





Transforming Nursing Practices: A Comprehensive Review of Performance Improvement Strategies

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ABSTRACT

Introduction: Nurses play a vital role in healthcare systems, directly influencing patient care quality and outcomes. This study aims to identify and analyze strategies for improving nursing performance in Iran through a systematic review and metasynthesis, following PRISMA 2020 guidelines.

Methods: Data were collected from four electronic databases: Web of Science, Scopus, PubMed, and Embase. Qualitative studies and mixed methods focused on nursing performance in Iranian healthcare contexts were included. Data management and theme development were facilitated using MAXQDA qualitative analysis software.

Findings: Thirty-seven studies were included, identifying 10 key themes for improving nursing performance: leadership, organizational culture, self-efficacy, mental health support, continuous education, technological integration, working conditions, performance evaluation, recruitment and retention, and service quality improvement.

Conclusions: A holistic approach, including leadership development, supportive work environments, continuous education, and technology integration, is essential for enhancing nursing performance and healthcare outcomes in Iran.

1 | Introduction

Nurses, often regarded as the cornerstone of healthcare systems, play an essential role in delivering high-quality medical services and advancing public health. This vital professional group is tasked with a wide range of responsibilities, including direct patient care, collaboration with interdisciplinary medical teams, ensuring patient safety, and providing emotional support. Their contributions significantly shape patient experiences and influence clinical outcomes [1].

Globally, nurses represent the largest segment of the healthcare workforce, and their effective engagement is crucial for the

success of healthcare institutions. Statistics reveal that nurses provide at least 50% of health services, with this figure soaring to 80% in some countries [2]. The diverse roles of nurses spanning advisory, managerial, educational, research, and supportive functions are integral to the healthcare landscape. Numerous studies have demonstrated that the performance of nurses directly correlates with the quality of medical services and overall patient satisfaction [3].

Despite their critical contributions, nurses face a myriad of challenges in their professional roles, including heightened demands for efficiency, cost reduction, and management of

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work-related stress, all of which contribute to burnout. These challenges resonate with nursing professionals worldwide, underscoring the urgent need for performance improvement strategies that can be adapted and implemented across various healthcare systems [4]. The multifaceted nature of nursing, which requires extensive communication with healthcare teams, patients, and families, coupled with organizational pressures, exposes nurses to additional hurdles. Suboptimal performance can result in errors in patient care, longer hospital stays, and increased medical costs, with potentially severe repercussions, including significant injury or even patient mortality [5, 6].

Research has identified a link between poor nurse performance and various factors such as understaffing, negative feedback, low wages, inadequate working conditions, and insufficient training. These factors are commonly observed across various countries, underlining the global relevance of this study [7]. Hospitals, known for their demanding environments, can adversely impact the mental and physical well-being of nurses. While many nurses enter the profession as organized, compassionate, and motivated individuals, the cumulative effects of work-related stress can lead to fatigue and a higher likelihood of leaving the profession [6, 8].

Given the pivotal role of nurses in ensuring the quality of healthcare services and their direct impact on patient outcomes, it is imperative to conduct further research into the factors influencing nurse performance, not only in Iran but also in a global context [9]. This study aims to address critical gaps in the literature regarding nursing performance improvement strategies, contributing to international nursing research by providing insights that extend beyond localized perspectives. The notable lack of comprehensive reports in this area necessitates a qualitative approach to explore the motivations and strategies for improving hospital nurse performance from the perspectives of experts and stakeholders, thus enriching the global discourse on nursing.

This study aims to investigate strategies fo r enhancing nursing performance through a systematic review and meta-analysis conducted in Iran, while contributing to the international discourse on nursing practices and performance improvement. By situating these findings within a global framework, this study seeks to address existing gaps in nursing literature and provide insights relevant to diverse healthcare settings, thereby justifying its relevance for publication in journals with broader international audiences [10].

2 | Methods

2.1 | Design

Our systematic meta-synthesis review follows PRISMA 2020 guidelines [11] and employs the Thomas & Harden method [12, 13] for data analysis, which includes three stages: coding the text, creating descriptive themes, and formulating analytical themes. To enhance the depth of our analysis, we established a formal advisory group comprising experts from various healthcare disciplines, including nursing, public health, and qualitative research. This group provided ongoing feedback,

ensuring that diverse perspectives were integrated into our findings and interpretations.

2.2 | Search Strategy

This systematic meta-synthesis review was conducted in September 2024 using four primary electronic databases: Web of Science, Scopus, PubMed, and Embase. In collaboration with our librarian, we developed targeted search strategies due to a notable absence of comprehensive studies on our focus area. The primary search strategy used the following combination of keywords and Boolean operators:

(TITLE-ABS-KEY ("Healthcare professional*" OR "Nurse*" OR "Nursing" OR "Health worker*") AND ("Performance" OR "Effectiveness" OR "Competence" OR "Quality" OR "Skills" OR "Strategies" OR "Interventions") AND ("Iran" OR "Persian" OR "Islamic Republic"))

Our comprehensive search approach included:

- a) Health, healthcare, and interdisciplinary electronic databases;
- b) Gray literature sources (e.g., conference proceedings, dissertations);
- c) Manual searches of relevant specialized journals;
- d) Reference lists from identified publications;
- e) Consultation with field experts to identify unpublished studies. This multifaceted search strategy was designed to capture a broad spectrum of literature, ensuring we included both published and gray literature, thus enriching the context of our review and avoiding publication bias.

2.3 | Eligibility Criteria

Eligibility criteria focused on qualitative studies and mixed methods studies with a substantial qualitative component, published between January 1, 2010, and September 30, 2024. Studies must address strategies for improving nursing performance in Iranian healthcare contexts. Exclusion criteria included purely quantitative studies, opinion pieces, and studies with major methodological flaws as assessed by Standards for Reporting Qualitative Research (SRQR) guidelines [14]. To ensure rigor, our screening process involved two independent reviewers who resolved disagreements through consensus, and we documented each decision to provide a transparent rationale for inclusion or exclusion.

2.4 | Study Selection

Two independent reviewers screened titles and abstracts of articles discussing strategies to improve nursing performance, importing citations into EndNote V.20 and removing duplicates. Initially, studies unrelated to nursing performance

improvement or outside the Iranian healthcare context were excluded. Remaining abstracts were further examined to identify those specifically addressing strategies in Iran. Full-text reviews ensured studies met inclusion criteria, focusing on qualitative or mixed-methods research. Disagreements between reviewers were resolved through discussion or a third reviewer. Furthermore, we conducted a comprehensive hand-search of the reference lists of included studies to identify additional relevant articles, enhancing the completeness of our review. Expert consultations were also undertaken to uncover unpublished or ongoing studies, thus broadening the scope and depth of our research.

2.5 | Quality Appraisal

Assessing the quality of the studies was essential for evaluating their results and data integrity. We used the SRQR [14] to assess qualitative research quality. Three authors conducted this assessment independently, and findings were discussed until consensus was reached. We emphasized the importance of quality appraisal by providing a detailed account of the criteria used for evaluation, allowing readers to understand the rigor of our review process. Despite the varying opinions on quality evaluation in systematic reviews, no studies were excluded, although some high-quality studies had minimal impact on the overall synthesis, demonstrating our commitment to inclusivity.

2.6 | Data Extraction

Relevant results were extracted and organized by thoroughly reviewing the selected articles, which included study characteristics, participant demographics, and notable findings. The authors conducted the study selection and data extraction, ensuring careful examination. Each article was critically assessed for methodological consistency using criteria outlined in the Standards for Reporting Qualitative Research. We employed a standardized data extraction form to ensure consistency in the data collected across studies, which facilitated a more cohesive synthesis of findings. Additionally, we implemented double data extraction to further enhance reliability, whereby a second researcher verified the extracted data for accuracy.

