Web of Science following Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidance. Peer-reviewed English-language empirical studies published between 2021 and 2025 were screened using predefined eligibility criteria and an adapted six-item quality appraisal checklist. The protocol was registered with PROSPERO (CRD420251186033). Twenty studies meeting the predefined quality threshold were synthesised using descriptive and thematic approaches guided by the a priori Job Demands–Resources framework. **Results:** Fourteen studies (70%) were conducted in Asia. Five interconnected themes were identified: supportive organisational culture, workload management, career development, psychological well-being, and reward and recognition. The findings indicate that retention and turnover intention are associated with interacting organisational, occupational, and individual factors. Technology-based retention strategies were minimally represented. **Conclusion:** Nurse retention in public healthcare settings requires an integrated perspective addressing organisational resources, occupational demands, and individual well-being. Future research should strengthen longitudinal and intervention-based evidence across diverse public healthcare contexts.

Keywords: Nurse Retention; Public Sector; Public Healthcare Workforce; Retention Strategies; Turnover Intention; Systematic Literature Review

INTRODUCTION

The retention of nursing staff in public healthcare settings is a critical workforce concern amid increasing service demands, demographic changes, and post-COVID-19 health system pressures. High turnover can disrupt care continuity, increase workloads, and raise recruitment and training costs (Kiptulon *et al.*, 2025; Figueiredo *et al.*, 2025). Retention is influenced by multiple organisational, occupational, and individual factors rather than a single intervention (Chen *et al.*, 2024; De Vries *et al.*, 2023), highlighting the need to examine organisational retention strategies. The public healthcare context warrants particular attention because organisational and resource conditions may differ substantially from those in private healthcare. Previous reviews have included both public and private settings, potentially limiting the specificity of their recommendations for government-funded systems (De Vries *et al.*, 2023). Public healthcare organisations may operate within tighter budgetary and workforce constraints (Homauni *et al.*, 2023), which can affect staffing levels, workload distribution, career advancement, and access to incentives (Figueiredo *et al.*, 2025).

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The Job Demands–Resources (JD-R) model conceptualises employee experiences through job demands, job resources, and personal resources. Job demands involve stress-inducing work aspects, while job resources help employees cope with workplace stress. Personal resources represent individual strengths that support coping. In nursing, workplace violence and workload may constitute job demands, supervision a job resource, and workplace spirituality a personal resource, influencing burnout, work engagement, and turnover intention (Hwang & Yi, 2025). Existing evidence suggests that leadership, work-life balance, career development, psychological well-being, and reward systems are relevant to nurses' work experiences and retention-related outcomes. However, their influence may depend on organisational conditions, including staffing adequacy, workload, resource availability, perceived fairness, and opportunities for professional development (Hussain *et al.*, 2025).

Despite the growing literature, an important synthesis gap remains. Although previous reviews have examined determinants of nurses' intention to stay (Pressley & Garside, 2023) and the effectiveness of retention interventions and strategies, evidence specifically synthesising factors and organisational strategies or practices associated with nurse retention and turnover intention among nurses working in public healthcare settings (Figueiredo *et al.*, 2025) remains limited. A systematic synthesis is therefore needed to consolidate this evidence and clarify common patterns relevant to public healthcare nursing workforce sustainability.

Accordingly, this review addresses the following research question: What factors and organisational strategies or practices are associated with nurse retention and turnover intention among nurses working in public healthcare settings? Using a PICO framework, the population comprises registered nurses in public healthcare settings; the intervention includes organisational strategies or practices to enhance retention or reduce turnover intention; and the comparison involves usual practice, absence of a specific strategy, or alternative approaches where reported. The outcomes included actual retention, intention to stay, and turnover intention. For the purposes of this review, retention-related outcomes and turnover intention were treated as related but conceptually distinct. Actual retention refers to nurses that remaining employed within the organisation (AbdELhay *et al.*, 2025), whereas intention to stay reflects nurses' intention to remain (Wang *et al.*, 2026). Turnover intention reflects nurses' intention or likelihood to leave their employment and was not considered equivalent to actual employee retention.

