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Nurse Retention in Saudi Arabia: A Scoping Review of Intent-To-Stay Determinants (2020–2025)

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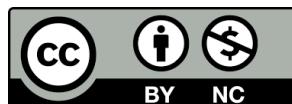
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ABSTRACT

Background: Nurse retention is a major workforce concern in Saudi Arabia, where the health system depends heavily on an expatriate workforce and Saudization under Vision 2030 has intensified interest in retention. This scoping review aimed to map and synthesize the organisational, psychosocial, and demographic factors associated with nurses' intent to stay (ITS), with turnover intention/intention to leave used as an inverse indicator, in Saudi Arabian healthcare organisations.

Methods: Following the Arksey and O'Malley framework as advanced by the Joanna Briggs Institute and reported per PRISMA-ScR, using the Population-Concept-Context framework, five databases (Google Scholar, Semantic Scholar, CrossRef, Scopus, and OpenAlex) were searched for peer-reviewed empirical studies published from January 2020 to March 2025. After duplicate removal and independent two-reviewer screening, 14 studies were included; discrepancies were resolved by consensus.

Results: Ten thematic determinant domains were identified. Job satisfaction, work-environment quality, and leadership style were most consistently associated with ITS across the 14 studies. Additional factors included compensation equity, workload and staffing adequacy, nationality and expatriate status, interprofessional communication, organisational commitment, and burnout. Across a predominantly cross-sectional base, job satisfaction was frequently an intervening variable linking structural conditions to retention outcomes.

Conclusion: Strengthening retention may require multi-level approaches spanning leadership development, equitable remuneration, supportive work environments, manageable workloads, and professional advancement, aligned with Vision 2030.

Keywords: Nurses; Intent to stay; Turnover intention; Job satisfaction; Leadership; Saudi Arabia

INTRODUCTION

Nurses constitute the largest group of health workers globally and have a direct impact on patient care, patient safety, and the sustainability of health systems (1). The International Council of Nurses (ICN) has estimated a global shortfall of several million nurses by 2030, threatening healthcare staffing stability across all regions (2). Turnover undermines institutional performance, increases recruitment and training costs, and disrupts the continuity of care (3,4).

These pressures are intensified in Saudi Arabia by rapid population growth, the ambitious Health Sector Transformation Program under Vision 2030, and the highly segmented composition of the nursing workforce. Approximately 60–70% of nursing staff are internationally recruited, and an ongoing Saudization initiative aims to nationalize the nursing profession (1). This structural arrangement creates workforce-retention dynamics that have, until recently, been under-represented in the international literature.

Conceptual Distinction Between Intent to Stay and Turnover Intention

This review should be interpreted in light of an important conceptual clarification. Intent to stay (ITS) and turnover intention are theoretically distinct but related constructs. ITS reflects a positive orientation toward retention, in which enabling factors such as job satisfaction, organisational commitment, and psychological safety are present in the nurse's work (4,5). Turnover intention, by contrast, reflects a withdrawal orientation, the cognitive decision to leave in response to dissatisfaction, stress, or perceived inequity (6,7).

Although conceptually distinct, the two constructs are typically strongly and inversely associated empirically, such that higher ITS is generally associated with lower turnover intention, and vice versa (5,8). Following the rationale of published scoping reviews in this field, this review adopted an inclusive operational definition encompassing ITS together with conceptually related constructs (turnover intention, intention to leave, and quit intention). This approach was adopted because the Saudi empirical literature does not consistently conceptualize ITS as a stand-alone construct. To preserve conceptual

precision, however, findings measured directly as intent to stay are distinguished from findings measured as turnover intention/intention to leave throughout the synthesis, and turnover intention is treated as an inverse indicator of retention rather than as an identical construct.

Although several Saudi studies have examined turnover intention, comparatively few have examined ITS as a positive phenomenon in its own right. An explicit focus on ITS supports a shift from reactive to proactive, ongoing workforce planning, consistent with the aims of Vision 2030 (5,9).

In data from Saudi hospitals, job satisfaction, organisational commitment, structural empowerment, and quality of work life are commonly reported as correlates of ITS (5,10). Conversely, inequitable salaries, perceived nationality-based discrimination, high workload, and limited career progression are associated with higher intention to leave, particularly among expatriate nurses (11,12).

