Impact of Leadership Styles on Healthcare Workers in the Gulf Cooperation Council (GCC) – Scoping Review

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Summary

Healthcare systems worldwide are facing increasing strain due to workforce shortages, burnout, and rising demands for care. In the Gulf Cooperation Council (GCC) countries, which comprise Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates, these pressures are heightened by rapid system expansion and a heavy reliance on a predominantly expatriate healthcare workforce, risking high turnover and undermining long-term system sustainability. In such contexts, leadership plays a critical role in shaping the experience, resilience, and performance of healthcare workers.

This dissertation explores the dynamics of leadership styles and their impact on healthcare workers in the GCC through a scoping review, which included 51 studies, guided by three questions: What leadership styles are most frequently studied in the region? What impact do these styles have on healthcare workers? And how does context shape the practice and perception of leadership? These questions structured the review and ensured a comprehensive mapping of the evidence.

The findings revealed that transformational leadership was the most frequently studied and was often associated with positive outcomes, such as higher job satisfaction, stronger organisational commitment, and greater work engagement. At the same time, the evidence showed that even transformational leadership could have mixed effects in specific contexts, meaning its benefits were not always universal. Other relational styles, such as authentic, democratic, and servant leadership, also demonstrated advantages by enabling trust, empowerment, and

psychological well-being, though these were most evident in specific contexts such as private hospitals, nursing cohorts, or organisations with supportive cultures.

By contrast, laissez-faire leadership, characterised by avoidance or inaction, was consistently linked to negative impacts such as dissatisfaction, burnout, and weaker organisational loyalty, although a few studies suggested benefits in some contexts. Transactional and autocratic leadership produced more mixed results: in some situations, they provided clarity and stability during high-pressure situations, and in others, they undermined motivation and engagement when overused.

The review also highlights how context shapes the impact of leadership on healthcare workers. In the GCC, centralised governance, rigid hierarchies, workforce demographics, and the dominance of short-term expatriate contracts all influence how leadership is enacted and experienced.

This scoping review provides the first comprehensive regional mapping of how leadership affects healthcare workers in the GCC, linking leadership styles with their impacts, healthcare worker groups, and national contexts. It shows that leadership effectiveness cannot be understood in isolation from the systems and cultures in which it is embedded. The review concludes by calling for context-sensitive leadership frameworks that reflect the realities of the GCC, striking a balance between inclusivity, empowerment, and stability among healthcare workers to build sustainable, motivated, and resilient healthcare workforces.

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Abbreviations

FRLM – Full Range Leadership Model

GCC – Gulf Cooperation Council

JBI – Joanna Briggs Institute

MeSH – Medical Subject Headings

MGHL – Master's in Global Healthcare Leadership

PCC – Population–Concept–Context

PRISMA-ScR – Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews

WHO – World Health Organization

Definitions

Clinical Healthcare Workers

Healthcare professionals directly involved in patient care, such as nurses, physicians, and other clinical healthcare workers.

Non-Clinical Healthcare Workers

Healthcare professionals working in administrative, managerial, or operational roles who support healthcare delivery but are not involved in direct patient care. This group includes health administrators and administrative supervisors.

Full Range Leadership Model (FRLM)

Originally developed by Bass and Avolio, the model breaks down into three categories of leadership behaviors: non-leadership (also known as laissez-faire), transactional leadership (including management-by-exception, passive, management-by-exception, active, and contingent reward), and transformational leadership (which includes individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence). (Kirkbride, 2006).

Abstract

Objective: This dissertation presents a scoping review on the impact of leadership styles on healthcare workers within healthcare organizations across the six Gulf Cooperation Council (GCC) countries.

Background: Healthcare systems in the GCC are undergoing ambitious reforms, characterized by rapid expansion, centralised governance, and a heavy reliance on expatriate healthcare workers. These dynamics create challenges of high turnover, pay inequities, and complex nationalisation policies. In this environment, leadership plays a critical role in shaping morale, resilience, and performance, yet little is known about how different leadership styles are enacted or experienced by healthcare workers in the region.

Methods: Guided by the JBI methodology and PRISMA-ScR checklist, the review applied the Population–Concept–Context framework. A systematic search of four databases, including Arabic and English papers with no date restrictions, identified 51 eligible studies. Data were charted to map leadership styles, their impacts on healthcare workers, and contextual influences.

Results: Transformational leadership was most frequently studied and linked mainly to positive outcomes such as job satisfaction, organisational commitment, and work engagement, though some studies showed mixed effects. Authentic, democratic, empowering, and servant leadership also demonstrated favourable impacts, often mediated by trust and empowerment. Transactional and autocratic styles had mixed effects, providing clarity and stability in high-pressure contexts but undermining morale when dominant. Laissez-faire, toxic, and dysfunctional leadership were

consistently associated with dissatisfaction, burnout, and reduced loyalty. Impacts were shaped by contextual factors, including rigid hierarchies, expatriate–national dynamics, and inequities in pay and progression. Most studies came from Saudi Arabia, with a concentration on public-sector nurses, leaving physicians, other clinical and non-clinical healthcare workers, and private-sector settings underrepresented.

Conclusions: The review highlights the need for context-sensitive leadership frameworks tailored to the structural and cultural realities of GCC healthcare organizations, while also identifying gaps in methodology and population diversity. It provides a foundation for future leadership development and workforce policy in the region.

1. Introduction

1.1 Background

Health systems worldwide are under mounting strain due to rising demand, critical workforce shortages, and increasing care complexity (Deloitte, 2025). The World Health Organization (WHO) estimates a global deficit of over 11 million healthcare workers by 2030, a challenge intensified by chronic stress, occupational burnout, and limited investment in workforce development (WHO, 2020). To address these pressures, innovative strategies are required, with leadership increasingly recognised as a key determinant of workforce resilience, satisfaction, and retention (Alkhateeb et al., 2025). Evidence from recent reviews reinforces the connection between leadership practices and their impact on healthcare workers. For example, a scoping review by Siabi et al. (2024) demonstrated that destructive leadership styles, including abusive and laissez-faire approaches, heighten emotional distress, burnout, and diminish psychological capital. Conversely, a systematic review by Wu et al. (2024) found that transformational, authentic, and ethical leadership were the most frequently examined styles in healthcare, with transformational leadership associated with improved job satisfaction, work engagement, and organisational commitment. However, the bulk of this evidence is drawn from Asian and Western contexts, leaving the Middle East and the Gulf Cooperation Council (GCC) region significantly underrepresented in research related to leadership styles and their impact on healthcare workers (Siabi et al., 2024; Wu et al., 2024).

1.2 The Gulf Cooperation Council (GCC) Countries' Healthcare Context

The GCC consists of six countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (Akbari, 2024). These countries' healthcare systems are navigating ambitious reform agendas under conditions that are resource-rich yet structurally constrained (AlRuthia et al., 2025). Despite their high-income status, supported by sustained oil revenues and extensive infrastructure investment, GCC healthcare systems grapple with fragmented structures and governance that hinder effective workforce and organizational functioning (AlRuthia et al., 2025). National health strategies are expanding services and infrastructure while simultaneously attempting to cultivate a stable, locally rooted workforce (Akbari, 2024).

A defining characteristic of the region is its heavy reliance on a transient expatriate workforce. In the United Arab Emirates and Saudi Arabia, for example, more than 80% of physicians and over 90% of nurses are non-nationals, typically employed on fixed-term contracts with limited opportunities for career progression (Katoue et al., 2022). This workforce composition contributes to leadership challenges, high turnover, fragmented service delivery, and difficulties in human resource planning (Katoue et al., 2022). Nationalisation initiatives, such as Emiratisation and Saudisation, aim to reduce dependence on expatriates and establish more stable, long-term employment for citizens. However, these policies also add complexity for healthcare leaders, who must ensure continuity of services, maintain performance standards, and safeguard workforce morale (Elbanna et al., 2021).

Cultural and structural dynamics further shape leadership in the GCC. Organizational hierarchies are often influenced by social norms, including deference to authority,

tribal affiliations, and collectivist values, which may hinder the adoption of participatory or distributed leadership styles commonly promoted in other contexts (Tawfik et al., 2022). Recent studies have highlighted the impact of leadership styles on healthcare workers in the GCC, but only in specific areas. For example, Alkhateeb et al. (2025) found that leadership plays a crucial role in job satisfaction among healthcare workers in the region.

Given the GCC's regional values of hierarchy and collectivism, as well as its expatriate-dependent workforce, understanding how leadership styles impact healthcare workers is crucial for sustaining stability and resilience (Tawfik et al., 2022). This scoping review addresses a critical gap by systematically mapping leadership styles in healthcare organizations across all six GCC countries and their reported impact on healthcare workers. It also considers the influence of contextual factors such as national policies, organizational structures, and cultural dynamics.

2. Methods

This scoping review was conducted in accordance with the Joanna Briggs Institute (JBI) methodological framework for scoping reviews and reported using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist. The review protocol was developed in 7 May 2025, and is included in Appendix 1; however, it was not formally published. The protocol is appended with a creation date, and no post hoc changes were made following its development.

2.1 Research Question

The Population–Concept–Context (PCC) framework was used to structure the research question:

Population	Concept	Context
All healthcare workers in the GCC healthcare organizations, including clinical and non-clinical healthcare workers.	All reported leadership styles and their experienced or perceived impact on healthcare workers.	Public and private healthcare organisations that are involved in care delivery within the GCC countries, which consist of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

The following research questions guided this scoping review:

- What leadership styles are most frequently studied in the GCC region?
- What impact do these styles have on healthcare workers?
- How does context shape the practice of leadership styles and perception by healthcare workers?

2.2 Identifying Relevant Studies

A comprehensive search strategy was developed to capture studies focused on leadership styles and their impact on healthcare workers across the six GCC countries. The databases searched were PubMed, Scopus, Web of Science, and Google Scholar. These databases were chosen for their complementary coverage of healthcare, leadership, and social sciences. Google Scholar was used to supplement these findings and capture grey literature, as well as regionally relevant studies. In Google Scholar, searches followed a staged stopping rule: the first 100 results were screened in full, and a further 50 were examined to assess saturation. No additional eligible studies were identified beyond this point, as relevance tends to decline beyond the early results in Google Scholar (IFIS, 2023). No date restrictions were applied to capture all relevant literature.

The search was conducted using Boolean operators, a combination of keywords, and Medical Subject Headings (MeSH) terms where applicable. An example search string used was:

(“leadership style” OR “hospital management” OR “transformational leadership”) AND (“Saudi Arabia” OR “UAE” OR “Qatar” OR “Oman” OR “Kuwait” OR “Bahrain”) AND (“healthcare” OR “health system”)

The search approach varied by database. In PubMed, the strategy combined terms such as “leadership,” “management style,” and “hospital leadership” with GCC country names and healthcare-related terms. Scopus expanded the geographic scope to include broader regional identifiers such as “Dubai,” “Abu Dhabi,” and “GCC,” alongside variants of leadership style and healthcare settings. Web of Science applied similar combinations, incorporating leadership and healthcare terms with full country names and common abbreviations, such as “UAE” for the United Arab Emirates. Google Scholar was used to search for both English and Arabic publications using equivalent translated and transliterated terms to reflect regional relevance.

Furthermore, following the scoping review protocol, inclusion and exclusion criteria were utilized to guide the review and refine the findings. The inclusion and exclusion criteria followed in this review are shown below:

Inclusion Criteria:

- The study must be conducted in one or more of the six Gulf Cooperation Council (GCC) countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, or the United Arab Emirates.
- The study must present applied findings on leadership styles and their impact on healthcare workers in the GCC.

- Studies that explore the perceived effects of leadership styles on healthcare workers, such as healthcare workers' perceptions of leadership behaviour, are eligible only if they link these perceptions to an impact on healthcare workers.
- The study must be published in English or Arabic.
- The research must be conducted within public or private healthcare organisations involved in care delivery.
- No restrictions on publication date were applied to ensure all relevant literature is captured, given the limited research available in this area.

Exclusion Criteria:

- Studies conducted outside the GCC.
- Opinion pieces, editorials, or theoretical/conceptual papers that do not include applied examples.
- Studies discussing leadership styles without evidence of real-world application in healthcare settings.
- Studies assessing healthcare workers' perceptions of leadership, but not reporting the impact of leadership styles on healthcare workers.
- Studies that examine the impact of leadership styles on organisational outcomes (e.g., hospital efficiency, accreditation) without connecting these to the experiences or the impact on healthcare workers.