METHODOLOGY

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 statement was used to guide the reporting of this systematic literature review (Page *et al.*, 2021), supporting transparent reporting of the review rationale, eligibility criteria, information sources, search strategy, study selection, and synthesis procedures. The review was conducted according to a pre-established protocol that was registered with PROSPERO (CRD420251186033) on November 7, 2025. Two reviewers (Reviewer 1 and Reviewer 2) independently conducted the title, abstract, and full-text screening and quality appraisal. Disagreements were resolved through discussion and consensus, with consultation from Reviewer 3 where necessary. Inter-rater reliability was not formally quantified.

Determining the Database(s)

This review considered literature across diverse journals, reflecting the multidisciplinary nature of nurse retention and turnover intention in public healthcare. Focusing on recent evidence, Scopus and Web of Science were selected for their broad coverage of nursing research, workforce management, employee retention, and healthcare organisational research (Zhu & Liu, 2020). These databases were considered appropriate for identifying literature spanning nursing, healthcare management, and organisational workforce research.

Search Strategy

The search strategy was developed based on the review objectives and refined through preliminary scoping searches to maximise sensitivity and specificity. Boolean operators (AND, OR), phrase searching, truncation (*), and database-specific search fields were employed to retrieve relevant studies while minimising irrelevant records. Search syntax was adapted to the indexing system of each database, including TITLE-ABS-KEY for Scopus and Topic Search (TS) for Web of Science. The search terms were organised into three conceptual groups: nursing workforce, employee retention, and public healthcare. Within each group, synonymous terms were

combined using OR, while the three conceptual groups were combined using AND. Parentheses were used to explicitly define the Boolean relationships and minimise ambiguity, thereby enhancing search reproducibility.

The terms included “nursing workforce,” “nursing staff,” “registered nurses,” “nursing profession,” “employee retention,” “staff retention,” “intention to stay,” “turnover intention,” “retention strategy,” “leadership support,” “mentorship programme,” “professional development,” “career advancement,” “work environment,” “organisational commitment,” and “job satisfaction.” It mainly addressing contemporary nursing workforce challenges, including post-pandemic staffing pressures and challenging organisational dynamics (Buckley *et al.*, 2025).

Inclusion Criteria

The inclusion criteria covered peer-reviewed English-language empirical studies indexed in Scopus or Web of Science and conducted in public healthcare settings. Eligible quantitative, qualitative, or mixed-methods studies examined factors, strategies, interventions, or practices associated with nurse retention or turnover intention. Outcomes included actual retention, intention to stay, or turnover intention, treated as related but distinct. Only full-text studies focusing on registered nurses in government-funded hospitals or public health institutions were included.

Exclusion Criteria

The exclusion criteria involved publications such as systematic reviews, scoping reviews, meta-analyses, conference proceedings, editorials, commentaries, conceptual papers, letters, and grey literature including theses or institutional reports. Studies centered solely on private healthcare contexts, non-nursing personnel, or unrelated workforce outcomes were also excluded to maintain focus on retention issues unique to the public sector nursing workforce.

Search and Screening Results

A total of 817 records were retrieved from the database searches. Following the removal of 111 duplicates, 706 studies proceeded to title and abstract screening. Based on the predefined inclusion and exclusion criteria, 524 studies were excluded, and 182 full-text articles were assessed for eligibility. At this stage, reasons for exclusion were recorded and categorised into three predefined categories: wrong population, wrong setting, and wrong outcome/topic of interest. Of the 182 full-text articles assessed for eligibility, 162 were excluded, comprising 32 articles with an ineligible population, 70 articles conducted in an ineligible or non-public healthcare setting, and 60 articles that did not address the outcomes or topic specified in the eligibility criteria, resulting in 20 studies being included in the final thematic synthesis. The study selection process is illustrated in Figure 1.