Although the volume of primary research is increasing, no prior review has systematically mapped and synthesized the determinants of nurses' intent to stay in the Saudi context. This gap constrains the ability of policymakers and healthcare leaders to design integrated, evidence-informed retention strategies. The present scoping review addresses this gap by systematically mapping and synthesizing the factors associated with nurses' ITS within Saudi Arabian healthcare settings (2020–2025) and by identifying theoretical, methodological, and contextual gaps for future research and workforce policy.

The review aligns with global development priorities relevant to nurse retention, including SDG 3 (Good Health and Well-Being), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequalities), insofar as it addresses disparities in compensation, career opportunities, and empowerment across nursing groups (13).

METHODS

Design

A scoping review was undertaken using the methodological framework of Arksey and O'Malley (14) as advanced by the Joanna Briggs Institute (JBI) (15). The review was reported in accordance with the Preferred

Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) (16). A scoping review design was selected because the aim was to map the scope, extent, and characteristics of the evidence and to identify gaps in the literature, rather than to pool effect estimates or generate pooled clinical recommendations as in a systematic review or meta-analysis.

Research Question and PCC Framework

The guiding research question was: What factors are associated with nurses' intent to stay in healthcare organisations in Saudi Arabia? The Population-Concept-Context (PCC) framework was applied as follows. Population: registered nurses and nursing personnel. Concept: intent to stay, retention intention, or related constructs, including turnover intention/intention to leave used as an inverse indicator. Context: healthcare settings in Saudi Arabia.

Search Strategy and Database Justification

Electronic searches were conducted in five databases, Google Scholar, Semantic Scholar, CrossRef, Scopus, and OpenAlex, for peer-reviewed empirical studies published between January 2020 and March 2025 (search executed February 2026). This timeframe was chosen to capture developments under Vision 2030 and the impact of COVID-19 on nurse retention.

The choice of databases combined an established bibliographic index with open-access discovery tools. Scopus provided broad coverage of peer-reviewed nursing and health-workforce literature. Google Scholar and Semantic Scholar were included to capture regional publications and literature less well indexed in traditional databases. To reduce bias toward subscription-based indexes, the open-access metadata aggregators OpenAlex and CrossRef were also searched. PubMed and CINAHL, two major nursing databases, were not directly searched; this is acknowledged as a limitation of the search strategy (see Limitations) rather than presented as fully offset by Scopus coverage and citation tracking.

A consistent Boolean search string was applied across databases: (nurse* OR "nursing staff") AND ("intent to stay" OR "intention to stay" OR "retention intention" OR "turnover intention") AND ("Saudi Arabia"). In Scopus, the syntax was: TITLE-ABS-KEY(nurs*) AND

TITLE-ABS-KEY("intent to stay" OR "retention intention" OR "turnover intention") AND TITLE-ABS-KEY("Saudi Arabia"). Reference lists of eligible papers were screened (backward citation tracking), and forward citation tracking was used to identify additional records.

Eligibility Criteria

Studies were included if they (a) enrolled registered nurses or nursing personnel in Saudi Arabian healthcare organisations; (b) assessed one or more of intent to stay, retention intention, or a related construct such as turnover intention/intention to leave used as an inverse indicator; (c) used quantitative, qualitative, or mixed-methods empirical designs; and (d) were published between January 2020 and March 2025. Studies of non-nursing healthcare professionals, studies not examining any ITS-related construct, studies conducted outside Saudi Arabia, and non-empirical publications (reviews, editorials, commentaries, and conference abstracts lacking primary data) were excluded.

Study Selection

After removal of duplicates, titles and abstracts were screened independently by two reviewers (A.A.A. and N.M.) using a standardized screening form. Full-text articles were retrieved for records meeting preliminary criteria and independently assessed against the full eligibility criteria. Discrepancies were resolved by discussion; where agreement was not reached, a third reviewer (A.A.H.) acted as arbitrator. Inter-rater agreement at full-text level was substantial (Cohen's $\kappa = 0.82$). The selection process is summarized in **Figure 1**.