2.3 Selecting Studies

All papers retrieved from the database searches were directly uploaded into Covidence (2025 version), which was used to manage the screening and selection

process. Covidence supported duplicate removal, blinded screening, and systematic tracking of inclusion and exclusion decisions.

I led the entire review process, whilst a second reviewer assessed the abstract of each record for eligibility based on the predefined inclusion and exclusion criteria. Any discrepancies were discussed and resolved through consensus. Then, I conducted a full-text review of the agreed-upon papers.

To strengthen consistency and reduce the risk of subjective bias, I undertook the verification of a few borderline studies using GPT-4o (https://chatgpt.com/). From the 116 full texts, nine presented uncertainty in relation to the included criteria, such as those reporting leadership effectiveness at the organisational level but with limited or ambiguous reference to its impact on healthcare workers. I have uploaded them in full. I instructed the tool to assess eligibility strictly against the PCC framework and the predefined inclusion and exclusion criteria of this scoping review. I cross-checked GPT-4o's outputs with my own assessments and retained ultimate decision-making authority. Of these nine studies, I excluded one *(Evaluating Leadership Dynamics: A Comprehensive Cross-Sectional Study of Madinah's Primary Healthcare Centers)* because it focused on leadership effectiveness in organisational performance rather than impact on healthcare workers. The remaining eight studies were confirmed as eligible and retained. The MGHL examination office approved the use of this tool for such purposes.

The final set of included studies comprised those that met all eligibility criteria outlined in Section 2.2.

2.4 Data Charting

Data from the included studies were charted into an Excel workbook (Appendix 2). The charting fields were adapted from Mak and Thomas (2022) and refined to reflect the specific aims of this scoping review. The following components were included:

Title / Author(s) / Year of publication / GCC country / Study-report type / Healthcare setting / Healthcare worker population / Type of leadership style(s) examined / Reported impact on healthcare workers / Objectives / Main results and impact size / Contextual considerations / Study Type / limitations / Suggested future directions

Additional fields, such as “type of leadership style(s) examined,” “impact on healthcare workers,” and “impact size,” were added to the original framework recommended by Mak and Thomas (2022) to ensure alignment with the review’s research questions.

2.5 Collating, Summarizing, and Reporting the Results

Descriptive statistics were used to summarise the distribution of studies by country, leadership style, healthcare setting, type of healthcare workers, and type of studies. Also, a thematic approach was applied to categorise the reported impacts of leadership styles on healthcare workers within GCC countries. Contextual factors influencing the enactment and perception of leadership were also explored.

To present the impact of leadership styles on healthcare workers, findings from the included studies were organised thematically and categorised according to whether they reflected a positive, negative, or mixed impact on healthcare workers. A positive impact was denoted by outcomes where leadership styles were associated with beneficial effects. A negative impact refers to outcomes demonstrating an adverse

impact on healthcare workers. A mixed impact was applied when studies reported both beneficial and adverse effects, or when contextual factors, such as organizational structure, sectoral differences, nationality, or cultural influences, moderated the relationship.

The impact of leadership styles also included reported effect sizes when available in studies, which were shown through measures such as correlation coefficients (r), regression estimates (β), explained variance (R^2), and mediation models. Results were presented in narrative form, supported by summary tables and figures. Outlier or contradictory findings were examined, considering the study design. The results section reports what was found in the included studies, and interpretation and reflection were reserved for the discussion section.

2.6 Consultation Exercise

To enhance contextual relevance and interpretive validity, a consultation exercise was undertaken with regional experts in healthcare leadership. Their insights helped highlight priorities for future research on culturally embedded leadership styles and workforce development strategies within the GCC context.

3. Results

A total of 516 records were identified through database searches, including Web of Science (n = 225), PubMed (n = 128), Google Scholar (n = 100), and Scopus (n = 63). After removing 139 duplicates via Covidence, 377 unique records were screened based on their titles and abstracts.

Of these, 261 studies were excluded because they did not meet the inclusion criteria. A total of 116 studies were retrieved for full-text screening. 65 full-text articles were excluded for the following reasons: wrong concept (n = 48), duplicate not previously removed (n = 9), wrong context (n = 6), wrong population (n = 1), and full text not available (n = 1). *Initially*, *there were 19 full texts with restricted access. The librarians at the University of Oxford made 18 of them available.*

Ultimately, 51 studies were included in the final synthesis. The study selection process is illustrated in the PRISMA flow diagram shown in Figure A.

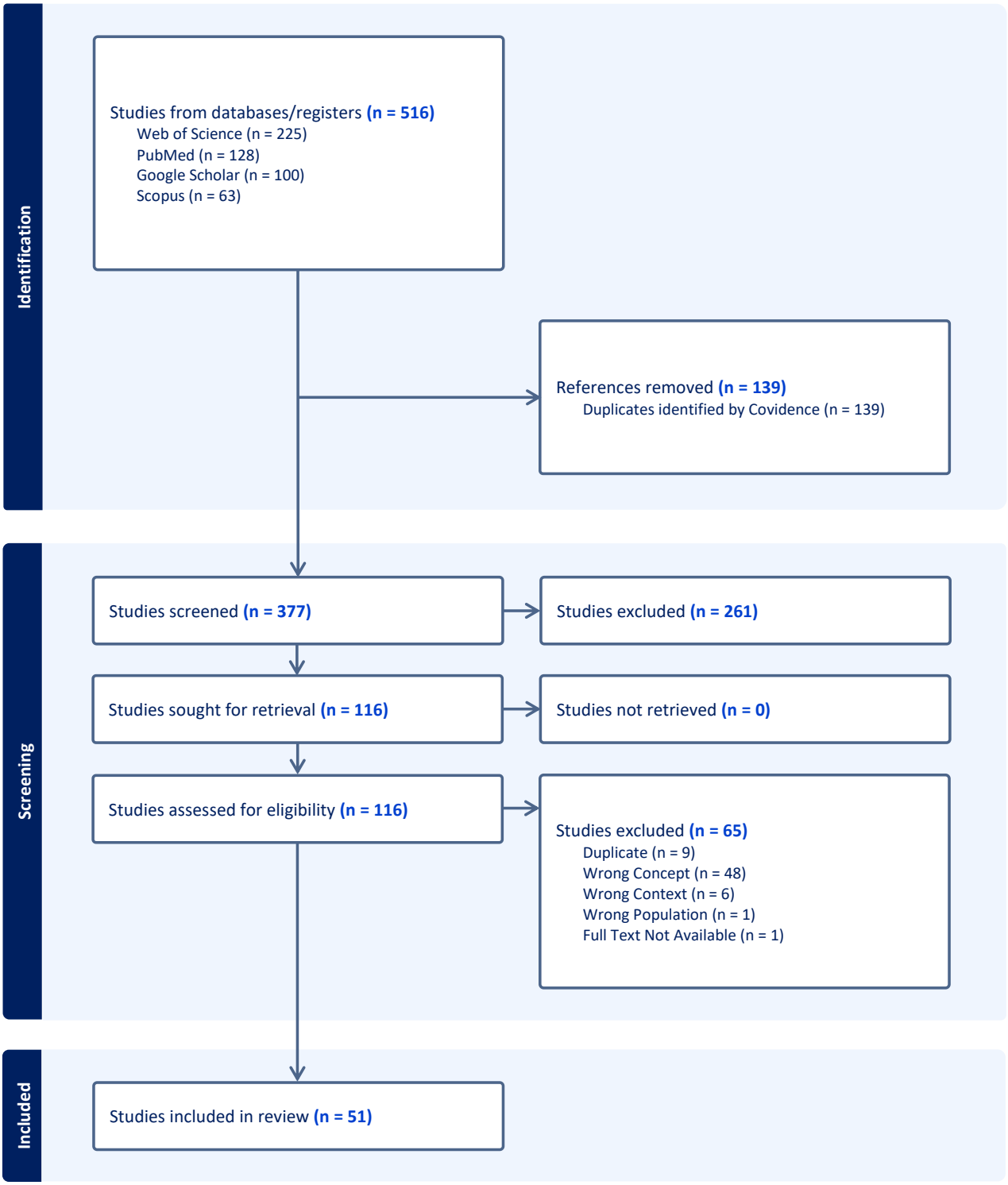


Figure A: PRISMA Flowchart

3.1 Characteristics of Included Records

A total of 51 studies were included in this scoping review. These studies examine the impact of leadership styles on healthcare workers in healthcare organizations across the six GCC countries. The records differed in methodological design, population focus, geographic distribution, and impact areas.

3.1.1 Geographic Distribution of Studies

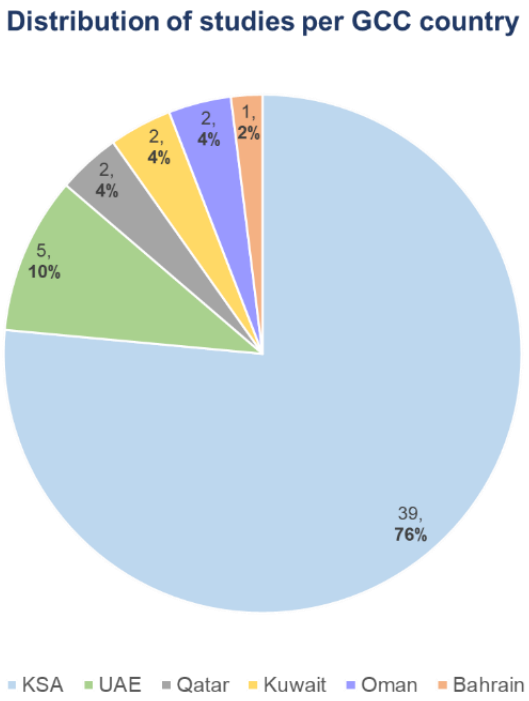


Figure B: Geographic Distribution of Studies

As illustrated in Figure B, 76% (n = 39) of the studies originated from Saudi Arabia. The United Arab Emirates accounted for 10% (n = 5) of the studies. The remaining 14% were distributed across Qatar (n = 2, 4%), Kuwait (n = 2, 4%), Oman (n = 2, 4%), and Bahrain (n = 1, 2%).

3.1.2 Methodological Approaches

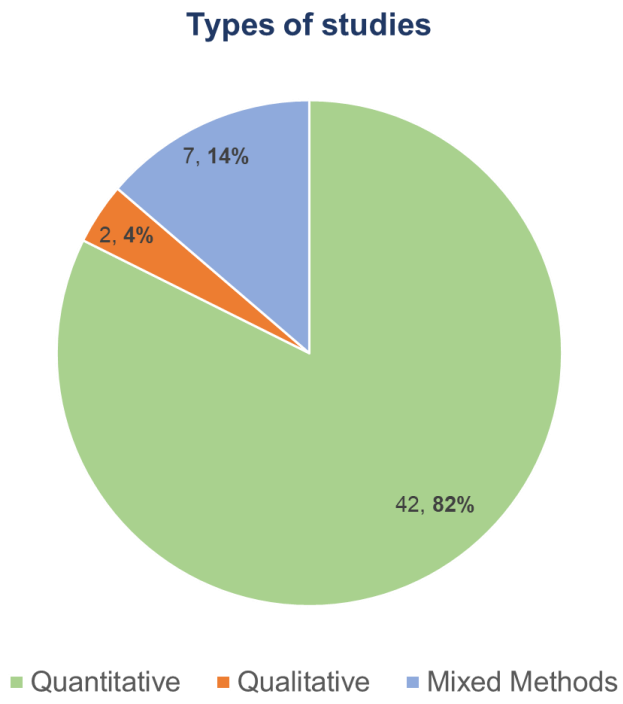


Figure C: Types of Studies

As shown in Figure C, most studies (82%, n = 42) employed quantitative designs, primarily using cross-sectional surveys or correlational studies within single hospitals, and standardized questionnaires to assess impacts such as engagement, job satisfaction, organizational commitment, safety practices, and change readiness (Appendix 2). Although most relied on correlation and regression, some applied structural equation modelling to test mediators such as happiness, empowerment, moral courage, and patient safety culture (Alahbabi, Robani & Zainudin, 2023; Al Otaibi et al., 2023; Ibrahim et al., 2024). Only two qualitative studies were identified. Abalkhail (2022) captured experiences of dysfunctional leadership through interviews, and Kutob and Alhothali (2021) used a case study of innovation teams to

assess leadership styles across Tuckman's stages of team development (forming, storming, norming, performing, and adjourning). Seven studies adopted mixed methods, combining surveys with interviews or focus groups, to examine impacts such as satisfaction, commitment, and well-being, and they highlighted contextual influences (Abualrub & Alghamdi, 2012; Saeed & al Asmri, 2014; Alruwaili, 2025; Alrwili, 2022; El Dahshan et al., 2017; Gonzales, 2023; Taeidi, 2023).