2.7 | Qualitative Synthesis

Our analysis followed Thomas and Harden's methodology [15]. We began with a thorough reading of each article's headings, abstracts, and main text. One researcher extracted formal study characteristics, while three independently analyzed first-order data (findings) and second-order data (authors' interpretations). These analyses were compared in research meetings. To address the concern of theme saturation, we systematically ensured that the themes reached saturation by continually comparing findings across studies until no new themes emerged. This iterative process is crucial for qualitative research, as it strengthens the validity of the themes identified. We defined saturation as the point at which additional data collection no longer yielded new insights. Data management and theme development were

supported by MAXQDA software, allowing us to inductively identify themes. To ensure transparency in the thematic analysis, we followed a systematic process:

- Initial Coding: Each researcher independently coded the data line-by-line to identify key concepts.
- Theme Development: Codes were grouped into preliminary themes based on their similarities and relationships.
- Reviewing Themes: The research team discussed and refined the themes to ensure they accurately reflected the data.
- Defining and Naming Themes: Final themes were defined and named to capture their essence.
- 5. Triangulation: To enhance credibility, we triangulated data sources through three independent evaluations and regular weekly meetings to discuss findings and resolve discrepancies. Triangulation also involved cross-checking themes with the original data to ensure alignment and accuracy.
- 6. Bias Management/Researcher Reflexivity: To minimize potential biases, we maintained reflexivity by documenting our assumptions and perspectives throughout the analysis process. Additionally, we engaged a formal advisory group to provide external feedback on the themes and interpretations.

We synthesized themes across papers to highlight key concepts, forming overarching themes related to the research question. This rigorous approach ensured that the themes were grounded in the data and reflected diverse perspectives, enhancing the trustworthiness of our findings. We also critically evaluated the limitations of the qualitative synthesis, acknowledging potential biases and constraints inherent in our methodology, including the subjective nature of qualitative analysis. This transparency enhances the overall credibility of our research. Furthermore, we discussed implications for future research and practice, positioning our findings within the broader context of international nursing research. We believe that this comprehensive methodological framework not only contributes significantly to the field of nursing research but also offers valuable insights that can inform practice on a global scale.

2.8 | Ethical Considerations

All procedures performed in this study were in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki Declaration and its later amendments. The study was approved by the Ethics Committee of Shiraz University of Medical Sciences under the ethics code No. IR.MUK.REC.1401.328.

3 | Results

3.1 | Study Selection

In the initial phase of our search across electronic databases, including Web of Science, Scopus, PubMed, Embase, we

identified approximately 2495 publications related to the performance of health workers. After removing duplicates (n=269), two independent reviewers screened the titles and abstracts, resulting in the exclusion of 2114 studies. This process left 140 studies eligible for full-text review. From these, we selected 37 studies based on our inclusion and exclusion criteria for the scoping review (Figure 1).

3.2 | Results of the Assessment of Methodological Quality

The methodological quality of the 37 selected papers was evaluated by all three authors (Table 1). Several items from the Standards for Reporting Qualitative Research (SRQR) were inadequately reported in the qualitative studies, including features of the researchers and their reflexivity [16–31], conflicts of interest [16, 25–27, 30, 32–41], and connections to empirical data [17, 18, 21, 24–28, 42]. The lowest score recorded was 12 [30], while the highest was 21 [42–48] out of a maximum of 21. Detailed scoring information can be found in Table 1. Overall, the assessment revealed a wealth of data within the reviewed literature; however, the presence of weakly scored items was

considered during the review process, highlighting potential biases in each study.

3.3 | The Characteristics of the Included Studies

Figure 2 illustrates the geographic distribution of study locations across provinces in Iran, showcasing the 37 studies conducted in 17 provinces throughout the country. These studies were published over a span of 10 years, from 2012 to 2022 (Table 2). The primary focus of this study was on public health staff working in the health sector, predominantly consisting of nurses. All 37 studies employed qualitative methodologies, including Delphi, focus groups, semi-structured interviews, structured interviews, or expert panels. Table 2 summarizes the key characteristics of the included studies.

3.4 | Thematic Analysis Results

Qualitative studies identified and validated ten main themes, 24 sub-themes, and 120 topics (Table 3). The codes extracted from the interviews were presented in the form of 10 themes:

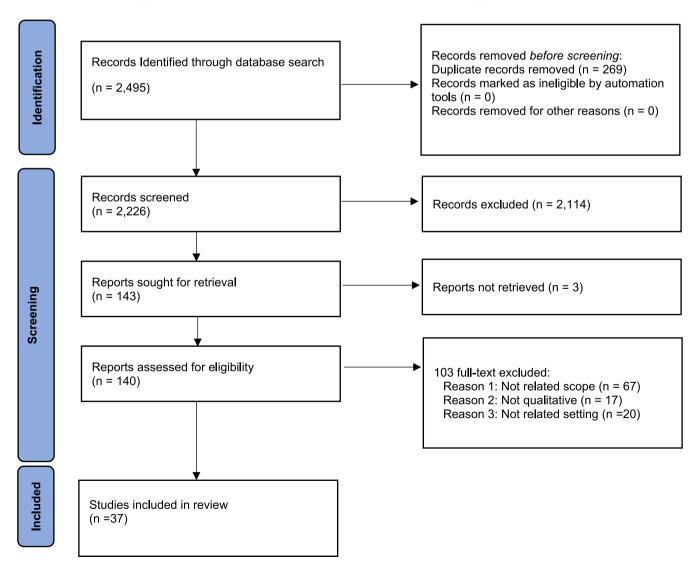


FIGURE 1 | Illustrates the detailed step-by-step process of study exclusion and inclusion, following the PRISMA guidelines.

TABLE 1 | SRQR critical appraisal tool results for qualitative studies.

	Title a	Title and abstract	Introd	Introduction					M	Methods					
Study	Title	Abstract	Problem formation	Purpose or research question	Qualitative approach and research paradiem	Researcher characteris- tics and reflexivity	Context	Sampling strategy	Ethics pertaining to subject's human	Data collection methods	Collection instruments	Units of study	Data	Data analysis	Techniques to enhance trustwor-thiness
	S1	S2	S3	S	SS	. 9S	S7	88	6S	S10	S11	\$12	S13	S14	\$15
Adib- Hajbaghery, et al.	×	×	×	×	×	×	×	×		×	×	×	×	×	×
Afshar, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Asadi, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Atefi, et al.	×	×	×	×	×		×	×	×	×	×	×	×	×	
Bahrami, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Baljani, et al.	×	×	×	×	×		×	×	×	×	×	×	×	×	×
Chaghari, et al.	×	×	×	×	X	×	×	×	×	×	×	×	×	×	×
Darvishpour, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Dehghani, et al	×	×	×	×	×	×	×	×	×		×	×	×	×	×
Dehghan- Nayeri, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Eslami Akbar, et al.	×	×	×	×	×		×	×	×	×		×		×	
Farokhzadian et al.	×	×	×	×	×		×	×		×	×	×	×	×	×
Farokhzadian, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Farzi, et al.	×	×	×	×	×	×	×	×	×	×		×	×	×	×
Ghiyasvandia- n, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Jafaraghaee, et al.	×	×	×	×	×	×	×	×		×		×	×	×	×
Jasemi, et al.	×	×	×	×	×		×	×	×	×		×	×	×	×
Kalateh Sadati, et al.	×	×	×	×	×		×	×	×	×	×	×	×	×	×
Kiani, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Moafimadani, et al.	×	×	×	×	×		×	×	×	×	×	×	×	×	×
Mozaffari, et al.	×	×	×	×	×		×	×	×	×	×	×	×	×	
Nakhaee, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Rafati, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
															:

(Continues)

