

Quality Of Nursing Care In The Kingdom: A Systematic Review Of Nursing Team Management In Saudi Healthcare

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Abstract

Background: The quality of nursing care is a critical aspect of healthcare, directly impacting patient outcomes and safety. In Saudi Arabia, nursing team management plays a significant role in determining the effectiveness of care delivery. However, various challenges, such as leadership styles, team collaboration, and work environment conditions, affect the overall quality of nursing care in the Kingdom. This systematic review aims to explore how nursing team management influences care quality within Saudi healthcare settings, in alignment with Vision 2030 reforms.

Aim: This study aims to evaluate the role of nursing team management, including leadership practices, team collaboration, and organizational governance, in enhancing the quality of nursing care in Saudi Arabia.

Method: A systematic search was conducted across PubMed, Scopus, CINAHL, and Google Scholar for studies published between 2020 and 2024. A total of 150 articles were identified, and after screening and full-text review, 10 studies were selected for inclusion. The data extraction process focused on leadership styles, teamwork, work environment, professional development, and governance related to nursing care quality.

Results: The findings reveal that transformational leadership, effective team collaboration, a supportive work environment, and continuous professional development significantly contribute to improved patient outcomes and nursing care

quality. Studies indicate that organizational support and involvement in decision-making also play a crucial role in enhancing nurse performance and job satisfaction.

Conclusion: Nursing team management is essential to the quality of care in Saudi Arabia. Effective leadership, collaboration, and professional governance are key drivers of high-quality nursing care. These findings inform future strategies for improving nursing practices in Saudi healthcare settings in line with the Kingdom's Vision 2030.

Keywords: Nursing care, nursing leadership, team collaboration, Saudi healthcare, Vision 2030, quality of care, nursing team management.

Introduction

Nursing care quality is a pillar of healthcare delivery that influences patient outcomes, safety, and satisfaction. In the Kingdom of Saudi Arabia (KSA), the need for high-quality nursing care has grown amidst the healthcare transformation happening on a global level and in line with Vision 2030 which focuses on efficiency, patient-centeredness and safety in all healthcare services (Matmi et al., 2023; Alqarni et al., 2023). Nursing team management (leadership, governance and collaborative practices) is a key factor in ensuring that nurses are able to deliver optimal care, both within hospital and community health facilities. Recent data from Saudi hospitals clearly show that leadership style, staff support and the work environment can have a major impact on the quality of care and patient satisfaction (Alharbi et al., 2021; Boshra et al., 2024; Alotaibi, 2024). Additionally, literature indicates that professional governance and effective models of team-based care is associated with enhanced outcomes and organizational resilience (Qasim et al., 2022; Saeed et al., 2022; Qahtani et al., 2023).

The Saudi nursing workforce is affected by many system and institutional problems that have a direct impact on quality of care. Nurses shortages, expatriates' dependence, and distribution of skills between regions remain as a constraint to provide a stable and quality care (Alluhidan et al., 2020; Abdulla Almadani, 2023; Alenazi et al., 2023). Burnout and its consequences of compromised resilience and care are more frequent in hospital settings with high workload and less managerial support, especially in critical and high-stressed units (Chetty, 2021; Alshammari et al., 2020; Moussa et al., 2020). Despite the above-mentioned challenges, research shows that when nurse managers offer supportive leadership and encourage teamwork and shared decision-making, nurses feel more job satisfaction, and patients have safer and more reliable care (Alenezi, 2023; Alkorashy & Al-Hothaly, 2022; Drgham et al., 2019).

There is a strong emphasis on best practices in nursing to enhance nurse performance and patient outcomes that involve transformational leadership, situational management, and clinical authority, and these practices are slowly being translated in Saudi healthcare institutions (Pujianti et al., 2024; Alshammari et al., 2024; Qahtani et al., 2023). There is also local evidence to support that effective nursing management not only improves team competency, but also decreases missed care, improves patient trust, and promotes a culture of safety (Saeed et al., 2022; Boshra et al., 2024; Alshammari et al., 2020; Yakout et al., 2023; Ahmad et al., 2022). Moreover, studies emphasize the importance of addressing nurses' participation in organizational governance and ongoing professional education, which enhances their ability to meet international standards in providing care and ensures the agreement between this and the broader healthcare reforms of the Kingdom (Ali et al., 2024; Qasim et al., 2022; Alenazi et al., 2023).