3.1.3 Healthcare Workers Studied

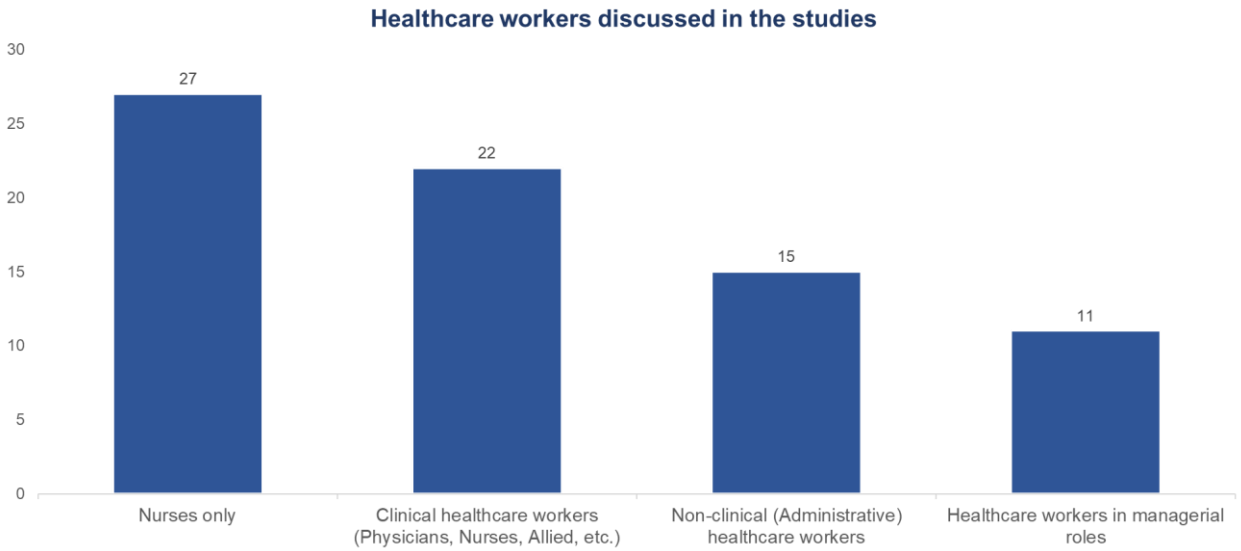
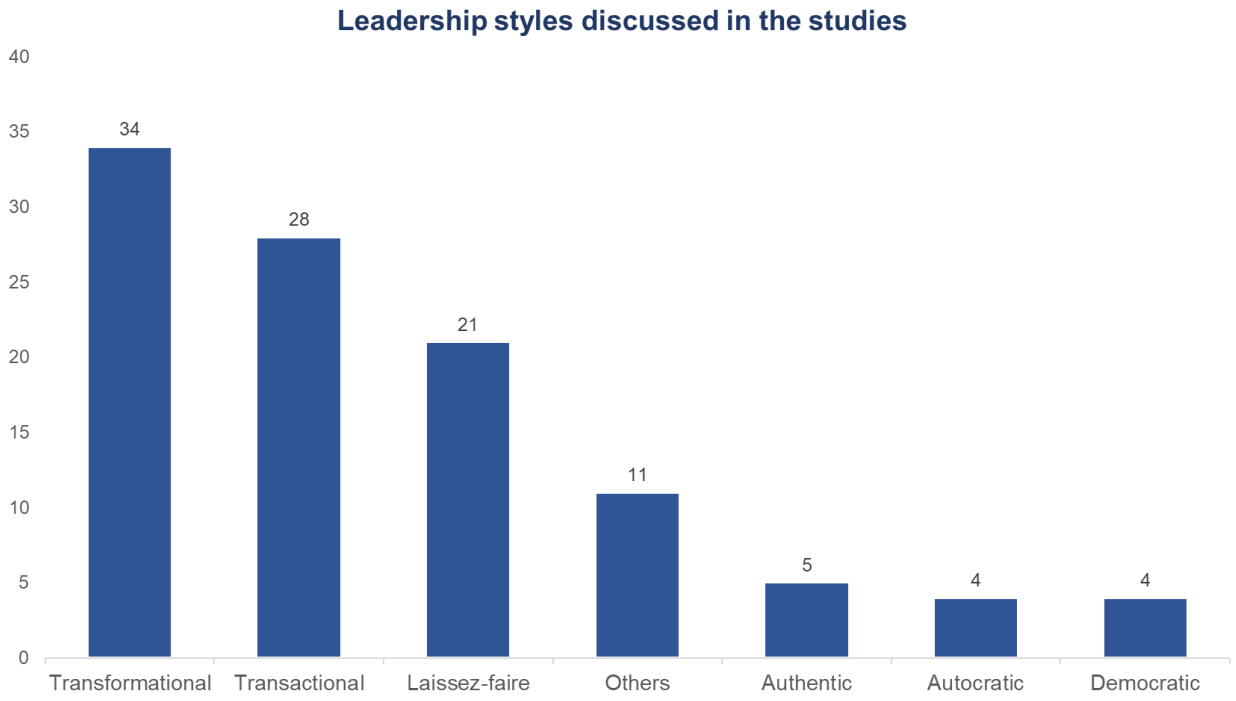


Figure D: Healthcare Workers Studied

The included studies, as shown in Figure D, examined a diverse range of healthcare workers. Nurses were the most frequently studied group (n = 27). Clinical healthcare workers, typically a mix of physicians, nurses, and other clinical healthcare workers, were reported in 22 studies. Non-clinical (administrative) healthcare workers were represented in 15 studies, covering administrative or operational roles. Managerial roles were examined in 11 studies, encompassing supervisory positions such as department heads and unit supervisors.

3.2 Leadership Styles



The ***Others*** category encompasses leadership styles mentioned in three studies or fewer. These are: Relationship-oriented, Task-oriented, Empowering, Toxic, Chameleon, Multicultural, Charismatic, Dysfunctional, Resonant, and Ethical.

Figure E: Leadership Styles

Figure E illustrates the distribution of leadership styles examined across the 51 included studies. Transformational leadership was the most frequently explored (n = 34), followed by transactional (n = 28) and laissez-faire (n = 21). Authentic leadership was reported in five studies, and democratic and autocratic styles were each examined in four studies, with both styles always examined together. Other distinct styles collectively appeared in 11 studies, including relationship-oriented, task-oriented, empowering, toxic, chameleon, multicultural, charismatic, dysfunctional, resonant, and ethical leadership.

3.2.1 Transformational Leadership

Transformational leadership was primarily studied in Saudi Arabia, accounting for 79% (n=27) of all papers on this style, with half of these focusing on nurses (Appendix 2). The United Arab Emirates contributed to three studies (Al-Farhan, 2018; Hasan et al., 2023; Taeidi, 2023). Two studies were from Kuwait (AlFadhalah & Elamir, 2019; Al-Mailam, 2004), and Bahrain and Qatar each had one study (Pattali et al., 2024; Alshamari et al., 2024). Of all the studies on the impact of transformational leadership on healthcare workers in the GCC, only three examined private or mixed settings (Al-Mailam, 2004; Pattali et al., 2024; Hasan et al., 2023), with the rest focusing on public organizations.

Definitions and Conceptualisations of Transformational Leadership

Across the included studies, transformational leadership was frequently defined within Bass and Avolio's Full Range Leadership Model (FRLM), emphasising inspiration, motivation, intellectual stimulation, and individualised consideration (e.g., Alharbi, 2018; Alrwili, 2022; Hasan et al., 2023; Al-Yami et al., 2018; Alrashidi et al., 2024; Al Zahrani et al., 2024; Alluhaybi et al., 2024). Other studies did not explicitly reference the FRLM; however, they described transformational leadership through its four core components, highlighting behaviours such as enabling trust, respect, and commitment to organisational goals (e.g., AlFadhalah & Elamir, 2019; Bhatti, 2021; Pattali et al., 2024).

Impact of Transformational Leadership on Healthcare Workers in the GCC

Figure F: Impact of Transformational Leadership on Healthcare Workers in the GCC

As shown in Figure F, transformational leadership studies identified seven areas of impact on healthcare workers: job satisfaction, organisational commitment and retention intentions, job performance, professional behaviours and safety practices, work engagement, psychological wellbeing and burnout reduction, as well as change readiness and leadership efficacy.

Fourteen studies examined transformational leadership and job satisfaction, with correlations ranging from –.63 to .87. Most studies reported positive associations, though a few identified negative relationships due to contextual variability which will be explained in the following paragraphs (Abualrub & Alghamdi, 2012; AlFadhalah & Elamir, 2019; Al-Farhan, 2018; AlHarthi et al., 2013; Alqahtani et al., 2021; Alrasheedi, Alrashaidi & Shahin, 2022; Alrashidi et al., 2024; Alrubaysh et al., 2022;

Alruwaili, 2025; Alrwili, 2022; Harb et al., 2022; Khusheim, 2024; Lagura et al., 2024; Alshahrani & Baig, 2016). Mediation models further clarified these relationships, for example, transformational leadership enhanced organisational justice and quality of work life, which in turn explained up to 63% of the variance in job satisfaction and 54% in stress reduction (Alruwaili, 2025).

Nine studies linked transformational leadership with stronger organisational commitment and lower turnover intentions, with moderate correlations typically between r = .30 and .49 (Al-Dossary, 2022; El Dahshan et al., 2017; Pattali et al., 2024; Alorhiri et al., 2019; Al-Yami et al., 2018; Asiri et al., 2016; Alshamari et al., 2024; AlHarthi et al., 2013; Abualrub & Alghamdi, 2012). Effects were more evident when supported by favourable organizational cultures and resources, such as in Bahrain's private sector (Pattali et al., 2024). Similarly, transformational leadership was consistently associated with better job performance and work engagement, with correlations for engagement reaching r = .65 among nurses (Alluhaybi et al., 2024). In Saudi Arabia, nurse managers' leadership practices alone explained substantial variance of 43% in nurses' organizational resilience and 40% in job involvement (Abd-EL Aliem & Abou Hashish, 2021). In clinics in the United Arab Emirates, work engagement mediated the relationship between transformational leadership and job performance (Hasan et al., 2023). At the team level, innovativeness was enhanced when transformational leadership was combined with reflective practices and the use of external knowledge (Al-Farhan, 2018).

Other benefits included reductions in stress, burnout, and emotional exhaustion, along with improved morale and resilience during the COVID-19 pandemic in Saudi Arabia (Lagura et al., 2024). Transformational leadership also accounted for up to

30% of the variance in readiness for change (Alharbi, 2018) and was associated with safer clinical practices such as improved handovers and medication administration (Hamdan, 2024).

Evidence on the impact of transformational leadership on healthcare workers in the GCC became more nuanced when contextual and structural moderators were considered. For example, Alorhiri (2019) highlighted that wage disparities between Saudi and expatriate healthcare workers in public hospitals may undermine expatriates' job satisfaction, motivation, perceived organisational support, and commitment, thereby influencing their turnover intentions.

A smaller body of evidence suggested negative impacts in specific situations. During the COVID-19 pandemic, certain dimensions of transformational leadership, such as inspirational motivation ($r = –.63$) and individualised consideration ($r = –.34$), were negatively correlated with job satisfaction (Khusheim, 2024). Similarly, among acute-care nurses in Saudi Arabia, transformational leadership showed a weak but significant negative correlation with organisational commitment ($r = –.113$, $p = .045$) (Asiri et al., 2016).