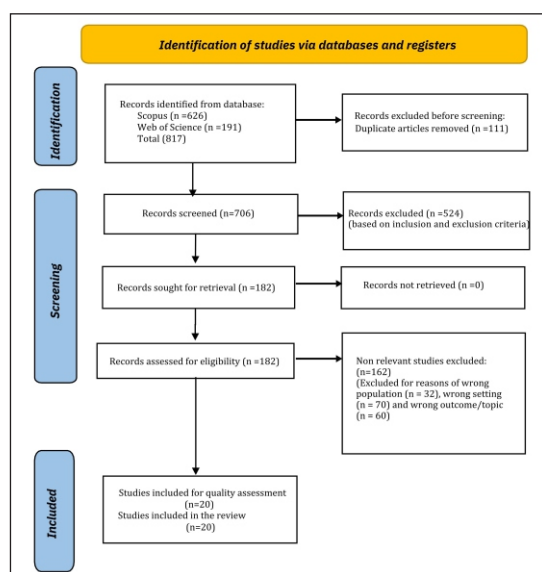


Figure 1: The Study Selection Process

Quality Assessment

The methodological quality of the included studies was assessed independently by two reviewers using an adapted six-item checklist informed by Kitchenham *et al.* (2009). It was used as a methodological reference for conducting a systematic literature review rather than as a software-engineering methodology. Its guidance provides a structured and transparent approach to key SLR processes, including study identification and selection, quality assessment, data extraction, and synthesis. In the present review, this approach were applied to nursing and public healthcare evidences and were complemented by PRISMA 2020 to guide transparent reporting.

Table 1: Quality Assessment Checklist

Criteria/ Question	
Q1	Is the study focusing on employee retention or turnover intention of public healthcare nurses?
Q2	Is the study context or intervention clearly described?
Q3	Is the data or evidence source adequately explained?
Q4	Is the analysis or reasoning logical and unbiased?
Q5	Are findings or recommendations clearly interpreted and applicable?
Q6	Does the study highlight implications or future directions?

Each item was scored as 1 when the criterion was adequately addressed and 0 when it was not, producing a total score ranging from 0 to 6. Studies scoring ≥ 3 were considered to have met the minimum quality threshold for inclusion in the synthesis. Disagreements between reviewers were resolved through discussion and, where necessary, consultation with a third reviewer. The appraisal was used to support interpretation of the evidence and was not treated as a formal risk-of-bias or certainty-of-evidence assessment. The questions used for quality assessment were shown in Table 1.

Table 2: Quality Assessment of Included Studies

Author (Year)	Q1	Q2	Q3	Q4	Q5	Q6	Quality Score
Arzani <i>et al.</i> (2025)	1	1	1	0.5	1	1	5.5
Zheng <i>et al.</i> (2025)	1	1	1	0.5	1	1	5.5
Lee & Shin (2025)	1	1	1	0.5	1	1	5.5
Kiptulon <i>et al.</i> (2025a)	1	1	1	0.5	1	1	5.5
Atingabili <i>et al.</i> (2025)	1	1	1	0.5	1	1	5.5
Liu <i>et al.</i> (2025)	1	1	1	1	1	1	6
Cho & Steege (2025)	1	1	1	0.5	1	1	5.5
Gold (2025)	1	1	1	0.5	1	1	5.5
Ditlopo <i>et al.</i> (2024)	1	1	1	1	1	1	6
Durmuş <i>et al.</i> (2024)	1	1	1	0.5	1	1	5.5
Ohue & Menta (2024)	1	1	0.5	0.5	1	1	5
Boudreau & Rhéaume (2024)	1	1	1	1	1	1	6
Wong <i>et al.</i> (2024)	1	1	1	1	1	1	6
Kwon & Song (2024)	1	1	1	1	1	1	6
Kida & Takemura (2024)	1	1	1	1	1	1	6
Lorber & Dobnik, (2023)	1	1	1	1	1	1	6
Pahlevan Sharif <i>et al.</i> (2023)	1	1	1	1	1	1	6
Yusandra & Diana (2022)	1	1	0.5	0.5	1	1	5
Ki & Choi-Kwon, (2022)	1	1	1	1	0.5	1	5.5
Chang <i>et al.</i> (2021)	1	1	1	1	1	1	6
Mean score: 5.73 $\pm$ 0.30							

The quality appraisal scores indicated that the included studies generally met the predefined appraisal criteria. The quality appraisal scores of the 20 included studies ranged from 5.0 to 6.0 out of 6, with a mean score of 5.73 ± 0.30 , indicating relatively limited variation in the overall quality scores across the included studies. Of the 20 selected studies, nine achieved the maximum quality score of 6.0, while most of the remaining studies scored between 5.0 and 5.5. No study scored below the predetermined inclusion threshold of 3.0. Lower scores were primarily associated with partially reported analytical procedures or limited

descriptions of evidence sources. This results suggest that the included studies have sufficient robust evidence base for thematic synthesis. The results of the quality assessment of the included studies are shown in Table 2.