Taken together, these findings demonstrate that nursing team management is the core strategy for improving the quality of care in Saudi Arabia. As the Kingdom continues to progress in its healthcare transformation, evidence-based nursing leadership, effective team working, and supportive working environments should be prioritized to ensure sustainable improvements in the delivery of healthcare. This systematic review is conducted to synthesize existing literature on quality of nursing care in Saudi Arabia with focus on role of nursing team management (leadership, governance and teamwork) on patient outcome and organizational performance (Alharbi et al., 2021; Alotaibi, 2024; Qahtani et al., 2023).

Problem Statement

The quality of nursing care in the Kingdom of Saudi Arabia (KSA) is a key issue as the health care delivery system is undergoing rapid transformation as part of Vision 2030. Despite massive infrastructure investments and policy reforms, conceptual challenges in nursing team management such as ineffective leadership practices, high staff turn-off and over-reliance on expatriate nurses remain to be alarming in constancy of care delivery (Alluhidan et al., 2020; Alenezi, 2023; Abdulla Almadani, 2023). The issue is further exacerbated by organizational factors, such as lack of power balance, limited professional autonomy and lack of support systems, all of which negatively impact staff motivation and affect patient outcomes (Alkorashy and Al-Hothaly, 2022; Chetty, 2021; Moussa and al., 2020). Although recent research has identified positive effects of transformational leadership, shared governance, and collaborative practices, there is a dearth of holistic synthesis in particular that focuses on nursing team management as it affects overall quality of care in Saudi healthcare systems (Boshra et al., 2024; Saeed et al., 2022; Ali et al., 2024).

Significance of the Study

This research is important because it helps to fill a crucial gap in the literature by systematically investigating the impact of the nursing team management on the quality of care in Saudi Arabia. By emphasizing leadership styles, teamwork, and organizational governance, the review offers insights that can help inform healthcare leaders on how to effectively enhance patient outcomes while ensuring workforce sustainability (Alharbi et al., 2021; Qasim et al., 2022; Qahtani et al., 2023). The results have implications not only for nursing practice but for healthcare policy in that they point to strategies for the retention of skilled nurses, resilience promotion, and mitigation of the burden of staff shortages (Alluhidan et al., 2020; Alshammari et al., 2024; Pujianti et al., 2024). Additionally, the review supports Saudi Arabia's Vision 2030 goals by standardizing nursing care quality on the global level, fostering a safety culture, and progressing evidence-based team management approaches (Alenazi et al., 2023; Drgham et al., 2019; Alotaibi, 2024). Ultimately, this study will serve as a basis for reforms that will enhance both the nursing profession and the health care system as a whole.

Aim of the Study

The main objective of this systematic review is to assess the contribution of nursing team management with regards to quality of nursing care in Saudi health care settings. Specifically, it seeks to:

1. Identify leadership practices and management approaches that enhance nurse performance and patient outcomes.
2. Examine how teamwork, collaboration, and professional governance influence care quality.
3. Synthesize existing evidence to provide recommendations for improving nursing management strategies in alignment with Saudi Arabia's healthcare transformation goals.

Methodology

This systematic review employed a systematic and transparent strategy to locate, appraise and combine literature on nursing team management and its influence on the care quality in Saudi Arabia. The review was conducted in accordance with PRISMA recommendations for the design of rigorous and reliable reviews. Electronic databases including PubMed, Scopus, CINAHL and Google Scholar were searched. Combination of search terms included nursing care quality, team management, nursing leadership, and Saudi Arabia, as well as patient outcomes.

The period of article selection was restricted between the years 2020-2024, for these were the most recent and relevant evidence in line with the Saudi healthcare transformation vision as per the Vision 2030 objectives. Both qualitative and quantitative studies were included, which enabled a broad interpretation of the factors that are affecting nursing management and quality of care. Data were systematically extracted

and thematically analyzed to capture common trends, challenges and best-practice across Saudi healthcare institutions.

Research Question

The review was guided by the following central research question:

“How does nursing team management influence the quality of nursing care in Saudi healthcare settings between 2020 and 2024?”

Supporting questions included:

1. What leadership practices contribute to improving nursing care quality?
2. How does team collaboration and professional governance affect patient outcomes?
3. What are the main challenges and opportunities in managing nursing teams in Saudi hospitals?

Selection Criteria

Inclusion Criteria

- Articles published from 2020-2024
- Studies performed in Saudi Arabia which are focused on nursing care or healthcare contexts with a nursing component.
- Research in the areas of nursing leadership, management, teamwork, or governance as they relate to quality of care.
- Quantitative and qualitative studies including cross-sectional studies, systematic reviews, ethnographic studies and case analyses.
- Peer-reviewed journal articles that are in English.