Finally, several studies highlighted contextual variations in perception (Khusheim, 2024; Alrashidi et al., 2024; Yami et al., 2018). Healthcare workers in the private sector reported higher satisfaction with transformational leadership than those in the public sector during the pandemic (Khusheim, 2024). Also, Alrashidi et al. (2024) observed more favourable perceptions among males, Saudi nationals, and less experienced nurses, and Al-Yami et al. (2018) reported that non-Saudi nurses rated

managers' transformational behaviours more positively than Saudi nurses in Ministry of Health hospitals.

3.2.2 Transactional Leadership

Seventy-nine percent of the studies examining transactional leadership in the GCC (n = 22 out of 28) were conducted in Saudi Arabia, with half of these focusing on nurses and almost all situated in public healthcare organisations (Appendix 2). Only one Saudi study investigated private hospitals (Bhatti & Alyahya, 2021). The United Arab Emirates contributed three studies (Al-Farhan, 2018; Taeidi, 2023; Ali & Niaz, 2024), Kuwait one (AlHarthi et al., 2013), and Qatar one (Alshamari et al., 2024).

Definitions and Conceptualisations of Transactional Leadership

Across all included studies, transactional leadership was defined through Bass and Avolio's Full Range Leadership Model (FRLM) as an exchange-based process involving contingent reward, which means clarifying expectations and providing rewards for meeting them, and corrective monitoring via management-by-exception, whether active, which means proactively addressing deviations, or passive, which means intervening only after problems arise (e.g., Al-Yami et al., 2018; Alrashidi et al., 2024; Al Zahrani et al., 2024; Alluhaybi et al., 2024; Saeed & al Asmri, 2014). Several papers described it as short-term, task-focused, goal-oriented leadership (e.g., Al-Farhan, 2018; Alorhiri et al., 2019; Khusheim, 2024; Al-Mailam, 2004; Bhatti & Alyahya, 2021).

Impact of Transactional Leadership on Healthcare Workers in the GCC

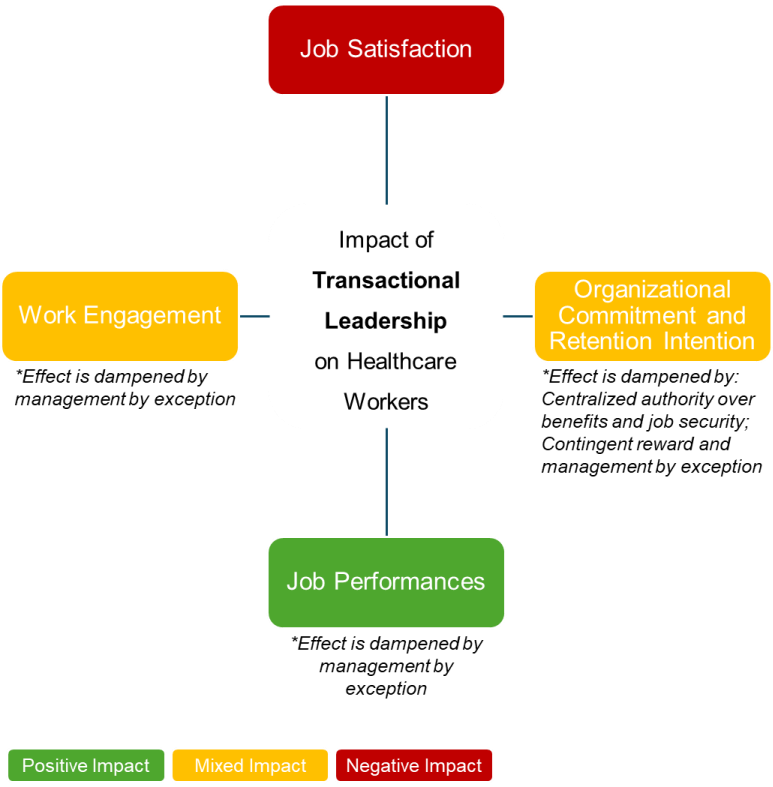


Figure G: Impact of Transactional Leadership on Healthcare Workers in the GCC

As shown in Figure G, studies on transactional leadership identified four areas of impact on healthcare workers: job satisfaction, organisational commitment and retention intentions, job performance, and work engagement.

Most of the positive evidence on transactional leadership was linked to contingent reward behaviours. Nine studies reported that contingent reward improved organisational commitment, engagement, and performance among nurses and mixed groups of clinical and non-clinical healthcare workers in Saudi Arabia and Kuwait (Al-Dossary, 2022; Alluhaybi et al., 2024; Asiri et al., 2016; El Dahshan et al., 2017; Harb et al., 2022; Alqahtani et al., 2021; Al-Yami et al., 2018; Alrubaysh et al., 2022; AlHarthi et al., 2013). Reported correlations between organizational

commitment and work engagement ranged from moderate to strong, with coefficients typically falling between r = .30 and r = .75 across the studies (Appendix 2).

Some findings highlighted conditional effects. In Qatar, transactional leadership alone did not significantly influence the affective commitment of healthcare workers. However, when coupled with a strong mission-driven culture, the relationship became positive and significant (β = .451, p < .05) (Alshamari et al., 2024). Conversely, in Saudi government hospitals, structural constraints limited managers' influence over salaries, benefits, and job security. The study states that this corresponded with a weak negative association between transactional leadership and job satisfaction (r = –.14, p < .01).

Also, Abualrub and Alghamdi (2012) found that transactional leadership was negatively correlated with nurses' job satisfaction (r = −0.14, p < .01). Khusheim (2024) similarly reported that the contingent reward dimension of transactional leadership had a negative association with job satisfaction during the COVID-19 pandemic. This paper indicated that even reward-based transactional mechanisms failed to sustain the morale of healthcare workers under pressure. Alshammari (2014) showed that management-by-exception (passive), a transactional subdimension, was negatively correlated with key leadership impacts, including extra effort, effectiveness, and satisfaction.

Several studies highlighted contextual variations. Non-Saudi nurses rated transactional leadership more positively than Saudi nurses in Ministry of Health hospitals, with concerns that Saudization policy could unintentionally weaken the impact of transactional leadership (Alshammari, 2014). In another study, male

nurses, Saudi nationals, and less experienced healthcare workers were also more favourable toward transactional behaviours; however, the reasons were not explained in the paper (Alrashidi et al., 2024). More positive perceptions were reported in private hospitals, where resources may mitigate the limitations of transactional leadership (Bhatti & Alyahya, 2021). Similarly, in the Saudi Ministry of Health, annual appraisal systems encouraged the prominence of contingent reward, with managers rewarding subordinates through higher appraisal marks rather than material benefits (Saud et al., 2013).

3.2.3 Laissez-faire leadership

Laissez-faire leadership was examined predominantly in Saudi Arabia, which accounted for 81% (n = 17) of the included studies on this style. Seven of these focused exclusively on nurses in public organizations (Al-Dossary, 2022; Alluhaybi et al., 2024; Alrashidi et al., 2024; Asiri et al., 2016, 2023; Harb et al., 2022; Alshahrani & Baig, 2016). Two studies from the United Arab Emirates assessed laissez-faire leadership in both public and private hospitals (Ali & Niaz, 2024; Taeidi, 2023). Kuwait and Qatar each contributed one study examining clinical and managerial healthcare workers in public healthcare organisations (AlFadhalah & Elamir, 2019; Alshamari, 2020).

Definitions and Conceptualisations of Laissez-faire Leadership

Within the reviewed studies, laissez-faire leadership was consistently conceptualised through Bass and Avolio's Full Range Leadership Model (FRLM) as a passive or non-leadership style characterised by avoidance of decision-making, abdication of responsibility, and delayed managerial action (e.g., Al-Dossary, 2022; Alrubaysh et

al., 2022; Alrashidi et al., 2024). Leaders were described as uninvolved in problem-solving and conflict resolution, often allowing issues to escalate without intervention (e.g., Taeidi, 2023; Ali & Niaz, 2024). Other studies described laissez-faire as when healthcare workers viewed its lack of proactive engagement as neglect. (e.g., AlHarthi et al., 2013; Asiri et al., 2016).

Impact of Laissez-faire Leadership on Healthcare Workers in the GCC

Figure H: Impact of Laissez-faire Leadership on Healthcare Workers in the GCC

As shown in Figure H, across the reviewed studies, laissez-faire leadership was associated with impacts reported across four domains: job satisfaction, organizational commitment and retention intention, job performance, and work engagement.

Although limited, some evidence suggested positive or neutral impacts of laissez-faire leadership on healthcare workers in the GCC (Alshamari, 2020; Asiri et al., 2016; Alshahrani & Baig, 2016; Al-Dossary, 2022; Ali & Niaz, 2024). In Qatar's public primary healthcare centres, laissez-faire leadership significantly predicted all three dimensions of organizational commitment, with minor effects on affective commitment ($R^2 = 0.04$), and a moderate effect on normative commitment ($R^2 = 0.18$) (Alshamari, 2020). Similar findings emerged in Saudi acute-care hospitals, where laissez-faire leadership significantly predicted nurses' organizational commitment ($B = 0.14$, $p = 0.012$) (Asiri et al., 2016). Three studies also reported modest positive or mixed correlations with satisfaction and engagement (Alshahrani & Baig, 2016; Al-Dossary, 2022; Ali & Niaz, 2024), though effect sizes were generally weak ($r = .20–.47$).

Across the reviewed studies, six studies explicitly correlated laissez-faire (or passive-avoidant) leadership with negative impacts for healthcare workers (AlHarthi et al., 2013; Alrubaysh et al., 2022; Al-Yami et al., 2018; Alluhaybi et al., 2024; Al Zahrani et al., 2024; Kutob & Alhothali, 2021). In the Saudi Ministry of Health, laissez-faire leadership was associated with negative correlations with satisfaction, effectiveness, and extra effort, ranging from $r = –0.18$ to $–0.48$ (AlHarthi et al., 2013; Alrubaysh et al., 2022). Among nurses, it was associated with reduced organizational commitment (Al-Yami et al., 2018) and weaker engagement (Alluhaybi et al., 2024). Public health professionals in Jeddah, Saudi Arabia, reported strong negative correlations between laissez-faire leadership style and both work engagement ($r = –.48$) and structural self-determination ($r = –.71$) (Al Zahrani et al., 2024). Furthermore, laissez-faire leadership undermined professional behaviours and safety practices in a

hospital in the United Arab Emirates (Taeidi, 2023). Qualitative evidence from Saudi Arabia also tied this leadership style to unclear goals, poor conflict management, and failed innovation projects (Kutob & Alhothali, 2021).

Contextual conditions further shaped perceptions of laissez-faire leadership. In Saudi Arabia's acute-care settings, nurse nationality and autonomy interacted with leadership behaviours to predict organizational commitment (Asiri et al., 2016). One paper stated that the absence of formal leadership training among nearly half of primary healthcare managers in Aseer, Saudi Arabia, was a factor that may amplify the adverse impact of this style (Alqahtani et al., 2021).

3.2.4 Authentic Leadership

Authentic leadership was examined in 5 of the 51 included studies (10%) (Alhalal et al., 2024; Gonzales, 2023; Khalid, 2024; Pattali et al., 2024; Labrague et al., 2021). Three studies were conducted in Saudi Arabia: two in public hospitals that focused exclusively on nurses (Alhalal et al., 2024; Gonzales, 2023), and one that spanned public and private hospitals, including clinical and non-clinical healthcare workers (Khalid, 2024). The remaining two studies were from Bahrain and Oman, both of which focused on nurses. The Bahraini study was based in private hospitals (Pattali et al., 2024), and the Omani study was also hospital-based but did not specify the sector (Labrague et al., 2021).

Definitions and Conceptualisations of Authentic Leadership

The five studies consistently conceptualised authentic leadership through its four core components: self-awareness, relational transparency, balanced processing, and

an internalized moral perspective. For example, Alhalal et al. (2024) described it as a behavioural pattern that draws upon and promotes positive psychological capacities and an ethical climate. Similarly, Pattali et al. (2024) and Labrague et al. (2021) portrayed authentic leadership as a style grounded in genuineness and ethical conduct that enables supportive work environments.

Impact of Authentic Leadership Style of Healthcare Workers in the GCC

Figure I: Impact of Authentic Leadership Style of Healthcare Workers in the GCC

As shown in Figure I, across the five studies examining authentic leadership in GCC healthcare organisations and its impact on healthcare workers, six distinct impact areas were identified: job satisfaction, organizational commitment and retention intention, structural empowerment, work engagement, psychological wellbeing, and job performance (Appendix 2).