Data Extraction and Data Collection

Data were independently extracted by two reviewers using a structured form covering study characteristics, setting, design, population, sample, retention-related outcomes, organisational factors or strategies, key findings, and quality appraisal scores. Discrepancies were resolved through discussion and consensus, with third-reviewer consultation where necessary. Extracted data were organised in a study characteristics matrix and used for descriptive and thematic synthesis. Given heterogeneity in study designs, outcomes, and organisational strategies, extraction focused on information directly relevant to the review question and did not support pooled effect estimates. This approach ensured that findings were synthesised according to the reported evidence across the included studies.

Data Analysis and Synthesis

Descriptive characteristics were summarised using frequencies, percentages, and narrative descriptions of publication and geographical patterns. The analysis considered publication year, country, setting, study design, population, variables, outcomes, and organisational factors or strategies. Relevant findings were initially coded according to reported concepts and characteristics, with similar codes grouped into broader categories. These categories were reviewed across studies to identify recurring patterns and relationships. Two reviewers independently conducted the coding, resolving differences through consensus and third-reviewer consultation where necessary. No formal inter-coder reliability statistic was calculated. The resulting themes were synthesised into an overarching framework of retention strategies for the public healthcare nursing workforce.

Thematic synthesis was guided a priori by the JD-R model to interpret findings in relation to job demands, job resources, and retention-related outcomes. The framework provided a theoretical lens without imposing predetermined categories or excluding relevant evidence. Given heterogeneity across study designs, populations, interventions, outcomes, and measurement approaches, the synthesis did not compare or rank strategy effectiveness. Instead, strategies were synthesised according to reported findings, while frequency of occurrence across studies was not interpreted as evidence of greater effectiveness. This approach supported an integrated interpretation of retention-related evidence while maintaining the distinct findings and contexts reported across the included studies.

RESULTS

Table 3: Characteristics of Included Studies

Article	Country	Name of Journal	Study Design	Setting	Population	Main Variable	Outcomes	Key Retention Strategy
Arzani <i>et al.</i> (2025)	Iran	Scientific Reports	Cross-sectional	Public healthcare	Nurses in QUMS teaching hospitals	Career plateau; job burnout; turnover intention	Turnover intention	Reduce burnout, promote career development
Zheng <i>et al.</i> (2025)	China	BMC Nursing	Cross-sectional	Public healthcare	New nurses from 6 hospitals	Professional identity; psychological capital; achievement motivation	Turnover intention	Strengthen professional identity; psychological capital
Lee & Shin (2025)	South Korea	Journal of Nursing Management	Cross-sectional	Public healthcare	Gen Z nurses	Work-life balance; organisational commitment; night shifts; salary; mentoring; nursing work environment	Turnover intention	Improve support for Gen Z nurses, reduce workload stress