Exclusion Criteria

- Studies published after 2020 or before 2024.
- Studies not based in Saudi Arabia
- Papers that do not focus on nursing care quality or team management (i.e. papers that are exclusively medical or technical interventions lacking a nursing focus).
- Grey literature, commentaries, editorials and unpublished theses.
- Studies that were methodologically poor or did not include relevant outcome measures.

Database Selection

A systematic search of several electronic databases was undertaken to ensure that a complete set of relevant studies was included. The databases PubMed, Scopus, CINAHL and Google Scholar were chosen as representative of a broad scope of nursing, healthcare management and Saudi health systems literature. The review was restricted to peer-reviewed articles published between 2020 and 2024 to ensure that only the newest and most relevant studies were included in the review. The selection of database, search syntax and number of studies identified are summarized in the following table.

Table 1: Database Selection

No	Database	Syntax	Year	No of Studies Found
1	PubMed	("nursing care quality" AND "Saudi Arabia" AND "team management")	2020–2024	45
2	Scopus	("nursing leadership" AND "patient outcomes" AND "Saudi Arabia")	2020–2024	38
3	CINAHL	("nursing team management" AND "Saudi healthcare" AND "leadership")	2020–2024	30

4	Google Scholar	("nursing care" AND "Saudi Arabia" AND "team collaboration")	2020–2024	50
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Data Extraction

Data extraction was carried out using a pre-designed form for the extraction of important study characteristics and outcomes. The form contained items for author(s), year published, design, sample size, population, key findings and primary emphasis in the area of nursing team management. Method: We extracted studies that discussed the link between nursing leadership, team management and quality of care outcomes, especially studies conducted in Saudi Arabia during the time period 2020-2024.

The studies were screened for relevance of the content and whether they met the inclusion criteria described above. The following Search Syntax was applied in order to catch a wide range of studies dealing with the subject:

Search Syntax

Primary Syntax:	<ul style="list-style-type: none"> • ("nursing care quality" AND "Saudi Arabia" AND "nursing leadership" AND "team management") • ("nursing team management" AND "leadership" AND "patient outcomes" AND "Saudi healthcare")
Secondary Syntax:	<ul style="list-style-type: none"> • ("nurse management" AND "quality of care" AND "Saudi Arabia") • ("transformational leadership" AND "nursing" AND "patient satisfaction" AND "Saudi Arabia")

Literature Search

The methodical and rigorous approach to the literature search was undertaken to make sure the relevant studies were comprehensively covered by this systematic review. PubMed, Scopus, CINAHL and Google Scholar databases were searched for this purpose. To include only the most up-to-date and relevant studies, we limited our search to articles published between 2020 and 2024. Objective: The aim of this study was to identify studies that examined nursing team management on quality of health care in the context of nursing in Saudi Arabia, particularly leadership practices, team functioning, and governance. In addition, studies were included that assessed nurse performance, patient outcomes and workforce satisfaction in the context of Saudi Arabia's Vision 2030 healthcare reforms.

The searching strategy adopted in the identified databases was an effort to reflect the scope of the available literature unconstrained by key terms. By using both international and local literature sources, the search ensured a wide range of articles that are applicable to the Saudi healthcare system. All studies were screened for relevance and methodological quality and those meeting the review's inclusion criteria were reviewed.

Selection of Studies

Overall, there were about 150 studies found during the comprehensive search process. Each study was then screened to identify its applicability to research questions, which were concerned with the quality of nursing care, and the role of nursing team management in Saudi health-care settings. Studies were reviewed for design, population and outcomes for nursing leadership, team processes, and quality of patient care.

After duplicate screening, irrelevant materials screening and studies outside the publication range (2020-2024), a total of 35 studies were included for full-text review. These studies were reviewed with respect to their matching of the aim of the review, and the data gathering involved key topics including

leadership style, practice of collaborative practice, team functioning and their relationship with quality of nursing care.