Authentic leadership was consistently associated with favourable impacts. In Saudi Arabia and Oman, it improved practice environments, psychological capital, and leadership self-efficacy, which in turn supported well-being, motivation, and nurses' willingness to assume leadership roles (Alhalal et al., 2024; Labrague et al., 2021). In Bahrain, it reduced turnover intention among private hospital nurses, with organisational support further strengthening this effect (Pattali et al., 2024). Performance-related impacts were also enhanced, as authentic leadership predicted extra-role behaviours, creativity, and knowledge sharing, with strong direct and mediated effects on overall performance (Khalid, 2024). Reported associations with practice environment, empowerment, and performance impacts ranged from moderate to strong ($\beta \approx .30–.85$, $p < .05–.001$).

No mixed or negative impacts of authentic leadership on healthcare workers were reported in the included studies from the GCC.

Several contextual variations shaped perceptions of authentic leadership. Gonzales (2023) reported that nationality influenced impacts, with non-Saudi nurses perceiving higher levels of authentic leadership and self-efficacy. Age and marital status were also significant, as older nurses (35–50 years and above) and divorced or separated nurses reported stronger perceptions. Ward assignment further mattered, with non-COVID nurses perceiving higher authentic leadership than those working in COVID wards (Gonzales, 2023).

3.2.5 Democratic and Autocratic Leadership

Four studies explored democratic and autocratic leadership styles on clinical and non-clinical healthcare workers (Alrwili, 2022; Takrouni, 2020; Kutob & Alhothali,

2021; Ali & Niaz, 2024). These two styles were consistently studied together, which is why they are presented in the same section. Three of the studies were conducted in public hospitals and healthcare centers in Saudi Arabia (Alrwili, 2022; Takrouni, 2020; Kutob & Alhothali, 2021), and one study was conducted in private hospitals in the United Arab Emirates (Ali & Niaz, 2024).

Definitions and Conceptualisations

Across the four studies, democratic leadership was described as a participatory, supportive, and collaborative approach in which leaders actively involve healthcare workers in decision-making, encourage open communication, and value employees' input (Alrwili, 2022; Takrouni, 2020; Kutob & Alhothali, 2021; Ali & Niaz, 2024).

In all four studies (Alrwili, 2022; Ali & Niaz, 2024; Kutob & Alhothali, 2021; Takrouni, 2020), Autocratic leadership was described as involving strict supervision, rigid adherence to rules, and limited or no input from healthcare workers into decisions. Autocratic leadership was also associated with controlling behaviours that reduce autonomy, restrict communication, and suppress collaboration.

Impact of Democratic and Autocratic Leadership on Healthcare Workers in the GCC

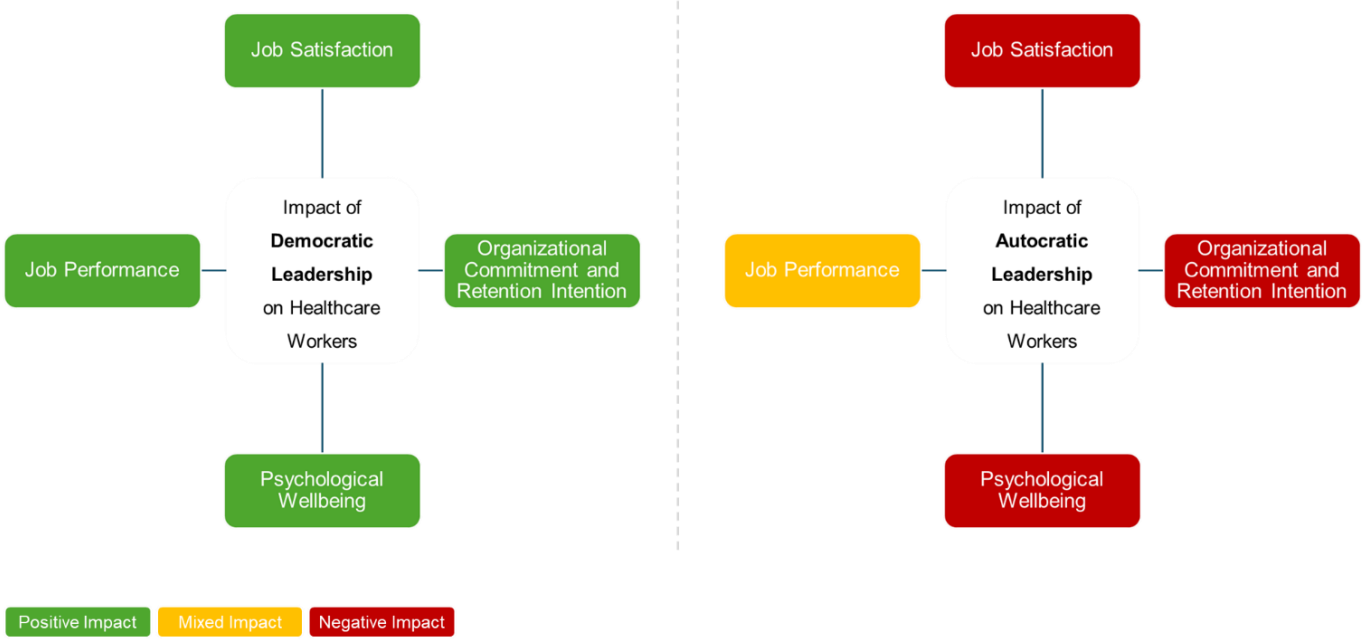


Figure J: Impact of Democratic and Autocratic Leadership on Healthcare Workers in the GCC

As shown in Figure J, across the four studies examining democratic and autocratic leadership in GCC healthcare organisations, four distinct impact areas were identified: job satisfaction, organizational commitment and retention intention, psychological wellbeing, and job performance. All four studies examined these two styles in conjunction.

Democratic leadership was consistently associated with favourable impacts. In the United Arab Emirates, Ali and Niaz (2024) found that democratic leadership had a moderate positive correlation with employee engagement ($r = .484$, $p < .001$), explaining 23.4% of the variance. In this study, engagement under democratic leaders was linked to stronger teamwork, better patient care, and reduced burnout. In Saudi Arabia, Takrouni (2020) reported that democratic leadership exerted the

strongest positive effect on commitment among healthcare workers at King Abdullah Medical City, promoting creativity, equal treatment, and supportive environments. Regression analysis confirmed significant associations with higher commitment, participation, and morale, with 32.8% agreement on these items. Similarly, Alrwili (2022) observed that democratic behaviours such as fairness, recognition, and concern for healthcare workers' welfare were strongly linked to higher job satisfaction in primary healthcare centres. Kutob and Alhothali (2021) further demonstrated that participative leadership enhanced teamwork, harmony, and the willingness to continue projects, thereby supporting completion through Tuckman's stages of team development (forming, storming, norming, performing, and adjourning).

Autocratic leadership has demonstrated mixed effects, depending on the context. In the United Arab Emirates, Ali and Niaz (2024) reported a strong positive correlation with employee engagement in private hospitals ($r = .554$, $p < .001$), accounting for 30.7% of the variance. This paper suggested that directive leadership in private hospitals may support engagement by providing clarity and structure. However, Takrouni (2020) found that autocratic leadership was associated with role clarity and procedural structure; however, its overall effect on commitment was weak (9.3%).

Negative impacts of autocratic leadership on healthcare workers were evident in two studies (Alrwili, 2022; Kutob & Alhothali, 2021). In Saudi Arabia, behaviours such as refusing to explain decisions ($M = 2.51$) and failing to act when necessary ($M = 2.20$) were rated below the scale midpoint and significantly associated with lower job satisfaction (Alrwili, 2022). Within innovation teams, autocratic leadership was further associated with conflict, diminished morale, and weakened collaboration, with participants reporting a reluctance to work under autocratic leaders again (Kutob &

Alhothali, 2021). By contrast, none of the reviewed studies reported significant negative associations for democratic leadership.

In some situations, contextual factors influenced the impacts of these leadership styles. In Saudi Arabia's public healthcare organisations, democratic behaviours such as fairness, recognition, and concern for healthcare workers' welfare were valued as they counterbalanced systemic gaps, including limited leadership development, outdated appointment practices, and high reliance on expatriate healthcare workers (Alrwili, 2022). This paper suggested that in these contexts, inclusive democratic leadership filled structural voids and reinforced morale among diverse and transient healthcare workers.

3.2.6 Other Leadership Styles

Finally, 11 additional leadership styles were identified in individual studies and grouped under "Others". These styles included toxic, dysfunctional, resonant, charismatic, multicultural, chameleon, ethical, and servant leadership. Most of the studies (n=9) originated from Saudi Arabia (Abalkhail, 2022; Saeed & al Asmri, 2014; Alharbi et al., 2024; Alotaibi et al., 2020; Al Otaibi et al., 2023; Alqarawi et al., 2025; Alrwili, 2022; Bhatti & Alyahya, 2021; Elhihi et al., 2025). These studies examined the impact of these styles on healthcare workers in public and private organizations. One study was from the United Arab Emirates (Alharbi et al., 2024), exploring the impact of servant leadership on clinical and non-clinical healthcare workers in public healthcare organizations. Another study from Oman (Durrah & Kahwaji, 2023) examined the impact of chameleon leadership on non-clinical healthcare workers,

without specifying whether it was conducted in public or private healthcare organizations.

Definitions and Conceptualisations

In the included studies, positive leadership approaches under the “others” category emphasised service, inspiration, and ethical conduct. Servant leadership prioritised followers’ needs, development, and well-being, enabling empowerment and a culture of service (Saeed & al Asmri, 2014; Alharbi, 2014; Alrwili, 2022; Alharbi et al., 2024). Resonant leadership centred on emotional intelligence, empathy, and authentic connection (Elhihi et al., 2025), and chameleon leadership highlighted adaptability to changing contexts and stakeholders (Durrah & Kahwaji, 2023). Ethical leadership was grounded in fairness, integrity, and two-way communication (Alahbabi, Robani & Zainudin, 2023). Charismatic leadership inspired and motivated through vision, personal magnetism, and emotional engagement (Bhatti & Alyahya, 2021). Multicultural leadership highlighted the value of recognising and adapting to workforce diversity (Alharbi et al., 2012). Bureaucratic leadership was framed as adherence to formal rules and hierarchical authority (AlOtaibi et al., 2023).

By contrast, negative leadership styles were associated with harmful managerial behaviours. Dysfunctional leadership encompassed abuse, marginalisation, favouritism, and the degradation of subordinates (Abalkhail, 2022), and toxic leadership involved self-serving, manipulative, and hostile practices that damaged the well-being of healthcare workers (Alqarawi et al., 2025).

Impact of the "Other" Emerging Leadership Styles of Healthcare Workers in the GCC

Leadership Style	Impact on Healthcare Workers
Servant	Job Satisfaction
	Organisational Commitment and Retention
	Work Engagement
Ethical	Job Satisfaction
Charismatic	Job Satisfaction
	Organisational Commitment and Retention
Multicultural	Job Satisfaction
Resonant	Work Engagement
	Psychological Well-being and Burnout
Chameleon	Change Readiness and Adaptability
Toxic	Psychological Well-being and Burnout
Dysfunctional	Psychological Well-being and Burnout

Positive Impact | Mixed Impact | Negative Impact

Figure K: Impact of the "Other" Emerging Leadership Styles of Healthcare Workers in the GCC

As shown in Figure K, five impact domains emerged across the included studies: job satisfaction, organizational commitment and retention, work engagement, change readiness and adaptability, and psychological wellbeing and burnout.