Kiptulon <i>et al.</i> (2025a)	Kenya	BMC Nursing	Cross-sectional	Public healthcare	Nurses from major referral hospitals	Organisational culture; work-related stress; job satisfaction; demographic factors	Job turnover intention; professional turnover intention	Supportive culture; manage stress; improve job satisfaction
Atingabili <i>et al.</i> (2025)	Pakistan	Frontiers in Public Health	Cross-sectional	Public healthcare	Registered nurses	Workplace bullying; emotional exhaustion; job engagement; climate for conflict management	Turnover intention	Anti-bullying policies; organisational justice
Liu <i>et al.</i> (2025)	China	Nursing Open	Cross-sectional	Public healthcare	Operating room nurses from 12 hospitals	Professional mission; professional identity; job burnout	Turnover intention	Professional mission; reduce burnout
Cho & Steege (2025)	USA	Journal of Nursing Management	Cross-sectional	Public healthcare	Registered hospital nurses	Authentic leadership; psychological safety; missed nursing care	Turnover intention	Improve authentic leadership; psychological safety
Gold (2025)	USA	Clinical Nurse Specialist	Nonexperimental correlational study	Public healthcare	Registered nurses in psychiatric-mental health inpatient setting	Leadership empowerment behaviours; coaching for innovative performance	Turnover intention	Coaching-based leadership; mentorship
Ditlopo <i>et al.</i> (2024)	South Africa	BMC Nursing	Cross-sectional	Public healthcare	Nurses from public primary healthcare clinics	Nurse practice environment; workload; professional support; job satisfaction	Intention to leave	Improve nurses' work environment; strengthen staffing
Durmuş <i>et al.</i> (2024)	Turkey	International Nursing Review	Cross-sectional	Public healthcare	Nurses from university hospital	Workplace incivility; work stress; psychological resilience; presenteeism	Turnover intention	Civility climate; resilience development
Ohue & Menta (2024)	Japan	Nursing Reports	Intervention study without control group	Public healthcare	Nurses in acute-care hospitals	CBT-based mentorship; stress; burnout; coping; irrational beliefs	Intention to leave	CBT mentorship
Boudreau & Rhéaume (2024)	Canada	Western Journal of Nursing Research	Cross-sectional	Public healthcare	Registered nurses in hospital	Work environment; COVID-19 impact; scope of practice; missed nursing care; emotional exhaustion	Intention to leave	Improve staffing; autonomy; workplace support
Wong <i>et al.</i> (2024)	Hong Kong	Journal of Clinical Nursing	Cross-sectional	Public healthcare	Registered nurses in hospital	Job demands; burnout; pay level satisfaction	Organisational and professional turnover intention	Reduce job demands; enhance pay satisfaction
Kwon & Song (2024)	South Korea	Journal of Nursing Management	Cross-sectional	Public healthcare	Nurses caring for COVID-19 patients	Emotional labour; positive psychological capital	Turnover intention	Build psychological capital; emotional support

Kida & Takemura (2024)	Japan	International Journal of Nursing Studies	Cross-sectional	Public healthcare	Shift-work nurses	Shift assignments; organisational justice; work-life control	Turnover intention	Fair shift scheduling; rest allocation
Lorber & Dobnik, (2023)	Slovenia	Journal of Nursing Management	Cross-sectional	Public healthcare	Acute care nurses from 4 hospitals	Work-life quality; leadership support; teamwork; workload; workplace well-being; work satisfaction	Work-life quality associated with nurse retention	Improve work-life quality; leadership support
Pahlevan Sharif <i>et al.</i> (2023)	Iran	Nursing Open	Cross-sectional	Public healthcare	Nurses from 2 public hospitals	Organisational support; pay satisfaction; job satisfaction; life satisfaction	Turnover intention	Organisational support; enhance job satisfaction
Yusandra & Diana (2022)	Indonesia	Nursing Practice Today	Descriptive-correlational	Public healthcare	Nurses from hospital	Mentorship programme; job satisfaction	Nurse retention and intention to stay	Structured mentorship
Ki & Choi-Kwon, (2022)	South Korea	Journal of Advanced Nursing	Prospective longitudinal cohort (secondary analysis)	Public healthcare	Shift-work nurses	Sleep disturbance; fatigue; depression	Turnover intention and actual turnover	Improve health monitoring; safer shift systems
Chang <i>et al.</i> (2021)	Taiwan	Journal of Nursing Management	Two-wave study	Public healthcare	Nurses from hospital	Robot-enabled professional task engagement; robot-reduced non-professional task engagement; job satisfaction; perceived health improvement	Professional turnover intention	Introduce robotic assistance

Descriptive Analysis

Descriptive analysis covered 20 studies published between 2021 and 2025. Eight studies (40.0%) were published in 2025, seven (35.0%) in 2024, two (10.0%) in 2023, two (10.0%) in 2022, and one (5.0%) in 2021. Geographically, 14 studies (70.0%) were conducted in Asia, including Turkey, while six (30.0%) were conducted outside Asia. All studies involved nurses in public healthcare settings, and 15 (75.0%) used cross-sectional designs. Detailed study characteristics are presented in Table 3.