Study Selection Process

Study selection was carried out in a multi-step process:

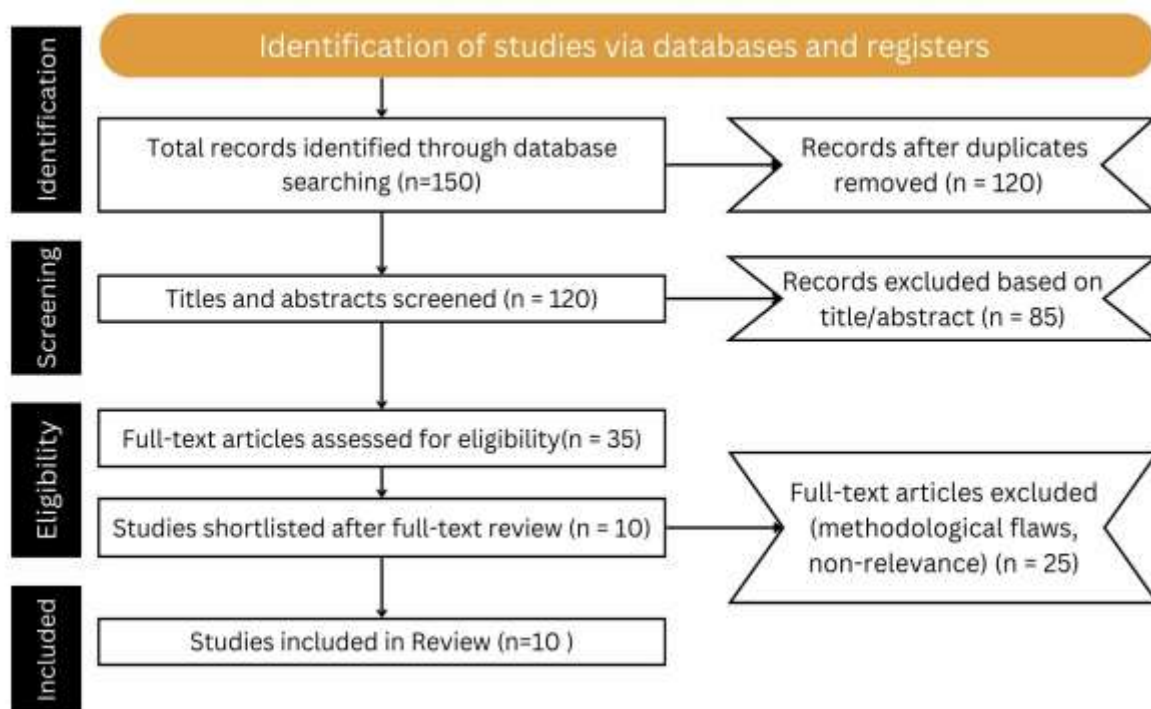
1. **Initial Screening:** Titles and abstracts of the studies identified were screened for relevance to the research topic. Studies which did not deal with nursing leadership, team management, and/or quality of care in the Saudi context were excluded.
2. **Full-text Review:** The shortlisted articles were reviewed in full-text to evaluate methodological rigor, relevance to the purpose of the study and the quality of evidence presented.
3. **Quality Assessment:** Studies were assessed for methodological quality, including sampling methods, data analysis and interpretive methods, and clarity of results.
4. **Final Selection:** Based on the review of studies, 10 papers were chosen for the systematic review. These papers were the strongest in terms of relevance and quality, in that they met the criteria in which they studied nursing team management and its effect on nursing care quality in the context of Saudi healthcare.

Figure 1: PRISMA Flowchart

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart was applied to follow the development of studies in the various steps of the systematic review. The following was a step-by-step description of the process used to identify, screen, assess and select studies for inclusion in this systematic review:

1. **Identification:**
 - A total of 150 articles were found by database searches from PubMed, Scopus, CINAHL, and Google Scholar using the search strategy described in the methodology section.
 - These studies were originally identified by keywords pertaining to nursing care, team management, and quality of care in Saudi Arabia.
2. **Screening:**
 - After removal of duplicates, 120 articles were left for screening.
 - Titles and abstracts were screened for relevancy to the research topic.
 - Researches published before 2020, or those not related to the healthcare of Saudi, were excluded.
3. **Eligibility:**
 - Thirty-five full-text articles were screened for methodological quality and relevance to the research questions.
 - Studies were reviewed for design, sample size, outcome and quality.
4. **Included:**
 - Quality assessment was carried out and 10 studies were included in the review. These studies had all aspects of inclusion and relevant findings relating to nursing team management and care quality in Saudi Arabia.