	Title a	Title and abstract	Introduction	uction					M	Methods					
					Qualitative	Researcher			Ethics		Collection				Techniques
			Problem	Purpose or research	approach and research	characteris- tics and		Sampling	pertaining to subject's	Data collection	instru- ments	Units	Data	Data	trustwor-
Study	Title	Abstract	formation	question	paradigm	reflexivity	Context	strategy	human	methods	& tech	of study	processing	analysis	thiness
Ravari, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Rezaee, et al.	×	×	×	×	×		×	×	×	×		×	×	×	×
Rezai Sepasi, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Rivaz, et al.	×	×	×	×	×		×	×	×	×		×	×	×	×
Safdari, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Salaree, et al.	×	×	X	×	×		×	X	X	×	X	×	×	×	×
Seidi, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Sepahvand, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Shahsavari Isfahani et al.	×	×	×	×	×		×	×	×	×	×	×	×	×	×
Sheikhi, et al.	×	×	×	×	×	×	×	X	×	×		×	×	×	×
Vaismoradi, et al.	×	×	×	×	×		×	×	×	×		×	×	×	
Vali, et al.	×	X	×	X	×		×	×		×		×		×	
Zaboli, et al.	×	×	×	×	×		×	×		×	×	×	×	×	×
Zamanzadeh, et al.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
				Results/findings	Sã			Discussion	u			Other		9	Score
Study		Synt	Synthesis and interpretation		Links to empirical data		Integration with prior work, transferability	th prior work, rability	Lin	Limitations	Conflicts of interest	nterest	Funding	Out of a	Out of a possible 21
			S16		S17		S18	8.		S19	S20		S21		
Adib-Hajbaghery, et al.	et al.		X		×		X			X				-	18
Afshar, et al.			×		×		×			×					19
Asadi, et al.			×		×		×			×			×	•	Q
Atefi, et al.			×		×		×			×			×		81
Bahrami, et al.			×		×		×			×			×	.,	0
Baljani, et al.			×							×	×		×		18
Chaghari, et al.			×		×		×			×	×		×	.,	
Darvishpour, et al.			×		×		×			×	×		×	.,	
Dehghani, et al.			×		×		×			×	×				6
Dehghan-Nayeri, et al.	et al.		×		×		×			×			×		20
Eslami Akbar, et al.	al.		X				×	,			×		X	1	5

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TABLE 1 | (Continued)

	Results/findings	dings	Discussion		Other		Coom
			Integration with prior work,				31026
Study	Synthesis and interpretation	Links to empirical data	transferability	Limitations	Conflicts of interest	Funding	Out of a possible 21
Farokhzadian et al.	X	×	X	×	×	×	19
Farokhzadian, et al.	X	×	×	×	×	×	21
Farzi, et al.	X	X	×		X	X	19
Ghiyasvandian, et al.	X	×	×	×	×	×	21
Jafaraghaee, et al.	×	×	×				16
Jasemi, et al.	X	X			X	×	17
Kalateh Sadati, et al.	X			×	×	×	18
Kiani, et al.	X	×	×				18
Moafimadani, et al.	X	X	×	×	X	×	20
Mozaffari, et al.	X	×	×		×	×	18
Nakhaee, et al.	×	×			×	×	19
Rafati, et al.	X	X	×	×	X	X	21
Ravari, et al.	X	×	×	×	×	×	21
Rezaee, et al.	×		×	×	×	×	19
Rezai Sepasi, et al.	X		×	×	×	×	21
Rivaz, et al.	×		×	×			16
Safdari, et al.	×	×	×	×			19
Salaree, et al.	X		×			×	17
Seidi, et al.	×	×	×	×		×	20
Sepahvand, et al.	×	×	×	×	×	×	21
Shahsavari Isfahani et al.	×		×	×		×	18
Sheikhi, et al.	×		×	×	×	×	19
Vaismoradi, et al.	X	×	×	×	×	×	18
Vali, et al.	×			×			12
Zaboli, et al.	×	×	×		×	×	18
Zamanzadeh, et al.	X	×	X	×		×	20



FIGURE 2 | Geographic distribution of study locations across provinces in Iran.

leadership and change management in organizations considering the role of nurses; organizational culture and interpersonal interactions; increasing self-efficacy and empowerment of nurses; supporting the well-being and mental health of nurses; education and development of nursing skills; technology and innovation in nursing services; improving working conditions and safety for nurses; monitoring and evaluating the performance of nurses; recruiting and retaining human resources in nursing; and enhancing the quality of nursing services. These themes encompass sub-themes and topics that are further explained below.

3.5 | The First Theme: Leadership and Change Management in Organizations Considering the Role of Nurses

The theme emphasizes the crucial role of effective leadership and change management in healthcare, particularly for nurses. Transformational leadership is vital for enhancing nurses' efficiency and productivity, requiring educational opportunities and supportive programs to boost motivation and commitment. Strengthening leadership skills among nursing managers and employing motivational strategies are essential for improving team morale and performance.

Enhancing the motivation and commitment of healthcare personnel is critical for improving nursing performance [22, 27, 29, 30, 34]. Organizations must implement transformational leadership strategies to increase nurses' efficiency [17, 22, 42]. Analyzing the impact of leadership on innovation and change is key [45]. Recognizing and supporting nurses [37] and assisting in medication

administration [40, 44] are vital for motivation. Additionally, fostering the creativity of nursing managers and elevating team morale are important [21].

Effective management strategies are essential for enhancing clinical processes during periods of change [22, 27, 31]. Establishing robust change management strategies for critical situations, such as the COVID-19 pandemic, ensures organizational resilience [39]. Anticipating and managing resistance to change is vital for successful implementation [31]. Strengthening managerial control can alleviate staff fatigue and stress. Educational programs for change management are necessary [19, 45], and enhancing leadership competencies among nursing managers directly influences staff engagement and the success of change initiatives [24].

3.6 | The Second Theme: Organizational Culture and Interpersonal Interactions

This theme emphasizes the importance of effective communication and collaboration in healthcare. Constructive communication between nurses and managers enhances nursing performance and fosters trust and empathy. Developing feedback channels and a positive work environment is crucial for reducing tensions and increasing job satisfaction, while strengthening communication skills among team member's boosts collaboration and teamwork, essential for high-quality patient care.

Establishing effective communication between nurses and managers is essential for improving nursing performance

Increasing Self-Efficacy and Competence of Nurses, IV = Supporting the Well-Being and Mental Health of Nurses, V = Continuous Education for Maintaining the Skills of Nurses, VI = Utilization of New TABLE 2 | Summary characteristics of the studies (theme reported: I = Leadership and Change Management in Organizations, II = Organizational Culture and Interpersonal Interactions III = Technologies in Nursing Services, VII = Improving Working Conditions for Nurses' Physical and Psychological Safety, VIII = Continuous Monitoring and Evaluation of Nursing Performance, IX = Recruitment and Retention of Human Resources in Nursing, X = Improvement of Nursing Service Quality).

Adib-Hajbaghery To understand nurses' et al. (2012) Kashan job-related stress Afshar et al. (2020) To explain the experiences of nurses regarding the challenges of nurses' professional behavior of nurses' professional behavior Tehran To explore the factors that affect caring motivation from the perspectives of nurses in Iran Atefi et al. (2014) To explore factors related to job Mashhad	To understand nurses'	f	Population	Data collection	Data analysis	authors
et al. (2020) t al. (2019) al. (2014)	job-related stress	Qualitative study	Expert: 19 participants	In-depth interviews	Conventional content analysis	II, IV, VII
t al. (2019) al. (2014)	To explain the experiences of nurses regarding the challenges of nurses' professional behavior	Qualitative study	Nurses, nursing faculty members, medical ethics specialists: 31 participants	In-depth semistructured interviews	Conventional content analysis	П, Ш, IV
1. (2014)	To explore the factors that affect caring motivation from the perspectives of nurses in Iran	Qualitative study	Nurse: 17 participants	In-depth semi- structured interviews	Conventional content analysis	I, II, III, IV, VI, VIII, IX, X
	To explore factors related to job satisfaction and dissatisfaction among critical care and medical-surgical nurses	Qualitative study	Nurse: 85 participants	Ten focus group discussions	Thematic analysis	П, Ш, VП
Bahrami et al. (2014) To explor Isfahan competenc Iranian nu	To explore the essential competencies required for Iranian nurses in disaster response.	Qualitative study	Nurse: 35 participants	Semi-structured interviews	Conventional content analysis	П, V
Baljani et al. (2020) To explore a Urmia supportive str.	To explore nurse managers' supportive strategies for nursing error management (NEM)	Descriptive qualitative study	Nurse managers: 22 participants	In-depth semi- structured interviews	Conventional content analysis	I, II, V, VI, VII, IX, X
Chaghari et al. (2016) To identify Tehran process of in- nursing perse affiliated w University of	To identify and explain the process of in-service training of nursing personnel in hospitals affiliated with Baqiyatallah University of Medical Sciences	Qualitative study	nurses, nurse managers, and educational managers: 35 participants	Semi-structured interviews, observation, field notes, and document analysis	Coding techniques	II, III, V, VII, IX, X
Darvishpour et al. To identify (2016) Rasht facilitators of based on pol	To identify the barriers and facilitators of nurse prescribing based on policymakers' views in Iran	Qualitative study	Expert: 14 participants	In-depth semistructured interviews	Conventional content analysis	I, II, IV, VIII, IX