Table 4: Theme Mapping of the Supporting Studies

Theme	Supporting studies	Frequency
Organisational Culture	Cho & Steege, 2025; Gold, 2025; Zheng <i>et al.</i> , 2025; Atingabili <i>et al.</i> , 2025; Liu <i>et al.</i> , 2025; Kiptulon <i>et al.</i> , 2025a; Durmuş <i>et al.</i> , 2024; Boudreau & Rhéaume, 2024; Ditlopo <i>et al.</i> , 2024; Kida & Takemura, 2024; Lorber & Dobnik, 2023	11
Workload Management	Arzani <i>et al.</i> , 2025; Lee & Shin, 2025; Wong <i>et al.</i> , 2024; Kwon & Song, 2024; Kida & Takemura, 2024; Ki & Choi-Kwon, 2022; Chang <i>et al.</i> , 2021	7
Career Development	Arzani <i>et al.</i> , 2025; Gold, 2025; Zheng <i>et al.</i> , 2025; Liu <i>et al.</i> , 2025; Ohue & Menta, 2024; Yusandra & Diana, 2022	6
Psychological Wellbeing	Liu <i>et al.</i> , 2025; Zheng <i>et al.</i> , 2025; Kwon & Song, 2024; Ohue & Menta, 2024	4
Reward and Recognition	Gold, 2025; Lee & Shin, 2025; Arzani <i>et al.</i> , 2025; Wong <i>et al.</i> , 2024; Ditlopo <i>et al.</i> , 2024; Pahlevan Sharif <i>et al.</i> , 2023	6

Thematic Analysis

Table 4 presents the thematic mapping of the included studies and the number of studies supporting each theme. The frequency reflects the breadth of representation within the evidence base and should not be interpreted as evidence of comparative effectiveness or certainty. Organisational culture received the broadest representation across the included studies, whereas psychological well-being emerged as an additional and relatively underrepresented theme. Technology-based approaches, particularly robotic assistance, were supported by only one included study (Chang *et al.*, 2021).

Supportive Organisational Culture

Organisational culture was associated with nurse retention and turnover intention (Kiptulon *et al.*, 2025a). Supportive leadership was linked to improved communication, trust, and professional relationships (Boudreau & Rhéaume, 2024). Authentic leadership and psychological safety were associated with lower turnover-related outcomes (Cho & Steege, 2025), while coaching-based leadership and mentorship may support retention (Gold, 2025). Professional identity and psychological capital were associated with turnover intention among new nurses (Zheng *et al.*, 2025), while workplace bullying was associated with turnover intention (Atingabili *et al.*, 2025).

Professional mission and identity were examined in relation to turnover intention, with burnout identified as an important factor (Liu *et al.*, 2025). Workplace incivility was associated with turnover intention through work stress and psychological resilience (Durmuş *et al.*, 2024). The nurse practice environment, professional support, and workload were associated with job-related outcomes (Ditlopo *et al.*, 2024). Organisational justice and fair shift arrangements were associated with turnover intention (Kida & Takemura, 2024), while leadership support, teamwork, work-life quality, autonomy, and workplace support were relevant to retention and intention to leave (Lorber & Dobnik, 2023; Boudreau & Rhéaume, 2024).

Workload Management

Workload-related conditions were associated with turnover outcomes, including career plateau, job burnout, job demands, emotional labour, and psychological capital (Arzani *et al.*, 2025). High job demands and burnout were linked to turnover intention, with pay satisfaction influencing this relationship (Wong *et al.*, 2024). Emotional labour and psychological capital further highlighted the role of emotional demands (Kwon & Song, 2024). Shift assignments, organisational justice, work-life control, work-life balance, and night-shift demands were also relevant (Kida & Takemura, 2024). Among Generation Z nurses, work-life balance, night shifts, workload stress, and the work environment were associated with turnover intention (Lee & Shin, 2025). Robotic assistance may reduce non-professional tasks, although evidence remains limited (Chang *et al.*, 2021). Sleep disturbance, fatigue, and depression were also associated with turnover intention and actual turnover among shift-work nurses (Ki & Choi-Kwon, 2022).