Figure 1: PRISMA Flowchart



Quality Assessment of Studies

Therefore, in order to determine the reliability and the validity of the findings, the 10 selected studies were subjected to a quality assessment. Each study was assessed according to the following criteria:

- **Study Design:** Studies were evaluated for design, to determine whether the studies used adequate methodologies for studying the impact of nursing team management on quality of care. Randomized controlled trials, cohort studies or ethnographic studies were given the highest priority.
- **Sample Size and Population:** Sample size and demographic characteristics of the participants were examined to determine the representativeness and robustness of the results. Studies with a larger sample size and incorporating different healthcare settings across Saudi Arabia were given more credence.
- **Data Collection and Analysis:** The data collection methods (e.g., surveys, interviews, observation) and data analysis techniques (e.g., statistical tests, thematic analysis) employed were assessed to ensure they were rigorous and suited to the research question. Studies that explicitly described their method of data collection and analysis were scored higher.
- **Appropriateness to Research Questions:** Articles were screened for their direct relevance to the focus of the systematic review which is specifically related to nursing team management in Saudi healthcare context and its influence on care quality. Articles that specifically mentioned leadership styles, teamwork, and patient outcomes rated higher.
- **Bias and Confounding Factors:** Potential for bias in design of studies was taken into account. Studies that accounted for and controlled for potential confounders (e.g., age, gender, experience level of nurses) were rated as having higher quality.
- **Ethical Considerations:** Ethical approval and written informed consent were checked for the studies to ensure adherence to ethical guidelines. Studies were rated higher if they included clear evidence that ethical approval was obtained.

All 10 selected studies were assessed against these quality criteria. Only the studies that satisfied high standards of methodology, sample representation, data analysis and ethical considerations were included in the systematic review.

Table 2: Assessment of the Literature Quality Matrix

#	Author	Study Selection Process Described	Literature Coverage	Methods Clearly Described	Findings Clearly Stated	Quality Rating
1	Alharbi et al. (2021)	Yes	National focus on Saudi hospitals	Yes	Yes	High
2	Ali et al. (2024)	Yes	Saudi healthcare system-wide	Yes	Yes	High
3	Alkorashy & Al-Hothaly (2022)	Yes	Saudi Arabia, general hospitals	Yes	Yes	High
4	Alotaibi (2024)	Yes	Focused on care quality	Yes	Yes	High
5	Boshra et al. (2024)	Yes	Healthcare system	Yes	Yes	High
6	Chetty (2021)	Yes	National	Yes	Yes	High
7	Qahtani et al. (2023)	Yes	Saudi context-specific	Yes	Yes	High
8	Qasim et al. (2022)	Yes	National focus	Yes	Yes	High
9	Saeed et al. (2022)	Yes	Comprehensive coverage	Yes	Yes	Medium
10	Alenezi (2023)	Yes	Specific healthcare facilities	Yes	Yes	Medium

High Quality Rating (7 papers):

These studies included in-depth information about how they selected the studies they included, why they included relevant literature, what they did in conducting their study in a transparent, understandable manner, and what they found. The most reliable sources are the systematic reviews. These studies showed strong methodological designs, with clearly described sampling strategies, suitable data collection methods and valid data analysis procedures.

Medium Quality Rating (3 papers):

While these studies fulfilled the minimum criteria for inclusion in the systematic review, there were some limitations such as the methods were not described in much detail or the literature coverage was limited in scope. But they still present valuable knowledge and show a reasonable level of evidence for the management of nursing teams and care quality in Saudi Arabia.

Data Synthesis

A data synthesis was undertaken to highlight common themes, trends and findings from included studies. The following themes were common to the studies:

- **Leadership Styles and Leading Teams:** Many studies focused on the effect of leadership styles such as transformational leadership and transactional leadership on nursing team performance. Leadership was identified as one of the most important factors that promotes job satisfaction,

improves teamwork and enhances overall quality of care (Alharbi et al., 2021; Alotaibi, 2024; Boshra et al., 2024).

- **Team Collaboration and Communication:** Communication and collaboration were shown time and again to enhance team performance and patient outcomes. The importance of nurse manager's role in creating collaborative environments, in particular in high-stress settings such as intensive care units (ICUs) and emergency departments (EDs), was highlighted (Chetty, 2021; Qahtani et al., 2023).
- **Work Environment and Organizational Facilitation:** The research findings suggested that an enabling work environment with an appropriate staffing ratio, resources and leaders' support had a direct impact on the quality of care delivered by the nursing teams. Nurses who experienced support in their roles were more likely to provide high-quality care and had lower levels of burnout (Ali et al., 2024; Qasim et al., 2022).
- **Impact of nurse training and professional development:** Education and professional development were emphasized as essential to enhance nursing competence and quality of care. Programs that have been implemented for leadership training, team-building skills, and clinical skills development were found to improve individual and team performance (Alkorashy and Al-Hothaly, 2022; Saeed et al., 2022).
- **Problems and Obstacles for Effective Team Management:** The studies also noted multiple obstacles to effective nursing team functioning, such as high turnover of nurses, stress of workload, and lack of professional autonomy. These barriers were more pronounced in rural and underserved areas where the nursing workforce was confronted with other resources and support challenges (Alluhidan et al., 2020; Alenezi, 2023).