Several leadership styles were consistently associated with favourable outcomes. In the United Arab Emirates, servant leadership exerted a strong positive effect on healthcare workers' happiness (β = 0.780) and a moderate effect on job performance (β = 0.504), with happiness mediating this relationship (indirect effect = 0.787) (Alahbabi, Robani & Zainudin, 2023). In Saudi Arabia, healthcare providers reported

a high level of resonant leadership (mean score 4.41 ± 0.28; 88.2%), which showed a significant positive correlation with their performance. The study indicated that higher resonance was associated with better outcomes among healthcare workers (Alharbi et al., 2024). In Saudi Arabia, empowering leadership significantly enhanced psychological empowerment and affective commitment, and indirectly improved work engagement, with the structural model explaining 51.5% of the variance in psychological empowerment, 24% in affective commitment, and 56% in work engagement (Al Otaibi et al., 2023). Also in Saudi Arabia, ethical leadership strengthened moral courage and error reporting, with mediation analyses identifying moral courage as a key mechanism (Elhihi et al., 2025). In addition, multicultural leadership showed strong associations, with job performance effects reaching $\beta = .58$ ($p < .001$) and explaining nearly 70% of the variance (Bhatti & Alyahya, 2021). In Saudi primary healthcare, job satisfaction was higher where leaders demonstrated fairness, recognition, and concern for healthcare workers' welfare (Saeed & al Asmri, 2014; Alrwili, 2022).

Not all impacts were uniformly positive. In Oman, for instance, chameleon leadership did not directly encourage innovation. Leaders' reliance on external control and context-dependent beliefs had little effect on the creativity of non-clinical healthcare workers, though job security did play a role in shaping the results (Durrah & Kahwaji, 2023).

Two studies highlighted the negative impacts of dysfunctional and toxic leadership. Abalkhail (2022) found that healthcare workers exposed to abusive, marginalising, and degrading behaviours reported heightened turnover intentions, alienation, reduced commitment, and psychological harm. These impacts also affected family

and personal life. Similarly, a cross-sectional study of Saudi nurses reported that toxic leadership traits were widespread, with narcissism scoring highest (mean 71.7), followed by authoritarianism (60.6) and abusive supervision (56.5) (Alqarawi et al., 2025).

Contextual and sectoral factors further shaped these impacts. Younger, more educated, and non-Saudi nurses reported stronger perceptions of toxic leadership, highlighting the vulnerability of expatriate healthcare workers in Saudi Arabia (Alqarawi et al., 2025). Empowering leadership also showed stronger associations with work engagement in private hospitals compared with public organisations (Alotaibi et al., 2020).

4. Discussion

4.1 Overview of Key Findings

Across 51 GCC studies, leadership style mattered for how healthcare workers experienced their jobs, but its impacts were not always universal and often contingent on organisational and cultural conditions. Transformational leadership emerged most frequently and was generally linked with higher satisfaction, commitment, engagement, and performance; yet several papers showed that these benefits were amplified, or blunted, by enablers such as fair policies, resourcing, and perceptions of organisational justice (e.g., Abualrub & Alghamdi, 2012; Alqahtani et al., 2021; Hasan et al., 2023; Alluhaybi et al., 2024). Evidence for authentic, democratic, empowering, and servant leadership pointed in a similar positive direction, but came from a smaller and context-specific base (Labrague et al., 2021; Pattali et al., 2024; Alahbabi, Robani & Zainudin, 2023). By contrast, laissez-faire, toxic, and dysfunctional patterns were consistently associated with negative impacts such as dissatisfaction, burnout, and weaker organisational commitment (Al-Dossary, 2022; Harb et al., 2022; Abalkhail, 2022; Alqarawi et al., 2025).

Directive leadership styles in the GCC, such as transactional and autocratic approaches, demonstrated situational utility, clarifying roles and facilitating short-term compliance in high-pressure situations; however, they tended to depress motivation and engagement when they dominated everyday practice (Al-Yami et al., 2018; Takrouni, 2020; Abualrub & Alghamdi, 2012; Kutob & Alhothali, 2021).

These findings suggest that the leadership style's impact on healthcare workers in the GCC is best understood through the lens of context, including hierarchical governance, expatriate–national dynamics, and sectoral constraints.

4.2 Contextual Influences on the Impact of Leadership Styles in the GCC

Several studies highlight how structural and organisational features shape the impact of leadership styles on healthcare workers in the GCC. For example, Alruwaili (2025) demonstrated that perceptions of organisational justice and quality of work life mediated the effect of transformational leadership on job satisfaction. Likewise, Abualrub and Alghamdi (2012) found that in highly centralised systems, where managers had limited control over pay or promotion, relational behaviours such as fairness and transparency were perceived as compensatory signals of support.

Cultural norms also played a decisive role. In many GCC contexts, hierarchy and deference to authority condition how leadership behaviours are interpreted (Alshammari, 2014; Alrashidi et al., 2024). These dynamics diverge from global patterns. For example, Wu et al. (2024), in a systematic review of healthcare leadership, reported consistent associations between transformational, authentic, and ethical leadership and outcomes such as job satisfaction, work engagement, and organisational commitment. However, the included papers in this review suggest that such relationships are not always linear in the GCC. Their strength and sustainability often hinge on structural enablers, including transparent career pathways, equitable promotion practices, and supportive working conditions. In the absence of these foundations, even well-intentioned relational behaviours risk being perceived as symbolic gestures rather than substantive commitments.

4.3 Expatriate–National Healthcare Worker Dynamics

Differences between expatriate and national healthcare workers were repeatedly noted in the reviewed studies. For example, non-Saudi nurses often rated their managers' transformational and transactional leadership more positively than Saudi nurses (Alshammari, 2014). Alrashidi et al. (2024) further found that males, Saudis, and less experienced nurses tended to perceive leadership more favourably, whereas females and expatriates were more critical. These findings suggest that leadership perceptions vary by nationality and demographic factors, and that expatriates and nationals may experience leadership differently depending on their career prospects.

4.4 Leadership Styles with Mixed or Situational Effects

The review revealed that the impact of styles may vary depending on specific circumstances. Transactional leadership, primarily contingent reward, was associated with better commitment and engagement in several studies from Saudi Arabia and Kuwait (Asiri et al., 2016; Al-Yami et al., 2018; AlHarthi et al., 2013). However, when dominated by management-by-exception, especially in its passive forms, it correlated with lower satisfaction and weaker commitment (Abualrub & Alghamdi, 2012; Khusheim, 2024). Also, autocratic leadership generally reduces morale and innovation (Alrwili, 2022; Kutob & Alhothali, 2021), but is perceived as beneficial in high-pressure contexts, such as the Hajj season in Saudi Arabia, the annual pilgrimage that brings millions of Muslims to Makkah and drives an extreme surge in patient volumes (Takrouni, 2020). Laissez-faire leadership was consistently linked to negative impacts (Alrubaysh et al., 2022; Harb et al., 2022); yet, in Qatar, it unexpectedly predicted higher organisational commitment in primary care settings

(Alshamari, 2020). These examples underline the situational character of leadership impacts on healthcare workers in the GCC, where the same style may yield different results depending on organisational and cultural context.

4.5 Reported Magnitude of Impact

The reviewed studies reported positive, negative, and mixed impacts of leadership styles on healthcare workers in the GCC, but the reported magnitude of these effects varied considerably. Some findings appeared strikingly large, for instance, Alruwaili (2025) reported that transformational leadership explained 63% of job satisfaction and 54% of stress reduction. In the context of leadership research, these are unusually high proportions of explained variance, which could suggest either a strong local effect or the influence of methodological factors such as overlapping constructs or model specification (Antonakis & House, 2014). By contrast, other studies presented more modest associations, measured through correlations (Alrasheedi, Alrashaidi & Shahin, 2022), regression models (Alqahtani et al., 2021), or structural equation modelling (Hasan et al., 2023).

These differences indicate that the reported effect sizes are heavily influenced by the study design, the tools used to measure leadership, and the research context. Global studies have raised this issue. For example, Antonakis and House (2014) explain that when important leadership behaviours, like monitoring strategy, allocating resources, and giving feedback, are left out of measurement models, the effects of transformational leadership can look stronger than they really are. Their work demonstrates that these inflated results often occur because certain factors are overlooked or due to bias, such as when unmeasured influences or reverse cause-

and-effect relationships lead to leadership styles being perceived as more powerful than they actually are (Antonakis & House, 2014). This suggests that leadership should be understood as one important determinant of healthcare workers' experience, but not in isolation from broader organisational and cultural enablers.

4.6 Framing Impact Domains of Leadership in the GCC

This review also showed that leadership styles impact healthcare workers in the GCC across seven key areas, including job satisfaction, organizational commitment, retention intentions, job performance, professional behaviours and safety practices, work engagement, psychological well-being, and burnout reduction, as well as change readiness and leadership efficacy. These domains are important; however, they may reflect what is most convenient to measure rather than what matters most to healthcare workers. The dominance of imported survey instruments, such as the Multifactor Leadership Questionnaire (MLQ), risks reinforcing global assumptions and overlooking GCC-specific realities, including contract uncertainty for expatriates, career stagnation for nationals under nationalisation policies, and relational dimensions like belonging and fairness. Future research must resist narrowing leadership "impact" to easily quantifiable metrics and instead capture contextually relevant experiences through qualitative and mixed-method approaches.

4.7 Towards a Leadership Evaluation Tool

This review highlights the opportunity to translate mapped impact domains into the basis of a leadership evaluation tool tailored to GCC healthcare systems. Leadership consistently influenced workforce outcomes such as job satisfaction, empowerment, engagement, burnout reduction, organisational commitment, and turnover intention

(Abualrub & Alghamdi, 2012; Alqahtani et al., 2021; Hasan et al., 2023; Alluhaybi et al., 2024). These repeatedly observed constructs provide a strong foundation for evaluation. However, contextual factors such as hierarchical governance, expatriate–national dynamics, and nationalisation policies shape how leadership is enacted (Alshammari, 2014; Alrashidi et al., 2024; Alruwaili, 2025). For this reason, evaluation must combine validated quantitative metrics with qualitative inquiry, such as interviews, focus groups, and narratives, that capture lived experiences and relational dynamics. A mixed-methods approach would enable treating identified constructs as entry points for exploring how leadership behaviours are interpreted in practice. This reframes evaluation from compliance measurement to a developmental tool, generating actionable feedback and cultivating future leaders. Aligning with global workforce sustainability agendas, such a framework, adapted to multiple workforce categories, can strengthen leadership today and build capacity for tomorrow.

4.8 Contribution to Global Literature

This scoping review makes a distinctive contribution by being the first to systematically map leadership styles and their reported impact on healthcare workers across all six GCC countries. Previous reviews have drawn on Western or Asian contexts (Wu et al., 2024; Siabi et al., 2024), and this work provides a regionally grounded mapping that highlights the unique interplay between leadership behaviours, hierarchical governance, and the expatriate–national workforce dynamic in the GCC. It shows that some leadership styles such as transformational leadership echo global findings in their association with improved satisfaction, engagement, and commitment; however, their effectiveness in the GCC is contingent

on structural enablers such as fair policies, transparent career pathways, and psychological safety (e.g., Alruwaili, 2025; Abualrub & Alghamdi, 2012). In contrast, transactional and autocratic leadership, which are sometimes dismissed in the global literature as outdated or harmful (Wu et al., 2024; Siabi et al., 2024), retain situational utility in GCC contexts where clarity and decisiveness are valued during crisis or surge conditions (e.g., Takrouni, 2020; Alshamari, 2024). Moreover, the review identifies other styles, such as servant, ethical, multicultural, and resonant leadership, that may resonate more closely with GCC cultural norms of collectivism, hierarchy, and service orientation (e.g., Alahbabi, Robani & Zainudin, 2023; Elhihi et al., 2025; Bhatti & Alyahya, 2021; Alharbi et al., 2024). These findings suggest that global leadership models cannot be transplanted blindly into GCC healthcare systems; instead, there is a pressing need to develop context-sensitive frameworks that align with regional values while addressing workforce morale and sustainability.

In practical terms, the review also provides an evidence base that can inform policy. Leadership training curricula across the GCC should incorporate relational capabilities that enable trust, empowerment, and well-being, and also equip leaders with directive skills for high-pressure environments. Human resource reforms, which are linked to nationalisation agendas such as Emiratisation and Saudisation, must integrate leadership development so that policies aimed at stabilising the workforce are not undermined by weak managerial capacity or inequitable practices (Elbanna et al., 2021). Furthermore, as the private sector expands under health insurance reforms and privatisation initiatives (Akbari, 2024), leadership frameworks must be adapted to its realities, ensuring that expatriate-heavy workforces are supported and that organisational cultures do not erode morale or lead to retention issues.