Career Development

Career stagnation and limited opportunities for professional growth were associated with higher turnover intention among nurses (Arzani *et al.*, 2025). Mentorship programmes supported nurse retention, job satisfaction, and intention to stay, particularly by providing structured support for nurses' professional development (Yusandra & Diana, 2022). Coaching and mentorship were identified as leadership approaches that may support nurse retention (Gold, 2025). CBT-based mentorship also addressed burnout and supported nurses' coping and motivation, indicating its potential role in reducing turnover (Ohue & Menta, 2024). Professional identity, psychological capital, and achievement motivation were associated with turnover intention among new nurses, highlighting the importance of strengthening professional development and identity (Zheng *et al.*, 2025). Professional mission and identity were also linked to turnover intention through burnout among operating room nurses, suggesting the relevance of career-related meaning and professional development (Liu *et al.*, 2025).

Psychological Well-being

Psychological capital and emotional factors were associated with nurses' turnover intention, highlighting the importance of psychological resources in managing work-related pressures (Kwon & Song, 2024).

Professional mission and identity were also examined in relation to turnover intention, with burnout identified as an important factor in this relationship (Liu *et al.*, 2025). Positive psychological capital, including hope, optimism, resilience, and self-efficacy, was associated with lower turnover intention among nurses (Zheng *et al.*, 2025). Mentorship using cognitive behavioural therapy helped address burnout and support nurses' coping and motivation, suggesting the value of combining psychological and organisational support (Ohue & Menta, 2024).

Reward and Recognition

Reward and recognition were associated with nurse retention and turnover-related outcomes, particularly through remuneration, job satisfaction, and workload conditions (Wong *et al.*, 2024). Career plateau and burnout were linked to turnover intention, highlighting the relevance of career development opportunities (Arzani *et al.*, 2025). Organisational support and intrinsic and extrinsic incentives were associated with retention, job satisfaction, and intention to stay (Pahlevan Sharif *et al.*, 2023). Coaching and leadership practices may support retention through professional development (Gold, 2025). Among Generation Z nurses, work-life balance, organisational commitment, and salary were associated with turnover intention, while autonomy and professional support were relevant to the work environment (Lee & Shin, 2025). Similarly, professional support and autonomy in supportive practice environments were associated with job-related outcomes in public primary healthcare settings (Ditlopo *et al.*, 2024).

DISCUSSION

The findings indicate that nurse retention and turnover intention in public healthcare settings are shaped by the interaction of organisational conditions, occupational demands, and individual resources rather than by a single organisational practice. This pattern suggests that retention is embedded within the broader conditions under which nursing work is organised.

Principal Findings

Organisational culture emerged as the most frequently represented theme, with supportive leadership, psychological safety, communication, teamwork, autonomy, and organisational support associated with favourable retention-related outcomes. Conversely, bullying, incivility, unsupportive leadership, and poor organisational conditions were associated with turnover intention. Excessive workload, staffing pressures, and fatigue may deplete nurses' resources, whereas fair scheduling, adequate staffing, and balanced workload distribution may support retention (Hirschmüller *et al.*, 2025).

Career development, psychological well-being, and reward and recognition further highlight the multidimensional nature of retention. Professional growth, psychological resources, fairness, and organisational support were associated with retention-related outcomes. Although robotic assistance may reduce non-professional tasks, evidence for technology-enabled retention remains limited.

Comparison with Previous Reviews

The findings are consistent with previous reviews while extending the evidence base in a more specific context. Pressley and Garside (2023) synthesised factors influencing registered nurses' intention to stay and identified environmental, relational, and individual influences. Kiptulon *et al.* (2025b), through an umbrella review similarly identified early-career interventions, leadership, work environment, organisational factors, individual factors, and innovation and technology as relevant areas of nurse retention.

The present review extends this literature by focusing specifically on recent primary empirical studies published between 2021 and 2025 involving registered nurses in public healthcare settings. It also considers actual retention, intention to stay, and turnover intention as conceptually distinct outcomes. This public-sector focus provides a more context-specific synthesis than previous reviews of nursing practice environment, retention, and turnover intention (Figueiredo *et al.*, 2025).