III, IV, VII

content analysis

Conventional

In-depth unstructured

interviews

participants

Nurse: 12

Qualitative study

To explore nurses' strategies for

Jasemi et al. (2019)

Urmia

professional commitment in

(2014) Tehran

Iranian nurses

conscience-based care delivery

method

structured interviews

nurses, and nurse managers: 21 participants

I, II, III, IV, VIII, IX, X reported by II, IV, V, VI, I, III, VI, VII I, II, IV, IX VII, VIII, III, IV, V II, III, V authors II, IV, X Theme IV, VII IX, X study (exploratory) Content analysis Content analysis Content analysis Content analysis content analysis Mixed methods content analysis content analysis Data analysis Conventional Conventional approach approach approach Unstructured interviews discussions, telephonic individual interviews personal interviews interviews, Delphi Data collection Semi-structured Semi-structured Semi-structured Semi-structured In-depth semi-Focus group interviews interviews interviews technique staff nurses, head Population participants participants participants participants participants participants participants Nurse: 18 Nurse: 18 Nurse: 23 Nurse: 14 Nurse: 40 Nurse: 19 Qualitative Study Study design evaluate a cultural care-training undergraduate nursing students To explore and describe factors clinical education problems and strategies to improve it from the perspective of nursing students nurses' activities for self-directed of missed nursing care and the nurses to identify the strategies hey used to cope with job stress affecting professional ethics in To explore nurses' experiences To explore the experiences of To explore nurses' experiences and clinical nursing educators. To explore factors influencing benefits of IT integration and program to improve cultural To explore and describe the To design, implement, and To explore Iranian clinical and viewpoints about the nursing practice in Iran adoption in healthcare competence among factors affecting it earning Dehghan-Nayeri et al. Ghiyasvandian et al. (2015) Jahrom, Fars Farokhzadian et al. Eslami Akbar et al. Farokhzadian et al. Farzi et al. (2018) Jafaraghaee et al. Dehghani et al. (2022) Kerman (2020) Kerman Author/year/ (2016) Isfahan (2015) Tehran (2016) Ahvaz country Isfahan

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TABLE 2 | (Continued)

TABLE 2 | (Continued)

Author/year/ country	Aim	Study design	Population	Data collection	Data analysis	reported by authors
Kalateh Sadati et al. (2021) Shiraz	To investigate the experiences and challenges faced by nursing managers	Qualitative study	Nursing managers: 11 participants	Semistructured interviews	Thematic analysis	I, IV, IX
Kiani et al. (2017) Tehran	To explain the personal factors affecting ethics and ethical behaviors among disaster healthcare workers	Qualitative study	Expert: 21 participants	In-depth unstructured interviews	Conventional content analysis	II, V, VII
Moafimadani et al. (2019) Mazandaran	To identify effective factors on management of nurses' organizational learning	Qualitative study	Experts: 15 participants	Semi-structured interviews	Thematic analysis (latent content analysis)	I, II, VI
Mozaffari et al. (2015) Tehran	To explore nurses' experience of social well-being and their need for holistic support	Qualitative study	Nurse: 18 participants	Semi-structured interviews	Content analysis	П, Ш, IV
Nakhaee et al. (2017) Birjand	To explore the major issues of nurse-physician interprofessional relationships in Iran	Qualitative study	Physicians and Nurses: 12 participants	In-depth, unstructured interviews	Conventional content analysis	П, Ш, IV
Rafati et al. (2017) Kerman	To explore the coping strategies of Iranian nursing students with stress in a clinical setting	Qualitative study	Nurse: 20 participants	Semi-structured interviews	Content analysis method	IV, V
Ravari et al. (2012) Tehran	To describe the effect of nursing profession work-related values on job satisfaction among Iranian nurses	Qualitative Study	Nurse: 30 participants	In-depth interviews	Thematic analysis	П, Ш, IV
Rezaee et al. (2020) Zahedan	To identify nurses' concerns about the nursing care quality process in Intensive Care Units (ICUs)	Qualitative Study	Nurse: 10 participants	Unstructured interviews	Conventional content analysis	I, X
Rezai Sepasi et a.l (2017) Qazvin	To identify and clarify strategies for gaining power in the nursing profession through the experiences of Iranian nurses	Qualitative grounded theory study	Nurse: 15 participants	In-depth semi- structured interviews	coding method	І, ІІ, ІІІ
Rivaz et al. (2017) Shiraz	To explore Iranian nurses' perceptions on the key	Qualitative study	staff nurses, supervisors, head	Semi-structured interviews	Content analysis	VII, IX, X
			Ī			

TABLE 2 | (Continued)

TABLE 2 (Continued)						
Author/year/						Theme reported by
country	Aim	Study design	Population	Data collection	Data analysis	authors
	for clinical staff in the health system					
Zaboli et al. (2016)	To identify factors affecting the	Qualitative study	Experts: 14	Semi-structured	Framework	I, II, X
Tehran	quality of emergency service in selected military hospitals in Iran from the perspective of medical experts and nurses.		participants	interviews	analysis	
Zamanzadeh et al. (2013) Northwest provinces	To elicit the strategies used by newly graduated nurses (NGNs) to gain self-confidence during their early career	Qualitative study	Nurse: 30 participants	In-depth, semistructured interviews	Content analysis approach	П, Ш, IV

[22, 31, 36, 44, 48–50]. Promoting effective communication is vital for leadership success and enhancing outcomes [27, 30, 31, 38, 42, 51]. A culture of trust and empathy strengthens nurse-manager relationships and overall performance [17, 23, 33, 34, 51]. Two-way feedback channels are critical for continuous improvement [29, 37], while a supportive work environment facilitates better communication and nursing performance [28]. Effective communication reduces tensions and increases job satisfaction [16, 32, 39], providing a safe space for idea exchange and collaboration [38, 39]. Strengthening communication skills among nursing team members is crucial for enhancing overall effectiveness [35, 45, 47].

Collaboration and coordination among healthcare team members are essential for improving overall performance and nurses' effectiveness [40, 41, 48, 51]. Developing team feedback systems optimizes work processes and increases efficiency [48]. Enhancing teamwork improves clinical service quality, leading to positive outcomes [39]. Creating learning opportunities fosters collaboration and strengthens team skills [43]. Establishing common goals aligns activities and enhances motivation, leading to better results in nursing care [44]. Regular evaluations to identify strengths and weaknesses are vital for enhancing team performance and nursing staff effectiveness [48, 51].

3.7 | The Third Theme: Increasing Self-Efficacy and Competence of Nurses

The theme of "increasing self-efficacy and competence of nurses" underscores the importance of boosting nurses' confidence and skills through targeted training. Enhancing self-efficacy is crucial for improving clinical quality and fostering accountability. Training in problem-solving skills enhances decision-making and job satisfaction. Providing career advancement opportunities and specialized educational programs supports professional growth.