Data Extraction

A structured charting form was used to extract author(s) and year, study title, design, setting, sample size and characteristics, key findings, identified ITS determinants, and measurement tools. Two reviewers extracted data independently and resolved discrepancies by consensus.

Quality Appraisal

Consistent with scoping-review methodology, quality appraisal was undertaken to characterise the methodological strength of

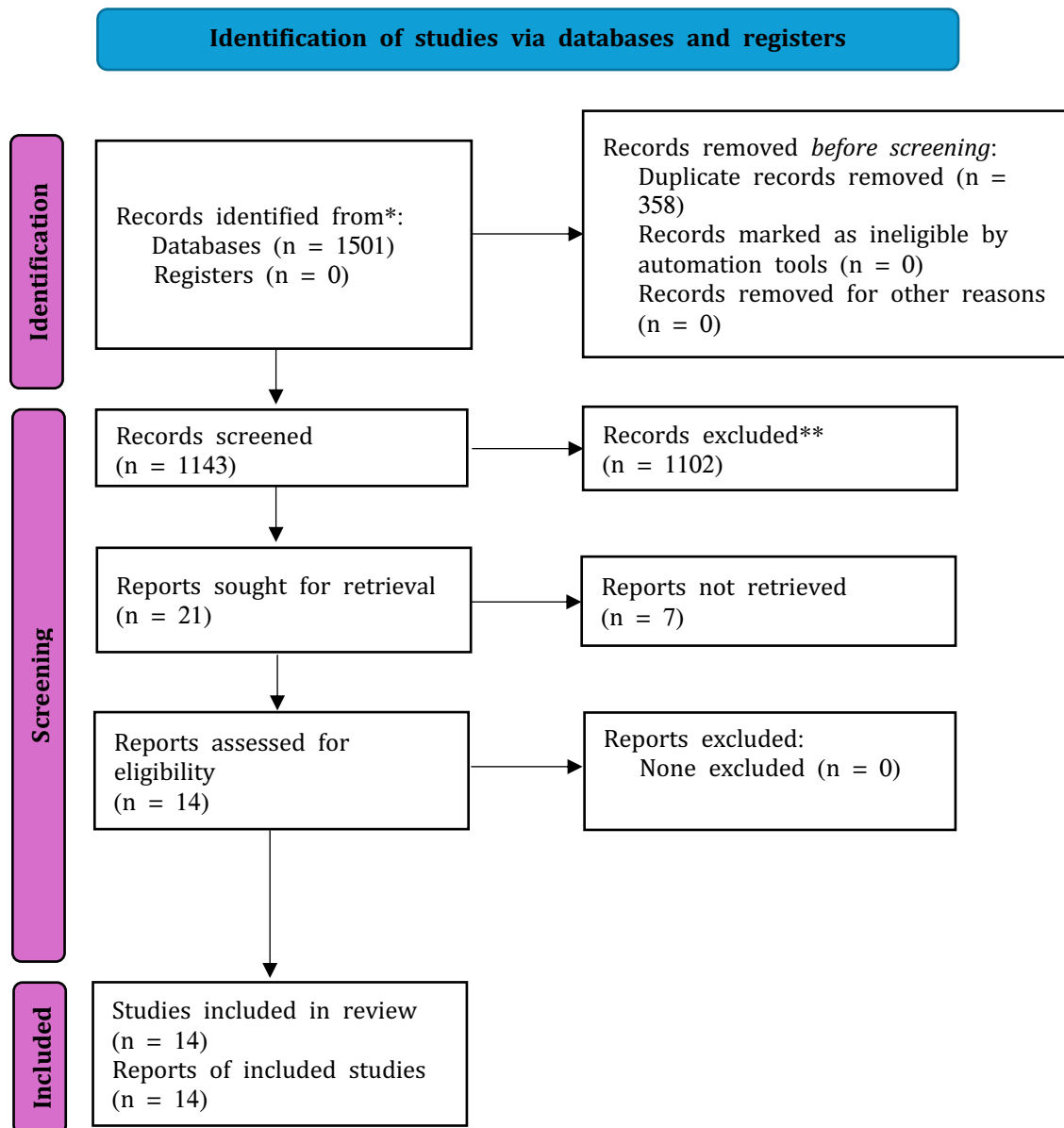
the evidence base rather than as a basis for excluding studies (15). Because all included studies used analytical cross-sectional designs, the JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies (eight domains, covering specification of inclusion criteria, valid and reliable measurement of exposure and outcome, identification and management of confounders, and appropriateness of statistical analysis) was applied. Two reviewers appraised each study independently, and differences were resolved by consensus. Results are then incorporated

into the interpretation of findings in the Discussion.