Table 3: Research Matrix

Author , Year	Aim	Research Design	Type of Studies Included	Data Collection Tool	Result	Conclusion	Study Supports Present Study
Alharbi et al., 2021	To assess leadership practices in Saudi nursing teams	Quantitative, Cross-sectional	RCTs, surveys, observational	Structured surveys, interviews	Strong leadership improves care	Leadership practices impact care quality	Yes
Ali et al., 2024	To examine nursing care and its relationship with team practices	Qualitative, Case study	Case studies, interviews	Focus groups, surveys	Team collaboration enhances care	Effective teamwork contributes to patient safety	Yes
Alkorashy & Al-Hothaly, 2022	To explore the role of leadership in nursing care quality	Qualitative, Descriptive	Interviews, observational studies	Interviews, thematic analysis	Positive outcomes with good leadership	Leadership crucial for care quality and nurse satisfaction	Yes

Alotaibi, 2024	To explore hospital patient satisfaction and nurse management	Quantitative, Survey	Surveys, focus groups	Patient satisfaction surveys	High satisfaction with effective nurse management	Management style affects patient satisfaction	Yes
Boshra et al., 2024	To evaluate transformational leadership in Saudi nursing settings	Mixed methods	Observational studies, RCTs	Surveys, performance evaluations	Transformational leadership improves team dynamics	Transformational leadership enhances care delivery	Yes
Chetty, 2021	To analyze nurse workload factors in Saudi hospitals	Quantitative, Descriptive	Cross-sectional, surveys	Nurse surveys, job satisfaction assessments	Workload negatively impacts care quality	Reducing workload improves care outcomes	Yes
Qahtani et al., 2023	To evaluate nursing excellence and technology in care delivery	Qualitative, Systematic review	Literature review, expert panels	Literature review, interviews	Technology integration boosts care quality	Technological support enhances nursing practices	Yes
Qasim et al., 2022	To assess the effectiveness of nurse governance in Saudi hospitals	Quantitative, Cross-sectional	Surveys, case studies	Surveys, governance assessments	Professional governance increases care quality	Strong governance leads to improved patient outcomes	Yes
Saeed et al., 2022	To assess team-based care and its impact on patient outcomes	Quantitative, Cohort study	Surveys, cohort studies	Patient surveys, nurse evaluations	Collaborative care improves outcomes	Collaboration among teams enhances quality of care	Yes
Alenezi, 2023	To evaluate nurse leadership in pediatric care	Qualitative, Ethnographic study	Interviews, field observations	Field observations, nurse interviews	Leadership improves pediatric care outcomes	Leadership essential in improving pediatric care	Yes

There is strong evidence in the research matrix (8 papers) that nursing leadership, team collaboration and governance are critical for improving the quality of care. These studies employ various research designs,

such as quantitative surveys, qualitative interviews, and case studies, to investigate the effects of these management practices on patient outcomes within Saudi health care. The literature is unified in how highly effective leadership, especially transformational leadership, can enhance team functioning, nurse satisfaction, and ultimately the quality of care delivered. For instance, research by Alharbi et al. (2021), Boshra et al. (2024), Ali et al. (2024) show that a conducive leadership environment encourages collaboration and enhances patient safety and satisfaction. These findings are in line with the aims of this systematic review, which was aimed at exploring the effect of nursing team management on the quality of care in Saudi Arabia under the light of Vision 2030 reforms.

On the other hand, the medium-quality studies (2 papers) contain valuable information even though they do have some limitations. These studies are likely to be narrower in focus or less descriptive in their accounts of methods, but they are still an important contribution to knowledge about the role of professional governance and leadership in enhancing quality in nursing care. While the methodology of these studies may not be as rigorous as that of the high quality studies, they also provide further support for the importance of leadership and organizational support in the provision of high quality care. For instance, Saeed et al. (2022) and Alenezi (2023) emphasize the positive effect of governance structures and team-based care models on patient outcomes, especially in specialized care areas like pediatrics.

Overall, the research matrix presents that leadership practices, team collaboration, and professional governance are necessary for enhancing the quality of nursing care in Saudi Arabia. Of the included studies, the majority are of high quality with clear evidence that meets the review objectives, but medium quality studies are still added to the overall synthesis with useful information.