Strengthening training and self-efficacy is essential for increasing nurses' effectiveness [30, 33, 34, 41, 42, 46, 51]. and improving patient outcomes [20, 51]. Enhancing professional accountability through training fosters a responsible healthcare environment [29, 40]. Self-efficacy boosts nurses' confidence in decision-making [19, 23, 33, 43] and overall job satisfaction [16].

Career growth pathways are fundamental for improving efficiency and staff retention [28, 45–47]. Designing educational programs that develop specialized skills enhances competencies [49], while identifying training needs tailors initiatives effectively [43]. Mentoring for new nurses helps integrate them into the healthcare environment, enhancing their confidence and capabilities [34]. This approach fosters individual growth and strengthens healthcare teams [38, 52].

3.8 | The Fourth Theme: Supporting the Well-Being and Mental Health of Nurses

This theme highlights the importance of psychological and social support systems to reduce occupational stress. Providing

TABLE 3 | Themes, subthemes and codes of selected studies.

Theme	Subtheme	Example of codes
I- Leadership and	Motivation and	 Enhancing motivation and commitment for overall organizational performance.
Change	Commitment	 Implementing transformational leadership to enhance efficiency and productivity
Management in Organizations Considering the	of Personnel	 Analyzing the effects of leadership on innovation processes and organizational changes.
Role of Nurses		 Improving performance through participatory leadership and constructive interactions.
		 Recognizing and supporting nurses
		 Supporting and motivating nurses in medication administration
		 Enhancing the creativity of nursing managers and their role in improving organizational performance.
		 Utilizing motivational methods to boost team morale
	Change Management	 Designing and implementing effective management strategies to enhance clinical processes.
	and Performance	 Change management strategies during critical times, such as the COVID-19 pandemic.
	Improvement	 Anticipating and managing potential resistance to changes.
		 Strengthening the control capabilities of managers to reduce fatigue and stress.
		 Designing educational programs to facilitate change management.
		 Enhancing leadership skills among nursing managers.
II- Organizational Culture and	Effective Communica-	 Establishing effective and constructive communication between nurses and managers
Interpersonal Interactions	tion and Interpersonal	 Promoting effective communication for leadership success
interactions	Interpersonal	 Fostering a culture of trust and empathy in the workplace
		 Enhancing performance through the establishment of effective two-way feedback channels
		 Creating a positive and supportive work environment that facilitates effective communication
		 Utilizing effective communication as a tool for reducing tensions
		 Providing a safe and welcoming space for exchanging ideas
		 Strengthening communication skills among team members
	Collaboration	- Strengthening collaboration and coordination among healthcare team members
	and Coordination in	 Developing team feedback systems to enhance efficiency
	the	 Enhancing teamwork to improve the quality of clinical services
	Healthcare	 Creating learning opportunities to improve collaboration
	Team	 Establishing common goals for healthcare teams
		 Identifying team strengths and weaknesses through assessment
III- Increasing Self-	Training and	 Updating skills to increase self-efficacy through training
Efficacy and	Development of	 Development of self-efficacy in enhancing the quality of clinical activities
Competence of Nurses	Self-Efficacy Skills	 Promotion of professional accountability among nurses
1,41505		 Strengthening self-belief in nurses' decision-making processes
		 Increasing self-efficacy through training in problem-solving skills
		 Development of self-efficacy in job satisfaction and efficiency
	Professional	 Career Growth and Professional Development
	Growth and	 Providing opportunities for career advancement for nurses
	Development	 Designing educational programs for developing specialized skills

(Continues)

TABLE 3 | (Continued)

Theme	Subtheme	Example of codes
		 Identifying individual and group training needs
		 Designing mentoring programs for new nurses
IV- Supporting the Well-Being and	Psychological and Social	 Establishing psychological and social support systems to reduce occupational stress among nurses
Mental Health of	Supports	 Providing necessary resources to improve performance and welfare services
Nurses		 Promoting the academic level of nurses through financial and educational support
		 Creating a sense of value and social support
		 Designing coping strategies to address burnout
		 Strengthening religious and spiritual beliefs
		 Developing supportive programs to improve employee well-being
		 Providing professional counseling for nurses
	Enhancing Job	 Improving working conditions
	Satisfaction	 Promoting work-life balance through welfare programs
	Among Nurses	 Providing psychological counseling services for mental health promotion
		 Continuous assessment of job satisfaction and identification of barriers and facilitators
		 Offering financial and social benefits to enhance satisfaction
V- Continuous	Continuous	 Continuous education for maintaining the skills of nurses
	Education	 Promoting a culture of learning and professional growth
-		 Training and development of ethical skills for nurses
V- Continuous Education for Maintaining the Skills of Nurses		- Training and development of skills in clinical decision-making/judgment
		 Increasing efficiency through clinical training programs
		 Identifying educational needs for effective planning
		 Creating opportunities for specialized learning for nurses
	Development of	 Enhancement of clinical decision-making competencies
	Key Skills	 Strengthening problem-solving skills in nurses
		 Training in essential skills for managing critical situations
		 Enhancement of clinical skills through practical training
		 Promotion of applied research for improving healthcare services
	Promotion of a Continuous	 Promotion and Development of a Continuous Learning Culture in Clinical Environments
	Learning	 Strengthening organizational culture to empower nurses
	Culture	 Improving organizational culture through participatory processes
		 Examining the impact of organizational culture on team performance
VI- Utilization of	Utilization of	 Utilization of Innovative Technologies to Improve Service Quality
New Technologies	New	- Enhancement of performance through clinical management software
in Nursing Services	Technologies	- Empowerment of digital skills for optimal technology use among nurses
		 Examination of the impact of technology on work processes
		 Establishment of databases to facilitate the sharing of clinical information
	Enhancement	 Enhancement of Educational and Technological Infrastructure
	of Educational	 Provision of access to modern educational resources
	and Technological	 Design of specialized training courses for nurses
	Infrastructure	 Improvement of educational equipment to facilitate learning

(Continues)

Theme	Subtheme	Example of codes
		 Provision of virtual courses for nurse education
	Promotion of	 Promotion of Innovation Culture and Empowerment of Staff for Change Acceptance
	Innovation	 Strengthening organizational culture to empower nurses
	Culture	 Designing cultural programs to encourage innovation
VII- Improving	Physical and	 Improving Working Conditions for Nurses' Physical and Psychological Safety
Working	Psychological	 Establishing supportive programs to reduce stress
Conditions for Nurses' Physical	Workplace Conditions	 Strengthening mental health through recreational programs
and Psychological	Conditions	 Continuous assessment of physical and psychological workplace conditions
Safety		 Designing supportive spaces in the workplace
	Safety	 Establishing and Implementing Safety Standards for Nurses
	Standards and	 Reducing workplace hazards through safe environments
	Training	 Increasing nurses' awareness through safety training
		 Evaluating and managing existing risks
		 Occupational safety and health training
VIII- Continuous	Performance	 Continuous Monitoring and Evaluation of Nursing Performance
Monitoring and	Evaluation	 Providing effective feedback as a tool for improvement
Evaluation of	Systems	Implementation of comprehensive 360-degree evaluation systems
Nursing Performance		 Clarifying expectations through feedback sessions
	Advanced	Utilization of Intelligent Systems for Performance Evaluation
	Technologies in	Improving managerial decision-making through data analysis
	Evaluation	Utilizing data to enhance managerial performance
IX- Recruitment	Recruitment	Designing effective programs for attracting qualified human resources
and Retention of	and Hiring	 Assessing staff competencies for performance improvement
Human Resources	Programs	Estimating the demand for nursing services
in Nursing		 Recruiting nurses with specialized skills
		Creating motivational programs for nurse retention
	Career	Designing clear career pathways for nursing growth and advancement
	Development	 Establishing performance-related rewards
	and	Updating reward programs based on performance
	Advancement	
	Attraction and Retention of	Emphasizing the attraction and retention of qualified nursing personnel Associate staff competencies for performance impressment.
	Human	Assessing staff competencies for performance improvement Creating a positive environment to support purses.
	Resources	Creating a positive environment to support nurses Compared to the control of the control
77 T	P 1 2 1	Implementing professional programs for attracting and retaining nurses
X- Improvement of Nursing Service	Evaluation and Quality	Implementation of evaluation methods and quality improvement of nursing services
Quality	Improvement	Improving the nurse-to-patient ratio
		Identifying and analyzing the strengths and weaknesses of services Output Designing and analyzing the strengths and weaknesses of services.
	Ŧ	Designing quality improvement programs based on feedback
	Innovative Approaches in	 Promoting innovation in the delivery of novel services and processes in nursing
	Nursing	Implementing novel methods for enhancing clinical services
	Services	 Developing new service models to address patient needs
	Application of	 Application of research findings in clinical processes
	Research	 Strengthening research collaborations between universities and healthcare centers
	Findings	 Establishing research groups to enhance clinical practice