Theoretical Interpretation

The results can be interpreted through the Job Demands-Resources (JD-R) model. Within this framework, excessive workload, staffing pressures, work-related stress, and emotional demands represent job

demands that may deplete nurses' physical and psychological resources. Conversely, supportive leadership, organisational support, career development, recognition, and psychological support represent job resources that may strengthen motivation, engagement, and intention to remain (Hwang & Yi, 2025).

Job demands and resources should be considered together, as supportive leadership, psychological well-being, career development, and recognition may strengthen retention but can be constrained by excessive workload and staffing limitations (Hwang & Yi, 2025). The JD-R model therefore highlights interactions between job demands, organisational resources, nurses' well-being, motivation, and intention to remain (Alyahya et al., 2026).

Unexpected Findings

This review found that technology-based retention strategies were minimally represented. Only Chang *et al.* (2021) examined robotic assistance in relation to nurses' professional task engagement and turnover intention. Although technology may have potential to reduce non-professional workload, this evidence is insufficient to establish its effectiveness as a retention strategy. Thus, it suggests that technology-enabled workforce solutions remain an emerging rather than established area of nurse retention strategy.

Evidence Gaps

Several gaps remain in the current evidence. The predominance of cross-sectional studies limits causal interpretation, particularly regarding whether specific organisational practices produce sustained improvements in retention. Longitudinal and intervention-based studies are therefore needed to examine changes in turnover intention and, importantly, actual retention over time.

.Limitations

The search was limited to English-language studies indexed in Scopus and Web of Science, potentially excluding relevant evidence and grey literature. Cross-sectional designs limited causal interpretation, while inter-rater reliability was not statistically assessed. The evidence was predominantly Asian (70%), limiting generalisability. The quality checklist was not validated or design-specific, and no formal risk-of-bias assessment was conducted. Thematic coding may involve interpretive bias, while technology-based strategies were represented by only one study.

Future Scope

The evidence is geographically concentrated and methodologically heterogeneous, requiring further research across non-Asian public healthcare systems and stronger evaluation of technology-supported, psychological, and integrated organisational approaches. Limited comparative evidence also prevents conclusions about the relative effectiveness of retention strategies. Comparative, longitudinal, and intervention-based studies are therefore needed to identify contextually appropriate approaches

CONCLUSION

This review identified five interconnected themes associated with nurse retention and turnover intention: supportive organisational culture, workload management, career development, psychological well-being, and reward and recognition that interpreted through the JD-R framework. These findings highlight the importance of considering retention through an integrated organisational perspective rather than a single strategy. Future research should prioritise longitudinal and intervention-based studies across diverse public healthcare contexts.

The findings have several evidence-linked practical implications for public healthcare organisations. The consistent association of supportive leadership, psychological safety, communication, teamwork, and organisational support with retention-related outcomes indicates the relevance of strengthening supportive organisational environments. Evidence linking workload, staffing pressures, fatigue, and burnout with turnover-related outcomes highlights the importance of considering workload distribution, staffing capacity, and equitable scheduling. Career development through mentorship, professional development, specialisation, and advancement may support commitment and retention. Psychological well-being interventions, including resilience, psychological capital, counselling, and cognitive behavioural approaches, may complement

organisational support. Pay satisfaction, recognition, autonomy, and perceived fairness are also relevant to retention. Given the predominantly Asian evidence base, these implications should be interpreted contextually across public healthcare systems.

CReditAuthorship Contribution Statement

L. A.: Conceptualization, Methodology, Validation, Formal Analysis. Writing - Original Draft, Writing - Review and Editing, Project Administration. **N. M.:** Supervision, Conceptualization, Methodology, Validation, Formal Analysis. Writing - Original Draft, Writing - Review and Editing. **D. R. S. I. S.:** Conceptualization, Methodology, Validation, Writing - Review and Editing.

AI Assistant Declaration

During the preparation of this work, the author(s) used an AI-based writing assistant to improve the clarity, flow, and academic language of the manuscript. The tool was not used for study design, data collection, data analysis, interpretation of findings, or drawing conclusions. The author(s) reviewed and edited the content as needed and take full responsibility for the content of this publication.

Conflict of Interest

The authors declare that they have no competing interests.

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