4.9 Future Research Directions

Future research must address design, population, and measurement gaps. Longitudinal and interventional studies are needed to establish causality and test leadership development in practice in the GCC and its impact on healthcare workers. Broader populations, including physicians, administrators, and healthcare workers in the private sector, require a systematic examination. Finally, GCC-specific instruments should be developed to capture the influence of hierarchical governance, expatriate contract dynamics, and nationalisation policies on leadership perceptions. Only then can leadership development efforts in the GCC move beyond imported models and towards context-sensitive frameworks that genuinely strengthen workforce sustainability.

4.10 Strengths of Scoping Review

This review demonstrates several strengths that enhance its methodological rigor and regional relevance. The review employed the Joanna Briggs Institute (JBI) framework and followed the PRISMA-ScR checklist, ensuring adherence to high standards of transparency, reproducibility, and methodological integrity. Additionally, this review was not limited to English-language publications. It included Arabic-language sources, which is the dominant language of the GCC, leveraging the author's native fluency to ensure inclusivity and minimize language bias.

Another strength is the systematic screening of four major databases and the extension of the scope to grey literature via Google Scholar, which allowed the review to capture a broad and diverse body of evidence. Rigour was further reinforced through the use of Covidence to manage all records. Covidence enabled

efficient duplicate removal, blinded screening, and systematic documentation of decisions.

Finally, the inclusion of a consultation exercise with regional experts in healthcare leadership added critical interpretive depth. Their insights contextualized the findings within GCC realities, highlighted gaps not visible in published research, and ensured that the review's conclusions are directly relevant to policy and practice priorities across health systems in the region.

4.11 Limitations of Scoping Review

Despite these contributions, several limitations must be acknowledged. The evidence base is uneven, with 76% of studies conducted in Saudi Arabia, leaving Bahrain, Kuwait, Oman, Qatar, and the United Arab Emirates underrepresented. Nurses constituted the dominant study population, and physicians, other clinical healthcare workers, and non-clinical healthcare workers received far less attention. The private sector, despite its growing role in GCC healthcare, was also rarely examined.

Methodologically, most studies relied on cross-sectional surveys using self-reported questionnaires. Only two qualitative studies were identified, restricting insights into lived experiences and leadership development in practice. This reliance limits causal inference, increases susceptibility to response bias, and raises concerns regarding the cultural validity of instruments imported from outside the region. Effect sizes were inconsistently reported, and few studies formally tested measurement validity across different national or linguistic groups.

Although this review was open to both Arabic- and English-language publications, the searches across the four major databases retrieved no Arabic-language studies, suggesting a gap in the indexed evidence. Also, only four databases (PubMed, Scopus, Web of Science, and Google Scholar) were searched, which may have limited the retrieval of relevant studies available in other sources such as CINAHL. Finally, grey literature was partially captured through Google Scholar; however, some relevant studies may still have been missed.

5. Conclusion

This review demonstrates that leadership styles are a critical determinant of healthcare workforce outcomes in the GCC. However, their effects cannot be divorced from the region's structural, cultural, and demographic realities.

The key contribution of this review lies in mapping how the impact of leadership styles on healthcare workers in the GCC is filtered through hierarchical governance, expatriate–national dynamics, and uneven organisational enablers. These findings suggest that global leadership frameworks cannot be applied uncritically; instead, the region requires models that are attuned to its workforce composition, policy environment, and cultural norms.

6. Reflection

This was not an easy topic to research. Evaluating the impact of leadership styles on healthcare workers in the GCC is less straightforward than in many industries, where leadership is often judged through tangible outcomes such as profitability, market value, or stock performance. In healthcare, the impact of leadership is often experienced more quietly, through the morale, resilience, and well-being of the workforce, which in turn shape the quality of care delivered, patient safety outcomes, and the overall sustainability of health systems. It is for this reason that I believe the work I have undertaken in this scoping review provides a foundation for institutions and policymakers to initiate a more meaningful conversation about how leadership should be evaluated in the GCC healthcare context and how to link the evaluation to its impact on healthcare workers.

Having worked within complex, hierarchical healthcare systems, I was often struck by the dissonance between global leadership ideals and the day-to-day experiences of healthcare workers operating in structurally constrained environments. This tension sparked my inquiries: how do those on the ground experience leadership, and how does it impact them? And how might context reshape the effectiveness of leadership styles in my region?

Conducting the review itself, from screening hundreds of studies to mapping fragmented evidence and grappling with geographic and methodological imbalances, exposed gaps in how we think about leadership in pluralistic, high-stakes health systems. Along the way, I also the value of engaging critically with digital tools like Covidence, Grammarly, and ChatGPT. When used thoughtfully, they become

powerful aids, emphasizing the need to use such technologies ethically and carefully, ensuring they support rather than weaken scholarly rigor.

I leave this programme with a greater appreciation for the complexities of healthcare leadership and a strengthened commitment to contribute to a more just, sustainable, and human-centred system within the GCC and beyond.

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8. Conflict of Interest

I hereby declare that there were no conflicts of interest.

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Appendices

Appendix (1): Scoping Review Protocol

Impact of Leadership Styles on Healthcare Workers of the Gulf Cooperation Council (GCC): A Scoping Review Protocol

Date: 7 May 2025

Introduction and Rationale

Health systems worldwide are under increasing strain, challenged by rising service demands, workforce shortages, and growing complexity in care delivery. While technological and financial resources remain vital, the sustainability of healthcare now depends just as much on the resilience and engagement of the people who deliver care. The World Health Organization projects a global shortfall of 11 million health workers by 2030, with implications that extend far beyond capacity gaps (WHO, 2020). Even before the COVID-19 pandemic, chronic challenges such as healthcare workers burnout, turnover, and workplace dissatisfaction were placing significant strain on health systems globally (Alpen Capital, 2022; Yerramilli et al., 2025).

In this context, leadership has emerged as a crucial factor influencing the impacts of healthcare workers. Evidence from diverse settings suggests that leadership style can have a significant impact on morale, psychological safety, retention, and team performance (Gilson, 2018; Alkhateeb et al., 2025). However, the extent to which these findings translate to other regions remains uncertain. In the Gulf Cooperation Council (GCC), which includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia (KSA), and the United Arab Emirates (UAE), health systems operate within distinct cultural,

structural, and workforce dynamics that may alter how leadership is enacted and experienced. Despite growing interest in leadership development, the evidence base in this region remains fragmented and underexplored.

GCC health systems are marked by distinctive characteristics: centralized governance, rapidly expanding infrastructure, and a predominantly expatriate workforce. In countries like the UAE and KSA, over 80% of physicians and more than 90% of nurses are non-nationals (Katoue et al., 2022). Combined with high turnover, evolving nationalization policies, and intense reform agendas, these factors create a unique context in which leadership may function differently than in other high-income countries.

While individual studies have investigated leadership in GCC healthcare, no review has systematically mapped the range of leadership styles and their reported influence on healthcare workers in the region. This scoping review seeks to fill that gap.

Novelty and Contribution

This scoping review will be the first to systematically map the published literature on leadership styles within healthcare organizations across the Gulf Cooperation Council (GCC) region. Although individual studies have explored leadership in specific countries or sectors, no prior review has compiled and organized this evidence at a regional level. The novelty of this work lies in its scope and intent: to bring together existing findings on leadership styles and their reported impact on healthcare workers, and to examine how these findings relate to the unique structural and cultural characteristics of healthcare organizations in the GCC. By charting the available evidence from across the six GCC countries, this review will offer a regionally

grounded understanding of leadership in healthcare, highlighting what is currently known and where critical knowledge gaps remain.

Objectives

- This scoping review will explore and map the published literature on leadership styles in healthcare organizations across the GCC. Specifically, it will:
- Identify and describe leadership styles reported in healthcare organizations in GCC countries.
- Document reported effects of these leadership styles on healthcare workers, including clinical and non-clinical healthcare workers.
- Explore how organizational, cultural, and policy contexts shape leadership practice and its perceived impact.
- Identify evidence gaps related to leadership styles in GCC healthcare organizations to support future research, leadership development, and workforce planning in the region.

Methodology

This review will follow the Joanna Briggs Institute (JBI) methodology for scoping reviews and report in accordance with the PRISMA-ScR checklist.

Research Question

What leadership styles are most frequently studied in the GCC region? What impact do these styles have on healthcare workers? And how does context shape the practice of leadership styles and perception by healthcare workers?

Inclusion and Exclusion Criteria (PCC Framework)

- **Population:** All healthcare workers in the GCC healthcare organizations, including clinical and non-clinical healthcare workers.
- **Concept:** All reported leadership styles and their experienced or perceived impact on healthcare workers.
- **Context:** Public and private healthcare organisations that are involved in care delivery within the GCC countries, which consist of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Inclusion Criteria:

- The study must be conducted in one or more of the six Gulf Cooperation Council (GCC) countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, or the United Arab Emirates.
- The study must present applied findings on leadership styles and their impact on healthcare workers in the GCC.
- Studies that explore the perceived effects of leadership styles on healthcare workers, such as healthcare workers perceptions of leadership behaviour, are eligible only if they link these perceptions to impact on healthcare workers (examples include but are not limited to: morale, burnout, retention, acquiring knowledge, innovative behaviours, etc.).
- The study must be published in English or Arabic.
- The research must be conducted within public or private healthcare organisations involved in care delivery.
- No restrictions on publication date will be applied to ensure all relevant literature is captured, given the limited research available in this area.

Exclusion Criteria:

- Studies conducted outside the GCC.
- Opinion pieces, editorials, or theoretical/conceptual papers that do not include applied examples.
- Studies discussing leadership styles without evidence of real-world application in healthcare settings.
- Studies assessing staff perceptions of leadership but not reporting the impact of leadership styles on healthcare workers.
- Studies that examine organisational outcomes (e.g. hospital efficiency, accreditation) without connecting these to the experiences or the impact on healthcare workers.

Search Strategy

A comprehensive search will be conducted in:

- **Databases:** PubMed, Scopus, Web of Science, Google Scholar
- **Languages:** English and Arabic (reflecting the primary languages in the region)
- **Timeframe:** No restrictions due to limited existing research

Sample Search Terms

The search strategy is intended to capture all papers about leadership styles practiced in GCC healthcare organizations:

("leadership style" OR "hospital management" OR "transformational leadership") AND ("Saudi Arabia" OR "UAE" OR "Qatar" OR "Oman" OR "Kuwait" OR "Bahrain") AND ("healthcare" OR "health system")

In Arabic:

"أسلوب القيادة" OR "أسلوب الإدارة" OR "قيادة المستشفى" AND "الرعاية الصحية" OR "نظام الصحة" OR "البحرين" OR "الكويت" OR "قطر" OR "السعودية" OR "الإمارات العربية المتحدة" AND "القطاع الصحي" OR "عمان"

Study Selection and Extraction

Titles and abstracts will be screened by two independent reviewers using Covidence, and discrepancies will be resolved through discussion to reach a consensus. The full texts will be assessed against the inclusion and exclusion criteria. The data extraction will include:

Title / Author / Year of Publication / GCC Country / Study / Report Type / Population / Type of Leadership Style(s) Discussed / Impact on Healthcare Workers / Objectives / Main Results / Study / Report Limitations / Future Directions

Data Analysis and Presentation

This review will adopt an exploratory, mapping-based approach consistent with the Joanna Briggs Institute (JBI) methodology for scoping reviews. The aim is to chart the extent, nature, and distribution of existing research on leadership styles and their reported effects on healthcare workers within the GCC healthcare organizations. Extracted data will be summarised using descriptive statistics, tabular matrices, and

visual charts to convey patterns across countries, leadership types, professional cadres, and impact categories.

Where relevant, narrative descriptions and inductive groupings will be used to highlight recurring themes, such as dominant leadership styles, contextual factors shaping leadership perceptions, and impacts related to healthcare workers. Contradictory or atypical findings will also be flagged and contextualised with reference to study design, population, or local norms. This descriptive approach aligns with established scoping review guidance (Peters et al., 2020) and the PRISMA-ScR framework.

Expert Consultation

Experts in healthcare leadership from the GCC region will be consulted to validate the emerging findings and support interpretation within local contexts. This engagement will enhance the relevance of the review by identifying potentially overlooked grey literature and clarifying region-specific nuances.

Ethics and Dissemination

No ethical approval is required as this is a secondary analysis.