essential resources and promoting academic advancement through financial support enhances nurses' performance and sense of value. Designing coping strategies for burnout and strengthening spiritual beliefs contribute to mental resilience. Developing supportive programs and offering professional counseling are crucial for improving employee well-being. By enhancing working conditions and promoting work-life balance, healthcare organizations can maintain job satisfaction and ensure better mental health among nurses.

Establishing psychological and social support systems is vital for reducing occupational stress [20, 23, 32, 36, 41, 49, 51, 52]. Providing necessary resources improves performance and welfare, alleviating job-related pressures [23, 46]. Promoting academic advancement through financial support enhances care quality [49] and increases job satisfaction [37].

Coping strategies for burnout and strengthening spiritual beliefs improve psychological well-being [21, 26]. Developing supportive programs and professional counseling significantly promote nurses' mental health [29, 45, 49].

Improving working conditions is essential for job satisfaction [18, 21, 23, 27, 33, 34, 47]. Promoting work-life balance through welfare programs is critical for well-being [23]. Psychological counseling services are linked to increased job satisfaction [26]. Continuous evaluation of job satisfaction and addressing barriers is necessary for an optimal work environment [44]. Implementing financial and social benefits also enhances overall satisfaction among nursing staff [33, 34], improving care quality within the healthcare system.

3.9 | The Fifth Theme: Continuous Education for Maintaining the Skills of Nurses

The theme of "continuous education for maintaining the skills of nurses" emphasizes the importance of fostering a culture of learning and professional growth. Ongoing training in ethical skills and clinical decision-making is essential for enhancing nurses' competencies. Identifying educational needs enables effective planning of clinical training programs, while specialized learning opportunities help nurses navigate complex healthcare challenges. Strengthening problem-solving skills and promoting applied research are also vital for advancing nursing practice.

Continuous education is critical for maintaining nursing competencies [38, 44, 46, 50]. Fostering a learning culture enhances nurses' overall capabilities [17] and ensures high-quality patient care through ethical training [35, 49]. Improving clinical decision-making skills is vital for advancing practices [40]. Targeted clinical training improves nursing performance [48], and identifying educational needs ensures training aligns with practice demands [38].

Enhancing problem-solving skills is essential for optimizing patient care [43], and training in critical situation management is paramount [35]. Practical training programs advance clinical skills and healthcare delivery, while promoting applied research supports ongoing competency development [45].

Fostering a culture of continuous learning within clinical environments is crucial [46]. Strengthening organizational culture empowers nurses to deliver high-quality care [17]. Improving this culture through participatory processes promotes professional development and enhances team performance, ultimately optimizing healthcare outcomes [43].

3.10 | The Sixth Theme: Utilization of New Technologies in Nursing Services

The theme of "utilization of new technologies in nursing services" emphasizes the importance of innovative technologies for improving service quality. This includes using clinical management software to enhance performance and equipping nurses with digital skills for effective technology integration. Establishing databases for sharing clinical information fosters collaboration, while improving educational infrastructure supports continuous learning. Promoting a culture of innovation encourages staff to embrace technology, leading to better patient care and outcomes.

Integrating innovative technologies is critical for enhancing healthcare service quality [19, 22]. Clinical management software improves performance and streamlines processes [39], while equipping nurses with digital skills is essential for effective technology use [39]. Establishing comprehensive databases enhances collaboration among healthcare providers [39, 45].

Advancing educational and technological infrastructure supports nursing education and practice, ensuring access to modern resources [39]. Developing specialized training programs addresses specific competencies [44], and enhancing educational equipment prepares nurses for complex clinical practice [34]. Virtual training courses broaden access to education and accommodate diverse learning needs [49].

Fostering a culture of innovation among healthcare personnel is crucial for adapting to changes [17]. Strengthening organizational culture empowers nurses to meet dynamic healthcare demands [17, 49]. Implementing cultural programs that promote innovation creates an environment conducive to creative thinking and problem-solving [34, 45]. This approach aims to improve care quality and the overall effectiveness of healthcare delivery.

3.11 | The Seventh Theme: Improving Working Conditions for Nurses' Physical and Psychological Safety

This theme highlights the importance of creating a supportive environment for nurses. This includes implementing stress-reduction programs and promoting mental health through recreational activities. Continuous assessment of workplace conditions and designing supportive spaces are essential for fostering well-being. Establishing safety standards and increasing awareness through training help reduce workplace hazards, enhancing overall safety and job satisfaction for nurses.

Enhancing physical and psychological workplace conditions is crucial for nurse well-being [25, 39]. Supportive programs to reduce stress promote mental health [17, 18, 32], while recreational activities foster a positive work environment [39]. Continuous assessment identifies areas for improvement [16, 30, 38], and supportive spaces enhance comfort and reduce stress [29].

Establishing safety standards is necessary for nurse safety [49]. Creating safe environments reduces workplace hazards [45], and safety training increases awareness among staff [20]. Evaluating and managing risks is essential for mitigating threats to nurse safety [43]. Comprehensive training in occupational safety equips nurses to effectively navigate safety challenges [17], ultimately enhancing their physical and psychological well-being in a safe working environment.

3.12 | The Eighth Theme: Continuous Monitoring and Evaluation of Nursing Performance

This theme highlights the importance of effective feedback systems for enhancing nursing practice. Implementing 360-degree evaluation systems provides a comprehensive view of performance, while regular feedback sessions clarify expectations. Utilizing advanced technologies improves assessment accuracy and supports better decision-making through data analysis, fostering continuous improvement in nursing performance and care quality.

Continuous monitoring and assessment of nursing performance are critical [45]. Effective feedback mechanisms enhance outcomes and support professional development [48]. Comprehensive 360-degree evaluations help identify areas for improvement [44], and structured feedback aligns individual performance with organizational standards [34].

Integrating advanced technologies into evaluation processes is essential [39]. Data analytics enhances managerial decision-making and optimizes operational strategies, ensuring high-quality patient care [45, 49]. This approach prioritizes robust evaluation systems while leveraging technology to cultivate a culture of continuous improvement in nursing practice.

3.13 | The Ninth Theme: Recruitment and Retention of Human Resources in Nursing

This theme focuses on creating effective programs to attract and retain qualified nurses. It emphasizes assessing staff competencies and estimating nursing service demand. Recruiting specialized nurses and implementing motivational retention programs are essential. Clear career pathways and performance-related rewards enhance job satisfaction, fostering a positive environment and professional development for better nursing service quality and patient care.

Effective recruitment and hiring programs are critical for attracting qualified personnel [17]. Assessing staff competencies

improves operational efficiency [17], and estimating nursing service demand ensures optimal staffing [21, 25]. Recruiting specialized nurses addresses specific healthcare needs [45], while motivational retention programs maintain workforce stability [44].

Establishing clear career pathways for nursing advancement is vital [49]. Performance-related rewards incentivize excellence and professional growth [30], with regular updates to reward programs fostering a culture of recognition [49].