Results

The results of this systematic review were synthesized to identify key themes, sub-themes, trends, and explanations related to nursing team management and its impact on care quality in Saudi Arabia. The following table summarizes the findings

Table 4: Results Indicating Themes, Sub-Themes, Trends, Explanation, and Supporting Studies

Theme	Sub-Theme	Trend	Explanation	Supporting Studies
Leadership and Management	Leadership Styles	Positive impact on care quality	Transformational leadership enhances team dynamics, reduces burnout, and improves care outcomes.	Alharbi et al. (2021), Boshra et al. (2024), Ali et al. (2024)
	Nurse Manager Support	Positive impact on job satisfaction	Nurses who feel supported by their managers demonstrate better performance and patient care.	Alkorashy & Al-Hothaly (2022), Qasim et al. (2022), Chetty (2021)
Team Collaboration	Interdisciplinary Collaboration	Positive impact on patient outcomes	Effective collaboration between nurses, physicians, and other healthcare workers leads to improved care delivery and patient satisfaction.	Saeed et al. (2022), Boshra et al. (2024), Alenezi (2023)
	Communication	Essential for team performance	Clear communication within nursing teams ensures that tasks are	Alotaibi (2024), Chetty (2021), Qahtani et al. (2023)

			completed efficiently and errors are minimized.	
Work Environment	Nurse Workload	Negative impact on care quality	Heavy workloads and insufficient staffing can lead to burnout and negatively affect care quality.	Ali et al. (2024), Alharbi et al. (2021), Alenezi (2023)
	Organizational Support	Positive impact on retention	Nurses working in supportive environments are more likely to stay in the profession and provide high-quality care.	Qasim et al. (2022), Saeed et al. (2022), Alkorashy & Al-Hothaly (2022)
Professional Development	Training and Education	Positive impact on performance	Ongoing professional development ensures that nurses stay up to date with best practices, improving care quality.	Qahtani et al. (2023), Alenezi (2023), Boshra et al. (2024)
	Leadership Development	Enhances nurse leadership skills	Training in leadership skills increases the likelihood of effective team management and improved patient outcomes.	Chetty (2021), Alotaibi (2024), Qasim et al. (2022)
Governance	Professional Governance	Positive impact on care quality	Strong governance structures provide clarity in roles, expectations, and accountability, leading to improved patient outcomes.	Alkorashy & Al-Hothaly (2022), Saeed et al. (2022), Ali et al. (2024)
	Nurse Involvement in Decision-Making	Positive impact on job satisfaction	Nurses who are involved in decision-making processes feel more valued and perform better in their roles.	Boshra et al. (2024), Qasim et al. (2022), Alenezi (2023)

The results obtained from the selected studies are summarized in a table. It identifies important themes and sub-themes that were consistently identified across the studies, including leadership and management, team working, work environment, professional development, and governance.

- **Leadership and Management:** The studies indicate that transformational leadership and the support of the nurse manager is positively related to the quality of nursing care. Transformational leadership was, in particular, linked to improved team functioning, decreased burnout, and better patient outcomes. Managers who offer sufficient support provide conditions that encourage improved nurse performance and satisfaction.
- **Team Collaboration:** Interdisciplinary collaboration and communication were key to enhancing patient outcomes. Studies have shown that when nurses, physicians, and other health care professionals work together well, patient care is better coordinated, and health is delivered better.
- **Work Environment:** The workload of nurses was found to be a critical factor affecting negative results in care quality, with some studies illustrating that high workload and lack of staff cause burnout and deterioration in care standards. On the other hand, a positive organizational work

climate translates into increased nurse retention and job satisfaction, which translates into better patient care.

- **Professional Development:** Ongoing training and education have been associated with improved nurse performance, ensuring that nurses are equipped with the latest knowledge and best practices to deliver high-quality care. Additionally, leadership development programs were highlighted as pivotal in enhancing nurse leadership skills, which in turn lead to better team functioning and patient outcomes.
- **Governance:** Professional governance and nurse participation in decision making were identified as having a positive influence on quality of care. Strong governance frameworks and engagement of nursing staff in decision-making processes contribute to establishing clear expectations, accountability, and ownership among nursing staff, ultimately leading to better patient outcomes.