Data Synthesis

A descriptive narrative synthesis was conducted. Each study was inductively coded to identify determinants, which were grouped into thematic domains. Frequency counts were used to record how many of the 14 included studies reported each determinant. To characterise heterogeneity, sample sizes, geographic location, level of care, and measurement instruments were tabulated.

Figure 1: PRISMA-ScR flow diagram for the selection of studies on determinants of nurses' intent to stay in Saudi Arabia (2020–2025)



RESULT

A total of 1,501 records were identified, of which 358 were duplicates, leaving 1,143 for title and abstract screening. Records were excluded for the following reasons: focus not aligned with the review objectives ($n = 798$); review rather than primary empirical study ($n = 97$); study conducted outside Saudi Arabia ($n = 192$); out-of-scope population ($n = 33$); and not published in English ($n = 2$). Full text was sought for 21 records, of which 7 were unavailable (not open access). All 14 remaining full-text articles met the inclusion criteria and were included in the final review (Figure 1).

Characteristics of Included Studies

Fourteen studies were included; their characteristics are summarized in **Table 1**, and study-level details are presented in **Table 2**. Most were published during the COVID-19 pandemic period (2020–2022; $n = 9$, 64%), with the remainder in the post-emergency recovery period (2023–2025; $n = 5$, 36%). All included studies used quantitative analytical cross-sectional designs: descriptive correlational ($n = 9$, 64%), descriptive comparative ($n = 4$, 29%), and descriptive survey ($n = 1$, 7%). This design profile means the evidence base identifies associations rather than causal pathways and underscores the need for longitudinal and interventional research.

Table 1: Quality Appraisal of the 14 Included Studies Using the JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies

Author and Year	Inclusion criteria	Exposure measurement	Outcome measurement	Confounders identified	Confounders addressed	Valid methods	Statistical analysis	Overall rating
Al Bazroun et al. 2023 (6)	Yes	Yes	Yes	Yes	Partial	Yes	Yes	High
Albougami et al. 2020 (8)	Yes	Yes	Yes	Yes	Partial	Yes	Yes	High
Alenazy et al. 2023 (17)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High
Alharbi et al. 2020 (7)	Yes	Yes	Yes	Yes	Partial	Yes	Yes	High
Alilyyani et al. 2022 (22)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High
Al-Otaibi et al. 2024 (10)	Yes	Yes	Yes	Yes	Partial	Yes	Yes	High
Alreshidi et al. 2021 (26)	Yes	Yes	Yes	Partial	Partial	Yes	Yes	Moderate
Al-Sawad et al. 2025 (19)	Yes	Yes	Partial	Partial	Partial	Yes	Yes	Moderate
Alshaibani et al. 2024 (5)	Yes	Yes	Yes	Yes	Partial	Yes	Yes	High
Alshareef et al. 2020 (12)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High
Alsufyani et al. 2021 (20)	Yes	Yes	Yes	Yes	Partial	Yes	Yes	High
Al-Surimi et al. 2022 (21)	Yes	Yes	Yes	Yes	Partial	Yes	Yes	High
Falatah et al. 2021 (18)	Yes	Yes	Yes	Yes	Partial	Yes	Yes	High
Hossny et al. 2023 (23)	Yes	Yes	Yes	Partial	Partial	Yes	Yes	Moderate

Note: Appraisal characterised the methodological strength of the evidence base, consistent with scoping-review conventions (15); no study was excluded on the basis of quality. “Partial” indicates that the domain was addressed incompletely or reported with limited detail (e.g., confounding acknowledged but not statistically adjusted, or a single-item outcome measure). Ratings reflect reviewer consensus.