Creating a supportive organizational culture promotes job satisfaction and reduces turnover [37]. Professional development programs designed to attract and retain talent are essential for ensuring a competent workforce [28, 43]. This comprehensive approach strengthens the nursing workforce and improves healthcare delivery quality.

3.14 | The Tenth Them: Improvement of Nursing Service Quality

This theme focuses on enhancing nursing services through effective evaluation methods. Key elements include improving the nurse-to-patient ratio, identifying strengths and weaknesses, and designing quality improvement programs based on feedback. Innovative approaches are essential for enhancing clinical practices, while applying research findings and fostering collaborations between universities and healthcare centers contribute to better clinical outcomes.

Implementing robust evaluation methodologies is crucial for enhancing nursing service quality [43]. Improving the nurse-to-patient ratio positively impacts patient outcomes [25]. Systematically identifying service strengths and weaknesses fosters continuous improvement [24, 31, 34, 39], and designing initiatives based on stakeholder feedback effectively addresses areas needing enhancement [17, 24, 31].

Promoting innovation in nursing services is vital for meeting dynamic patient needs [24, 31]. Developing new service delivery models improves overall care quality [39]. Integrating research findings into clinical practices is necessary for fostering innovation [45], and strengthening collaborations between academic institutions and healthcare organizations enhances clinical practice [45].

This comprehensive approach—encompassing evaluation, innovative service delivery, and research application—aims to elevate nursing care quality and improve patient outcomes and satisfaction.

4 | Discussion

The first theme emphasizes that effective leadership and change management are crucial for improving nurses' performance in Iran's healthcare organizations. In Iran, where hierarchical structures and cultural norms influence workplace dynamics, transformational leadership can play a pivotal role in bridging

gaps between management and frontline staff [53]. Transformational leadership enhances efficiency and productivity, while educational opportunities and supportive programs increase motivation and commitment, significantly boosting job satisfaction and retention rates [54]. In the Iranian context, participatory leadership models that align with Islamic values and community-oriented healthcare practices can strengthen team morale and create a positive work environment [55]. During crises like COVID-19, proactive change management fosters organizational resilience. Involving nurses in decision-making enhances engagement and healthcare delivery [56, 57]. Ongoing leadership development is essential for improving staff engagement and patient care; however, the implementation of leadership training programs must consider the existing hierarchical structures and resource limitations prevalent in many Iranian healthcare institutions [58].

While findings from Boamah in Canada highlight that empowering nursing staff through leadership initiatives enhances their commitment and overall quality of care [59], it is crucial to note that the integration of such strategies in Iran requires an understanding of cultural nuances. For instance, while transformational leadership has been effective in both Iran and Western countries, the unique interplay of Islamic values and community-oriented practices in Iran necessitates a culturally sensitive approach. Studies from the United States [60] emphasize direct communication and flat organizational hierarchies, contrasting with Iran's emphasis on respect for seniority and indirect communication. This comparative analysis underscores the importance of tailoring leadership strategies to fit cultural contexts, suggesting that what works in one setting may not be directly transferable to another. By engaging with international perspectives, we can better understand the variability of nursing performance improvement strategies across different healthcare systems.

In Iran, organizational culture and interpersonal interactions are vital for enhancing nursing performance. Effective communication between nurses and managers fosters trust and empathy, and in Iran, understanding cultural nuances in communication styles-such as the importance of respect for seniority and the role of indirect communication—is essential to enhance trust and collaboration among healthcare teams [61]. Our study emphasizes that establishing two-way feedback channels and a supportive work environment reduces tensions and strengthens collaboration [60]. Prioritizing communication skills and teamwork improves relationships and team dynamics, directly linked to better patient outcomes and higher staff retention rates, as noted by Boamah [59]. Ultimately, a collaborative and open organizational culture is essential for optimizing nursing practices and ensuring high-quality healthcare delivery [62, 63]. In the Iranian context, this includes fostering a culture of mutual respect and aligning organizational values with Islamic principles of care and community service. In contrast to Iran's emphasis on respect for seniority and indirect communication, studies from Western countries like the United States [60] emphasize direct communication and flat organizational hierarchies. These differences highlight the need for culturally tailored approaches to communication in healthcare settings.

The theme of "increasing self-efficacy and competence of nurses" emphasizes the importance of targeted training in enhancing nurses' confidence and skills, which are crucial for improving clinical performance and patient outcomes. Our findings show that training in problem-solving and decisionmaking boosts job satisfaction and professional accountability. Empowered nurses contribute to a more responsible healthcare environment, leading to better patient care [54]. In Iran, establishing clear career advancement pathways that align with the country's healthcare goals and economic realities fosters professional growth and improves retention rates [64]. Mentoring programs for new nurses enhance their integration and confidence. This comprehensive approach empowers individual nurses and strengthens the healthcare system, promoting a culture of continuous improvement in patient care [65, 66].

Similar to Iran, studies from South Korea [65] and the United Kingdom [66] underscore the importance of targeted training and mentoring programs. However, resource limitations in Iran necessitate innovative, low-cost solutions to achieve similar outcomes. This highlights the need for future research that investigates how these training programs can be adapted to different cultural and economic contexts, allowing for a broader application of successful strategies in nursing performance improvement. A comparative approach can help identify which elements of these international programs can be effectively tailored to the Iranian context.

Supporting nurses' well-being and mental health emphasizes the need for psychological and social support to reduce stress and enhance job performance. In Iran, addressing stigma around mental health in the workplace—particularly in a culture where mental health issues are often underreported—is crucial for the successful implementation of these support initiatives [67].

Our study aligns with Melnyk's findings that comprehensive mental health resources help prevent burnout and increase job satisfaction [68]. Financial and educational support boosts motivation and professional fulfillment [69]. Promoting worklife balance and effective coping strategies is crucial for building resilience, with wellness programs demonstrating significant benefits [70]. Ensuring nurses' mental health improves their well-being and positively impacts patient care quality, as highlighted by Bu [71]. While mental health stigma is a global issue, its impact is particularly pronounced in Iran due to cultural norms. Furthermore, examining programs like those in Canada [72] which have implemented nationwide mental health initiatives for healthcare workers, can provide valuable lessons for Iran in addressing these challenges. This comparative perspective emphasizes the necessity of culturally relevant mental health initiatives that consider local stigmas and healthcare practices. By drawing on successful international models, we can develop tailored interventions that resonate with the cultural context of Iranian nurses.

The theme of "continuous education for maintaining the skills of nurses" underscores the importance of lifelong learning to enhance competencies and improve patient care. Ongoing training in clinical decision-making and ethics helps nurses meet evolving healthcare demands, positively impacting clinical outcomes and accountability [70].

In Iran, identifying educational needs and targeting training to specific challenges—such as resource limitations and high patient-to-nurse ratios—are crucial for improving performance. Although similar educational challenges exist globally, such as in the United States and Canada, their solutions may not be directly applicable in Iran without modification to fit local conditions. The integration of international best practices into local training programs represents a valuable avenue for future research. A culturally informed approach to education can facilitate more effective training programs that align with local values and needs. Promoting problem-solving skills and research further develops nursing competencies [73], while fostering a learning culture enhances job satisfaction and retention, ultimately strengthening team performance and patient care [74].

The theme of "utilization of new technologies in nursing services" highlights the role of innovative tools in enhancing healthcare delivery. Integrating clinical management software optimizes performance and streamlines processes, improving patient outcomes [75, 76]. In Iran, equipping nurses with digital skills-particularly in rural and underserved areas-can enhance collaboration and communication, while shared clinical databases improve teamwork. Effective leadership plays a critical role in facilitating the adoption of new technologies. Transformational leaders, by fostering a culture of innovation and providing the necessary resources and training, can significantly enhance nurses' ability to integrate technology into their practice. For instance, leaders who prioritize digital education and specialized training can bridge the gap between traditional practices and modern technological advancements, particularly in resource-limited settings like Iran. This alignment between leadership and technology integration not only improves healthcare delivery but also empowers nurses to adapt to evolving healthcare demands [77]. Advancing digital education and specialized training is essential for professional growth, with virtual learning expanding access to skills and knowledge [77]. Fostering a culture of innovation is vital for adapting to technological trends. Ultimately, combining technology integration with ongoing education leads to improved healthcare effectiveness and patient care quality [78]. The integration of technology in nursing is a global trend, with countries like the United States [79] and China [80] leading in digital education and clinical management software. However, Iran's rural and underserved areas face unique challenges in adopting these technologies, requiring targeted interventions.