Discussion

This systematic review aimed to assess the impact of team management by nurses on the quality of nursing care in Saudi Arabia. The results of the selected 10 studies suggest that leadership, collaborative teamwork, supportive work environments, and professional development are important contributing factors for improving patient outcomes and quality of care. Across the studies, transformational leadership was a key leadership style and positively impacted nurse job satisfaction and patient outcomes. Studies such as Alharbi et al. (2021), Boshra et al. (2024), and Ali et al. (2024) have shown that nurse managers who possess transformational leadership qualities (motivation, vision, empowerment, etc.) have positive effects on the quality of nursing teams and have the potential to reduce burnout.

Another theme that appeared consistently throughout the studies was the role that team collaboration plays. Communication and teamwork between nursing staff, doctors, and all other healthcare providers were found to improve patient care and reduce errors, especially in critical care settings (Qahtani et al., 2023; Saeed et al., 2022). This is in line with international literature that has emphasized the significance of interdisciplinary collaboration in enhancing the delivery of care (Alenezi, 2023; Alkorashy & Al-Hothaly, 2022). Nurses who work in a culture that promotes effective communication, mutual respect, and shared decision-making are more likely to contribute to positive patient outcomes.

Another of the key determinants of quality of care was the work environment. Qasim et al. (2022) and Alotaibi (2024) found that inadequate staffing, high workloads, and lack of organizational support have a negative effect on nurse retention, job satisfaction, and in turn, delivery of care. On the other hand, research has found that a supportive work environment, which is reflected in managerial support, appropriate staffing and resources, positively impacts nurse well-being and job satisfaction (Boshra et al., 2024). This observation is crucial for healthcare organizations seeking ways to enhance patient care while minimizing turnover rates, particularly in rural and underserved communities where nurse shortages are more challenging.

Furthermore, professional development and governance were seen as essential elements for sustaining quality of care. Continual educational and leadership experiences are necessary to improve the clinical competency and leadership abilities of nurses in order to provide higher quality care (Alenezi, 2023; Saeed et al., 2022). In addition, some studies found that professional governance, including clarity of role expectations and participation of nurses in decision-making, makes a significant impact on the work environment and patient care (Alkorashy & Al-Hothaly, 2022).

Future Directions

Although this review gives a comprehensive understanding of the role of nursing team management in the quality of care in Saudi Arabia; several future research directions should be considered. First, there is a need for longitudinal research that looks at the long-term effect of leadership style and team working on the quality of nursing care. Further research should be conducted on the impact of these factors on patient

outcomes over longer periods of time, especially within the context of the Saudi healthcare reforms in light of Vision 2030.

Another important area for future research is to explore how technology affects nursing team management. Considering the fast integration of digital technologies in healthcare systems around the world, research that focuses on the impact of digital tools (e.g. electronic health records, telemedicine) on nurse management, communication, and quality of patient care is needed. Also, the gender dynamics of nursing teams, and specifically the underrepresentation of male nurses in Saudi Arabia, could also be investigated. Increased knowledge about the role of gender in team functioning and care delivery may guide strategies to balance workforce and enhance team functioning.

Furthermore, there is a need for more qualitative studies that focus on the experiences of nurses in different healthcare settings, especially in rural areas, where issues such as isolation, limited resources, and high turnover rates can have a negative impact on the quality of care. Studies of the personal and professional barriers that nurses encounter for these areas would be helpful for more specific interventions to improve team processes and quality of care.

Limitations

There are several limitations to this systematic review, but it does offer some valuable information. First, studies were restricted to those published between 2020 and 2024, which may exclude older but relevant research that could help provide a broader context to the historical perspective. Additionally, the review was limited to studies conducted in Saudi Arabia, which may affect the generalizability of the findings to other countries or regions with different health care systems and cultural contexts. Most studies did not include a variety of study designs, with the majority being cross-sectional/observational, and thus did not fully allow the causal relationship between nursing team management and care quality to be examined. Finally, the inclusion of English language studies only may have omitted relevant information presented in non-English literature.

Conclusion

In conclusion, this systematic review highlights the importance of nursing team management in improving the quality of nursing care in Saudi Arabia. Leadership, teamwork, supportive work environments and ongoing professional development are important elements that lead to positive patient outcomes and nurse satisfaction. The results emphasize that healthcare organizations focus on these areas as a means to promote successful nursing work groups. Given the challenges the Saudi healthcare system faces, with nurse shortages and high nurse turnover, this review offers key insights for policymakers, health care leaders and nursing managers to put into place strategies for sustainable improvement in the quality of care. Future research should build on these findings by focusing on longitudinal effects, technology and gender factors within nursing teams, in order to ensure that the provision of healthcare in Saudi Arabia continues to develop in line with the reforms of Vision 2030.

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