Table 2: Characteristics of the 14 Included Studies

Characteristic	N = 14	Percentage (%)
Year of publication		
2020–2022 (COVID-19 pandemic period)	9	64
2023–2025 (post-emergency/recovery period)	5	36
Research design		
Descriptive correlational	9	64
Descriptive comparative	4	29
Descriptive survey	1	7
Setting		
Public/military hospitals	11	79
Mixed/multiple settings	3	21
Sample-size range		
< 200 participants	3	21
200–500 participants	10	72
> 500 participants	1	7

Heterogeneity of the Evidence Base

Substantial heterogeneity was observed across the included studies. Sample sizes ranged from 152 (17) to 424 (8). Studies were conducted across several regions of Saudi Arabia: Western region (n = 3), Northern region (n = 1), Southwestern region (n = 1), Central region/Riyadh (n = 5), and multi-region or multi-centre designs (n = 4). Settings comprised public or military hospitals (n = 11, 79%) and mixed or multiple settings (n = 3, 21%). Measurement tools ranged from validated scales, such as the Practice Environment Scale of the Nursing Work Index (PES-NWI) and the Authentic Leadership Questionnaire (ALQ), to custom or adapted items, and psychometric reporting varied. This variation across samples, settings, and instruments limits direct comparison and should be considered when interpreting the synthesized findings (Table 3).

Determinants of Nurses' Intent to Stay

Ten thematic determinant domains were identified and are presented below in order of frequency across the 14 studies (Table 3). Frequency counts refer to the number of included studies reporting each determinant. Because most studies measured turnover intention/intention to leave rather than intent to stay directly, associations are described in the direction reported by each study, and

turnover intention is treated as an inverse indicator of retention.

Job satisfaction

Job satisfaction was the determinant most consistently associated with retention-related intentions, reported in six studies (5-8,17,18). Higher satisfaction was inversely associated with turnover intention and positively associated with organisational commitment. In several studies, job satisfaction was reported as an intervening variable linking job security (18), practice environment and participation in hospital affairs (7), and quality of work life (19) to retention-related outcomes; formal mediation was statistically tested only in a subset of studies (e.g., (18)).

Work environment and organisational climate

Favourable work environments were positively associated with ITS, or inversely associated with turnover intention, in six studies (5,7,10,17,20,21). Supportive, safe, and participatory climates were associated with lower quit intention (10,20), whereas inadequate resources, poor communication climate, and authoritarian cultures were associated with higher turnover intention.

Table 3: Summary of the 14 Included Studies and Identified Determinants of Nurses' Intent To Stay, Ordered By Reference Number