The theme of "improving working conditions for nurses' physical and psychological safety" emphasizes the need for a supportive environment. Our study, echoing Chen's findings in China, highlights the importance of stress-reduction programs and recreational activities for enhancing mental health [81]. Pinho supports this, noting these initiatives improve workplace satisfaction [82]. In Iran, continuous assessment of workplace conditions—particularly in underfunded public hospitals—is vital for identifying improvement areas [83]. Establishing safety standards and providing training to raise awareness of hazards are crucial for fostering a culture of safety, as recommended by

Slemon in Canada [72]. Overall, these measures enhance nurses' well-being and job satisfaction, ultimately leading to better patient care and outcomes.

Continuous monitoring and evaluation of nursing performance highlight the importance of effective feedback systems in enhancing practice. Our study, like Twigg's, emphasizes that ongoing assessment is crucial for improving performance outcomes and professional growth [84]. In Iran, implementing 360-degree evaluation systems that consider cultural and hierarchical dynamics provides a comprehensive view of performance and identifies areas for improvement. Regular feedback sessions align individual performance with organizational goals, as noted by Akpa [85]. Additionally, integrating advanced technologies into evaluation processes enhances managerial decision-making, supporting high-quality patient care [86]. Overall, this approach fosters continuous improvement and excellence in nursing practice, ultimately enhancing healthcare delivery effectiveness. In the Iranian context, involving community leaders and religious figures in feedback processes can enhance acceptance and implementation.

Improvement of Nursing Service Quality emphasizes enhancing nursing quality through effective evaluation methods. Our study, like McHugh's, highlights the importance of improving the nurse-to-patient ratio for better patient outcomes [87]. In Iran, identifying strengths and weaknesses in nursing services—particularly in rural and underserved areas—is essential for continuous improvement [88]. Recruitment and retention challenges significantly impact service quality. High turnover rates and staffing shortages, exacerbated by limited resources and stressful working conditions, can lead to increased workloads for existing nurses, ultimately compromising patient care. Addressing these challenges requires a multifaceted approach, including competitive compensation, career advancement opportunities, and supportive work environments. For example, leadership initiatives that prioritize nurse well-being and professional development can improve retention rates, thereby enhancing service quality [64]. Designing quality initiatives based on stakeholder feedback is crucial, as noted by Rosenfeld [89]. Promoting innovation in nursing services is vital for addressing dynamic patient needs [90]. Integrating research findings into clinical practice and fostering collaboration between academic institutions and healthcare organizations, as emphasized by Chen [91], aims to elevate nursing care effectiveness and improve patient outcomes and satisfaction. In Iran, aligning these initiatives with national healthcare policies and cultural values can enhance their impact.

4.1 | Contextual Limitations and Broader Applicability

While this study offers valuable insights into improving nursing performance in Iran, its findings are geographically confined to a context shaped by unique cultural, religious, and economic factors, such as Islamic values, hierarchical structures, and resource limitations. These factors may limit direct applicability to other settings. However, many themes identified—such as improving working conditions, enhancing mental health

support, and fostering continuous learning—are universally relevant, as challenges like understaffing, high workloads, and burnout are common globally.

Future research should explore how these strategies can be adapted to different cultural and regulatory environments. For instance, transformational leadership models may need adjustments in decentralized systems, and technology integration must consider variations in digital infrastructure, especially in rural or underserved areas.

5 | Conclusion

In summary, this systematic review highlights the crucial role of nursing performance in improving healthcare quality and patient outcomes in Iran. The evidence indicates that effective leadership, a supportive organizational culture, and continuous professional development are vital for optimizing nursing performance. Specifically, strategies that incorporate cultural sensitivity, economic realities, and regulatory frameworks unique to Iran are essential for practical implementation. This contextualization ensures that recommendations are actionable and relevant to the Iranian healthcare environment.

The identified themes—transformational leadership, self-efficacy, technological innovation, and mental well-being—illustrate the complexity of nursing practice. While these themes are globally relevant, their implementation in Iran requires careful consideration of cultural, religious, and economic contexts. This nuanced understanding is critical for developing recommendations that are not only theoretically sound but also practically applicable.

The findings from this study not only provide insights into improving nursing performance in Iran but also offer valuable lessons for other countries facing similar challenges. For instance, the integration of cultural and religious values into leadership models in Iran can inspire similar approaches in other culturally diverse healthcare systems. Furthermore, the emphasis on low-cost, resource-efficient strategies for training and mental health support can serve as a model for low- and middle-income countries, adapting to their unique challenges.

As global healthcare systems face increasing demands, comprehensive strategies to support nurses are essential. The findings suggest that fostering an environment focused on professional growth, emotional resilience, and effective communication enhances nurse satisfaction and significantly improves patient care quality. Such an environment is crucial not only for retention but also for the overall well-being of healthcare professionals. By adapting these strategies to different cultural and regulatory environments, healthcare systems worldwide can elevate nursing performance and achieve better health outcomes for patients and communities.

Additionally, the study emphasizes the necessity of engaging with stakeholders from diverse sectors of the Iranian healthcare system—including policymakers, religious leaders, and

community representatives—to ensure that the proposed strategies are relevant, effective, and inclusive. Such stake-holder engagement can provide valuable insights into the practical challenges faced by nurses, ensuring that the recommendations are grounded in the realities of the Iranian healthcare landscape.

Practical Implications

The findings of this study offer actionable recommendations for nursing managers and policymakers, including:

- Implementing transformational leadership training programs tailored to Iran's cultural and hierarchical structures to enhance leadership effectiveness.
- Fostering a collaborative organizational culture through effective communication and feedback channels, which can improve staff morale and teamwork.
- Developing targeted training programs to enhance nurses' clinical and decision-making skills, ensuring they are equipped to meet evolving healthcare demands.
- Providing comprehensive mental health resources to support nurses' well-being, thereby reducing burnout and turnover rates.
- Integrating innovative technologies into nursing services to improve healthcare delivery, efficiency, and patient outcomes.

By implementing these strategies, nursing performance can be enhanced, leading to improved health outcomes for patients and communities. This holistic approach not only addresses immediate challenges but also sets the groundwork for sustainable nursing practice in Iran and beyond.

Future Research

To address the limitations of this study and advance the field, future research should:

- 1. Use quantitative methods to measure the effectiveness of strategies like leadership training, technology integration, and mental health support.
- 2. Conduct cross-cultural comparisons to explore the universal applicability of strategies and the influence of cultural, economic, and regulatory factors.
- 3. Evaluate mental health interventions to reduce burnout and improve job satisfaction.
- 4. Examine the role of policymakers in developing national policies to support nursing performance improvement, especially in low- and middle-income countries like Iran.

Addressing these gaps will help build evidence-based strategies to enhance nursing performance and healthcare quality globally.

Author Contributions

Nahid Hatam: conceptualization, writing – original draft, writing – review and editing, methodology, formal analysis, supervision. Mohammad Amin Bahrami: conceptualization, writing – review and editing, writing – original draft, supervision. Mahnaz Rakhshan: methodology, writing – original draft, writing – review and editing. Vahideh Rostami: investigation, writing – original draft, writing – review and editing, formal analysis, data curation, methodology. Azad Shokri: methodology, investigation, writing – original draft, writing – review and editing, project administration, formal analysis.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Transparency Statement

The lead author Vahideh Rostami affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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