Authors and Year	Title (abbreviated)	Design	Key findings	Determinants of retention-related intentions
Al Bazroun et al. 2023 (6)	Job satisfaction and anticipated turnover among ICU nurses	Comparative cross-sectional	Overall job satisfaction was low and inversely associated with intention to leave ($P = .001$); nationality and salary were significant correlates.	Job satisfaction; nationality; salary; ICU work environment
Albougami et al. 2020 (8)	Factors affecting nurses' intention to leave their current jobs	Comparative cross-sectional	Poorer quality of life was associated with higher turnover intention; risk was elevated among single, Filipino/Indian nurses and those with lower salaries.	Quality of life; marital status; nationality; salary level
Alenazy et al. 2023 (17)	Practice environment, job satisfaction and intention to leave in critical-care nurses	Correlational cross-sectional	Practice environment was inversely associated with turnover intention ($r_s = -.277$); participation in hospital affairs and staffing scored lowest.	Practice environment; participation; staffing adequacy; job satisfaction
Alharbi et al. 2020 (7)	Work environments, emotional exhaustion, job satisfaction, and intent to leave	Correlational cross-sectional	Participation in hospital affairs was associated with all three outcomes; burnout and satisfaction were reported as mediators of the relationship with turnover.	Nurse participation; burnout; job satisfaction; staffing; leadership
Alilyyani et al. 2022 (22)	Authentic leadership, turnover intentions, and satisfaction with quality of care (SEM)	Correlational cross-sectional (SEM)	Authentic leadership was positively associated with team effectiveness, work engagement, and psychological safety; team effectiveness was inversely associated with turnover.	Authentic leadership; team effectiveness; work engagement; psychological safety
Al-Otaibi et al. 2024 (10)	Structural empowerment, resilience, and intent to stay among midwives and nurses	Convergent parallel mixed methods (cross-sectional quantitative phase)	Structural empowerment and resilience were positively associated with intent to stay among OB/GYN midwives and nurses.	Structural empowerment; resilience; participation; intent to stay
Alreshidi et al. 2021 (26)	Turnover among foreign nurses in Saudi Arabia	Cross-sectional descriptive survey	Professional growth was rated highest and housing/facilities lowest; wages and workload were primary correlates of expatriate-nurse turnover.	Compensation; workload; career development; living/working conditions
Al-Sawad et al. 2025 (19)	Nurses' quality of work life: determinants of job satisfaction and intent to leave (Eastern Province)	Correlational cross-sectional	Quality of nursing work life was positively associated with job satisfaction and inversely associated with turnover intention; job satisfaction partially mediated the QNWL–turnover relationship.	Quality of work life; job satisfaction (mediator); pay; turnover intention
Alshaibani et al. 2024 (5)	Job satisfaction, intent to stay, organisational commitment, and self-efficacy among clinical nurses (Riyadh)	Correlational cross-sectional	Moderate levels across variables with significant positive inter-correlations; non-Saudi nurses were at higher risk.	Job satisfaction; organisational commitment; self-efficacy; sociodemographic factors
Alshareef et al. 2020 (12)	Identifying factors influencing Saudi Arabian nurses' turnover	Correlational cross-sectional	Perceived discrimination and salary inequity were associated with higher turnover, particularly among Filipino nurses; supervisor support and autonomy were inversely associated.	Perceived equity; salary equity; supervisor support; autonomy; organisational commitment
Alsufyani et al. 2021 (20)	Work-environment perceptions and communication satisfaction on intention to quit	Predictive correlational	Work environment was positively associated with communication satisfaction; both were inversely associated with quit intention; mediation was statistically tested.	Work environment; communication satisfaction (mediation tested)
Al-Surimi et al. 2022 (21)	Impact of patient-safety culture on job	Comparative cross-sectional	Teamwork and organisational learning scored highest; communication	Safety culture; teamwork; staffing;

	satisfaction and intention to leave		openness and staffing scored lowest; female nurses showed elevated turnover risk.	communication; demographic factors
Falatah et al. 2021 (18)	Job security, job satisfaction, and turnover during reform and privatization	Correlational cross-sectional	Job satisfaction partially mediated the job-security–organisational-turnover relationship and fully mediated professional-turnover intention.	Job security; job satisfaction (mediator)
Hossny et al. 2023 (23)	Organisational climate and toxic leadership on intent to stay	Comparative descriptive (cross-sectional)	Toxic leadership was inversely associated with intent to stay; a positive organisational climate was associated with stronger retention.	Organisational climate; toxic leadership; authoritarian behaviour

Leadership and management style

Leadership was a prominent structural correlate of retention-related intentions across four studies (5,7,22,23). Authentic leadership was positively associated with team effectiveness, work engagement, and psychological safety, which were in turn associated with stronger retention-related outcomes (22). Toxic leadership behaviours, including authoritarianism and unpredictability, were inversely associated with ITS (23), consistent with international evidence linking leadership style to nurse retention (24,25).

Compensation and salary equity

In five studies, low or inequitable compensation was associated with increased turnover intention (5,6,8,12,26). Salary inequity was described not only in economic terms but also as a marker of institutional fairness, particularly where expatriate nurses perceived nationality-based pay differentials as inequitable (12,26).

Nationality and expatriate status

Perceived discrimination, salary inequity, and limited career progression were frequently associated with higher turnover intention among expatriate nurses, particularly those from the Philippines and India (5,6,8,12,26). This is a comparatively distinctive Saudi correlate that is less prominent in the international nursing literature. As discussed below, nationality is closely entangled with structural employment conditions and should not be interpreted as an independent determinant in isolation.

Workload and staffing adequacy

Five studies reported that higher workload and inadequate staffing were associated with

increased turnover intention, particularly in critical-care settings (7,10,17,21,26). Adequate staffing and resources were identified as necessary conditions for a favourable practice environment.

Communication, teamwork, and interprofessional relationships

Effective communication and interprofessional collaboration were positively associated with job satisfaction and inversely associated with burnout and turnover intention across four studies (7,20,21) and were reflected in the wider environment literature. Communication satisfaction was reported as a mediator between work-environment quality and quit intention (20).

Organisational commitment, self-efficacy, and professional empowerment

Higher organisational commitment, self-efficacy, and work engagement were associated with stronger retention-related intentions across four studies (5,10,12,22). These psychosocial resources appeared to buffer the relationship between adverse workplace conditions and retention-related outcomes.

Burnout and psychological well-being

In four studies, burnout and emotional exhaustion were associated with higher turnover intention and were frequently reported as intervening variables between adverse environmental conditions and retention-related outcomes (7,8,19,22). Retention-related intention worsened as reported physical and psychological quality of life decreased (8).

Participation in hospital affairs and shared governance

Participation in hospital affairs, although reported in only two studies (7,10), was a work-environment subscale associated with emotional exhaustion, job satisfaction, and retention-related outcomes. This suggests that structural-empowerment mechanisms may amplify the influence of other organisational resources on retention.

DISCUSSION

This scoping review mapped the empirical evidence on the determinants of nurses' intent to stay in Saudi Arabia during 2020–2025. The synthesis indicates that retention-related intentions are associated with an interlinked set of organisational, psychosocial, and demographic factors, within which job satisfaction was frequently reported as an intervening variable linking structural conditions to retention-related outcomes. Because the evidence base is cross-sectional, these relationships are described as associations rather than causal pathways.

Theoretical Integration

The findings can be organised using the Job Demands–Resources (JD-R) model (27) and are summarised in the proposed conceptual framework (Figure 2), which proposes that job demands (e.g., high workload, inadequate staffing, role conflict) may deplete nurses' energy and increase the risk of burnout and turnover, whereas job resources (e.g., supportive leadership, participatory governance, adequate compensation) may buffer these demands by promoting engagement and commitment. In this review, workload and understaffing were consistently reported as demands associated with turnover risk, whereas participation, interprofessional collaboration, and leadership were consistently reported as resources associated with stronger retention-related intentions. Because included studies were cross-sectional, the mediating role of burnout and emotional exhaustion is described as reported association; longitudinal designs are required to test these pathways.

Social Exchange Theory (28) offers additional interpretive traction. When nurses perceive fair rewards, recognition, and opportunities for advancement, they may be more likely to reciprocate through organisational loyalty and stronger ITS. Associations involving salary

equity and perceived discrimination are consistent with this perspective and suggest that difficulties retaining expatriate nurses may partly reflect perceived imbalance in the exchange relationship. These interpretations remain associational given the study designs.

Herzberg's two-factor theory (29) provides a further lens. "Hygiene" factors such as compensation, working conditions, and job security appear necessary but not by themselves sufficient for retention, and their absence is commonly associated with turnover. The reviewed literature suggests that longer-term "motivators", professional recognition, career progression, and meaningful work, are also associated with ITS.

Saudi-Specific Contextual Considerations

Several findings reflect features comparatively specific to the Saudi healthcare environment that are not fully captured by existing international retention frameworks. First, the nursing labour market is segmented by nationality: expatriate nurses constitute the majority of the workforce yet, in the reviewed studies, were reported to receive lower pay and less favourable employment conditions and to have fewer opportunities for permanent residency or career progression than Saudi nurses (12,26). This reflects structural employment conditions rather than culture alone, and retention strategies that do not address these conditions may be less effective. Importantly, because nationality is confounded with salary, contract type, tenure, occupational grade, and clinical setting, the association between nationality and retention should be interpreted with caution and not treated as an independent causal determinant.

Second, the high proportion of studies conducted in public or military hospitals (79%) may limit generalisability to the private sector, where work environment, remuneration, and job security can differ. Ongoing privatization under Vision 2030 may further affect employment conditions and organisational commitment in ways not yet reflected in the available evidence.

Third, because 64% of included studies were published during the COVID-19 period (2020–2022), some findings may partly reflect pandemic-era conditions of workload, staffing, and burnout rather than baseline conditions. Some associations may therefore be transient, and longitudinal data spanning pre- and post-

pandemic periods are needed to assess their persistence.

Global Comparisons

The core determinants identified here, job satisfaction, leadership, work environment, workload, and compensation, are broadly consistent with the international nurse-retention literature (3,4,24). However, the strength and direction of some associations appear context-dependent. The dynamics of an expatriate-dominated workforce, nationality-based compensation differentials, hierarchical organisational structures, and Vision 2030 reforms add retention dimensions that are less prominent in European and North American frameworks, underscoring the need for context-sensitive synthesis and policy.

CONCLUSION

This scoping review synthesized 14 empirical studies conducted during 2020–2025 and identified ten thematic domains associated with nurses' intent to stay in Saudi Arabia. Job satisfaction, work-environment quality, and leadership style were the most consistently reported correlates, with job satisfaction frequently reported as an intervening variable between organisational conditions and retention-related outcomes. The JD-R model offers a coherent framework for organising these associations, which remain cross-sectional and therefore non-causal.

Nationality and expatriate status emerged as comparatively distinctive Saudi correlates of increased turnover risk and warrant policy attention, with the caveat that nationality is entangled with structural employment conditions. Future research should prioritise longitudinal designs to examine temporal relationships, mixed-methods approaches to explore mechanisms, and intervention studies to evaluate targeted retention programs, including for expatriate nurses.

Considerations for Practice and Policy

Because the included evidence is cross-sectional and observational, the following are offered as considerations rather than as interventions demonstrated to improve retention. Local context, available resources, and institutional capacity should guide prioritisation and implementation.

At the institutional level, healthcare organisations may consider: leadership-development programs emphasising authentic, participatory, and supportive approaches; reviewing compensation practices for equity across nationality and role; monitoring staffing ratios and workload distribution, particularly in high-workload units such as critical care; involving nurses in governance and decision-making; developing well-being and burnout-prevention programs; and developing human-resource policies that support the integration and career development of internationally recruited nurses.

At the national level, government and regulatory bodies may consider: reviewing employment models for expatriate nurses to address structural inequities; aligning Saudization targets with retention strategies to avoid unintended consequences for workforce stability during transition; and investing in longitudinal data collection to evaluate the effects of Vision 2030 reforms on nurse-retention outcomes.

LIMITATIONS AND RECOMMENDATIONS

Several limitations should be considered. The search was restricted to January 2020–March 2025 and to English-language publications, potentially missing relevant Arabic-language and earlier studies. No systematic search of grey literature or conference proceedings was undertaken, which may introduce publication bias toward statistically significant findings. PubMed and CINAHL were not searched directly; although Scopus and citation tracking may have captured much of the relevant indexed literature, this remains a genuine limitation of the search strategy, and some eligible studies may have been missed.

The review combined studies measuring intent to stay with studies measuring turnover intention/intention to leave. Although these constructs are strongly and inversely associated, they are not identical, and their combination, together with variability in measurement instruments and the possibility of overlapping findings reported across related publications, is a limitation. All included studies used cross-sectional designs, so causal and temporal relationships between organisational determinants and retention-related intentions cannot be established. Methodological diversity (in designs, samples, regions, and measures) limited direct cross-study comparison. Finally, because most

studies were conducted in public and military hospitals, and a majority during the COVID-19 period, findings may not generalise to private-sector or primary-care settings or to non-pandemic conditions.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise, in relation to this manuscript.

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AUTHOR CONTRIBUTIONS

AAA: Conceptualisation, methodology, data curation, formal analysis, writing of original draft.

NM: Supervision, validation, writing, review & editing, corresponding author.

AAH: Supervision, validation, writing, review & editing.

RRD: Writing, review & editing, validation.

DA: Writing, review & editing, resources.

DECLARATION OF GENERATIVE AI USE

The authors declare that AI-assisted tools (QuillBot and Grammarly) were used solely for language enhancement and grammar correction during manuscript preparation. All intellectual content, analytical decisions, and interpretations were generated, reviewed, and revised by the authors, who take full responsibility for the accuracy, originality, and integrity of the final manuscript.

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