Limitations

- Limited published literature may affect comprehensiveness
- Terminological inconsistencies between Arabic and English
- Private sector leadership may be underrepresented
- There is a risk that relevant grey literature may be difficult to locate due to inconsistent indexing, lack of digitization, or government restrictions on publication.

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Appendix (2): Data Chart

S. No	Paper No.	Title	Author	Year of Publication	GCC Country	Research Method	Research Type	Population	Unified Terminologies (Population)	Type of Leadership Style(s) Discussed	Unified Terminologies (Leadership Styles)	Impact on Healthcare Workers	Themes (Impact on Healthcare Workers)	Objectives	Main Results / Imact Size	Study / Report Limitations	Future Directions
1	140	Dysfunctional Leadership: Investigating Employee Experiences with Dysfunctional Leaders	Jouharah M. Abalkhail	2022	Saudi Arabia	Semi-structured interviews	Qualitative	25 Administrative and clinical staff in Riyadh-based hospitals	Administrative, Clinical	Dysfunctional leadership: abusive, marginalizing, favoritism, degrading behaviors	Dysfunctional leadership: abusive, marginalizing, favoritism, degrading behaviors	Psychological harm, burnout, low morale, alienation, turnover intention, reduced commitment, work–family conflict	Psychological Harm and Burnout	To examine lived experiences of employees exposed to dysfunctional leadership in healthcare	Four dysfunctional behaviors identified: abusive (9/25, 36%), marginalization (12/25, 48%), favoritism (~25%), and degradation (18/25, 72%). Reported effects included intention to leave, work alienation (10/25, 40%), reduced commitment (8/25, 32%), and psychological/physical harm (15/25, 60%), with one-third noting spillover into family life.	Context limited to Riyadh; self-report bias; single-sector (healthcare); lacks longitudinal perspective	Organizations should develop policies to detect and address dysfunctional leadership; future research could explore coping mechanisms, cross-country comparisons, and preventative interventions

2	154	The Relationship Between Transformational Leadership Practices of First-Line Nurse Managers and Nurses' Organizational Resilience and Job Involvement	Abd-EL Aliem, S.M.F. & Abou Hashish, E.A.	2021	Saudi Arabia	Correlational study	Quantitative	60 nurse managers + 211 nurses in a university hospital	Nursing	Transformational	Transformational	Positive correlation with resilience and job involvement	Work Engagement	Assess the relationship between transformational leadership and nurses' work attitudes	Transformational leadership practices of first-line nurse managers showed strong positive correlations with nurses' resilience ($r = 0.418$, $p < .001$) and job involvement ($r = 0.566$, $p < .001$). Leadership accounted for 43% of variance in resilience and 40% in job involvement; resilience also mediated 43% of job involvement	Convenience sampling, limited to university hospital setting, gender-biased sample (reportedly only female), self-reported tools, non-causal study design, potential unmeasured confounders	Suggest use of 360° evaluation and broader sampling for future studies

3	165	The impact of leadership styles on nurses' satisfaction and intention to stay among Saudi nurses	Raeda F. Abualrub and Mohammed G. Alghamdi	2012	Saudi Arabia	Correlational study	Mixed Methods	308 Saudi nurses working in six Ministry of Health hospitals in Jeddah, Makkah, and Taif	Nursing	Transformational / Transactional	Transactional, Transformational	Job satisfaction was higher under transformational leadership and lower under transactional leadership; intention to stay was influenced by job satisfaction but not directly by leadership styles	Job Satisfaction / Organizational Commitment and Turnover Intention	To examine the impact of nurse managers' leadership styles on Saudi nurses' job satisfaction and their intention to stay at work	Transformational leadership was positively correlated with job satisfaction ($r = 0.45$, $p < .001$), and transactional leadership showed a weak negative correlation ($r = –0.14$, $p < .01$). Job satisfaction correlated weakly with intention to stay ($r = 0.15$, $p < .01$). Leadership styles and background variables explained 32% of variance in job satisfaction, but only 5% in intention to stay. Satisfaction was highest for nature of work ($M = 4.81$) and lowest for fringe benefits ($M = 2.95$)	The study used convenience sampling from only six public hospitals and relied on self-administered questionnaires, which may have introduced recall or reporting bias.	Developing transformational leadership characteristics among nurse managers, exploring broader organizational factors influencing nurse retention beyond leadership style, and enhancing fringe benefits and work environments to improve overall staff satisfaction and retention.

4	197	A Framework of Servant Leadership Impact on Job Performance: The Mediation Role of Employee Happiness in UAE Healthcare Sector	Alahbabi, A.M.F. et al.	2023	United Arab Emirates	Empirical Study	Quantitative	Employees and administrative staff at Abu Dhabi Health Services Company (SEHA) - Paper doesn't define "employees"	Administrative, Clinical	Servant Leadership	Servant	Improved job performance through increased employee happiness; statistically significant direct and mediated effects	Job Performance	To examine how servant leadership affects employee happiness and job performance in UAE healthcare, and whether happiness mediates this relationship	Servant leadership had significant positive effects on employee happiness (β = 0.780, p < .001) and job performance (β = 0.504, p = .008). Employee happiness also directly improved job performance (β = 0.600, p = .004) and partially mediated the servant leadership, job performance relationship (indirect effect = 0.787, bootstrapped CI 0.125–3.082, p = .026)	Limited to SEHA in UAE; does not generalize to other sectors or regions; time constraints prevented broader sampling	Test the framework in other GCC countries and sectors; validate findings with broader populations and other healthcare contexts

5	490	Organisational Culture, Leadership Behaviour and Job Satisfaction among Primary Health Care Professionals in Saudi Arabia	Mushabab Saeed Hassan Al Asmri	2014	Saudi Arabia	Thesis	Mixed Methods	Primary Health Care Centre (PHCC) professionals (clinical and administrative)	Administrative, Clinical	Consideration, Initiating Structure (aligned with task- and relationship-oriented styles)	Relationship-oriented, Task-oriented, Transactional	Leadership behaviors characterized by high consideration and clear structure were associated with increased job satisfaction, but gaps in support, training, and bureaucratic leadership practices contributed to stress and dissatisfaction among PHCC professionals.	Job Satisfaction / Psychological Harm and Burnout	Explore links between leadership, culture, and job satisfaction; propose a Primary Health Care (PHC) managerial framework	Leadership behaviour (consideration and initiating structure) significantly predicted job satisfaction among PHCC professionals (β = 0.53, p < .001). Organisational culture also predicted satisfaction (β = 0.62, p < .001) and explained leadership behaviour (β = 0.58, p < .001). Key reflections of satisfaction were praise/recognition and supportive culture. Qualitative findings highlighted stress from bureaucracy, centralisation, and lack of competent leadership	Regional focus (Asir); based on self-reported data; doctoral study scope	Implementation and evaluation of a PHC management framework based on findings
6	432	Leadership Style, Work Engagement and Organizational Commitment Among Nurses in Saudi Arabian Hospitals	Reem N. Al-Dossary	2022	Saudi Arabia	Cross-sectional survey	Quantitative	Nurses and Nurse Managers	Nursing	Transformational / Transactional / Laissez-faire	Laissez-faire, Transactional, Transformational	Transformational and transactional leadership styles positively influence nurses' organizational commitment and engagement, but transactional leadership (especially contingent reward) showed the strongest statistical relationship with outcomes like dedication and absorption.	Organizational Commitment and Turnover Intention / Work Engagement	Examine the relationship between leadership styles, work engagement, and organizational commitment	Transformational leadership correlated moderately with organizational commitment (r = 0.30–0.49) and engagement (r = 0.48–0.55), especially in inspirational motivation with dedication (r = 0.521) and absorption (r = 0.511). Transactional leadership showed stronger correlations with engagement (r = 0.50–0.71), with contingent reward strongly linked to dedication (r = 0.528) and absorption (r = 0.535). Laissez-faire had moderate positive associations with	Self-selection bias; generalizability concerns	Need for further studies and leadership development in the context of Vision 2030 reforms

															commitment (r ≈ 0.45–0.47) and engagement (r ≈ 0.40–0.43)		

7	50	Exploring leadership styles in government hospitals in Kuwait	Talal AlFadhalah and Hossam Elamir	2019	Kuwait	Cross-sectional study	Quantitative	66 leaders (hospital directors and heads of departments) and 1,626 followers (physicians, nurses, pharmacists) from six government general hospitals in Kuwait	Managerial, Clinical	Transformational / Transactional / Laissez-faire	Laissez-faire, Transactional, Transformational	Transformational leadership was positively associated with higher levels of extra effort, perceived effectiveness, and job satisfaction among healthcare workers, with followers reporting significantly better outcomes than those under transactional leaders and regression models confirming strong correlations between leadership style and these outcomes.	Job Satisfaction / Job Performance	To determine and assess the leadership styles of leaders in government hospitals in Kuwait and evaluate their effect on organizational outcomes as perceived by healthcare staff	ransformational leadership was the prevailing style, with leaders rating themselves higher than followers. Followers of transformational leaders reported significantly higher extra effort (M = 2.79 vs. 1.89), effectiveness (M = 3.01 vs. 2.08), and satisfaction (M = 3.07 vs. 2.08) compared with transactional leaders (all p < .001). Correlations between transformational leadership and outcomes were strong (r = 0.61–0.87, p < .001), with effectiveness most strongly affected. Individualized consideration scored lowest among transformational factors	Limited to general government hospitals in Kuwait, excluded other healthcare sectors, used a cross-sectional design that limits causal inference, and faced challenges with data consistency in analyzing demographic impacts.	Include other healthcare sectors, implement training to enhance transformational behaviors (especially individualized consideration), adopt leadership style assessments as performance indicators, and promote leadership certification and continuous development within Ministry of Health structures.

8	510	The influence of transformational leadership on individual and team innovativeness in the hospital sector in the United Arab Emirates	Maha Al-Farhan	2018	United Arab Emirates	Thesis	Quantitative	157 Clinical and non-clinical healthcare workers and managers in a large tertiary public hospital in the UAE	Managerial, Administrative, Clinical	Transformational leadership (with comparison and contextual reference to transactional leadership)	Transactional, Transformational	Transformational leadership significantly improved team-level innovativeness (especially with external knowledge and team reflection), enhanced knowledge sharing among staff, but had no direct effect on individual innovativeness.	Job Performance	To examine how transformational leadership influences staff innovative behavior, including the mediating effects of knowledge sharing, moderating role of team reflexivity, and contextual boundaries like external knowledge acquisition.	Transformational leadership showed no significant effect on individual innovativeness (r = 0.135, n.s.), and knowledge sharing did not mediate this relationship. At the team level, transformational leadership had a significant positive impact on team innovativeness (r = 0.354, p < .05; B = 3.84, p < .05). The effect was contingent on external knowledge acquisition: under low external knowledge, leaders themselves drove innovativeness (direct effect B = 1.31, p < .05); under high external knowledge, the effect was mediated by team reflection	The study was conducted in a single UAE public-sector hospital, involved a small sample of 32 team units, used cross-sectional data, and may reflect cultural or sector-specific bias.	Future research should conduct longitudinal, multi-site studies across the GCC to explore how reflexivity emerges, compare team versus individual knowledge dynamics, and examine how staff influence leadership from the bottom up.
9	36	Impact of Authentic Leadership on Nurses' Well-being and Quality of Care in Acute Care Settings	Alhalal, E. et al	2024	Saudi Arabia	Cross-sectional study	Quantitative	415 nurses from 6 public hospitals	Nursing	Authentic leadership	Authentic	Positive effect on psychological capital and perceived quality of care; indirect effect on well-being via practice environment and psychological capital	Psychological Harm and Burnout	To examine the mechanisms through which authentic leadership affects nurses' well-being and care quality	Authentic leadership had a direct positive effect on the nursing practice environment (β = 0.53, p < 0.001), psychological capital (β = 0.34, p < 0.001), and perceived quality of care (β = 0.12, p = 0.047), but no direct effect on well-being (β = 0.09, n.s.). Well-being was influenced indirectly via the practice environment (β = 0.13, p < 0.001) and psychological capital (β = 0.10, p < 0.001). Quality of care was influenced both directly and indirectly through the practice environment (β = 0.22 direct; β = 0.12	Cross-sectional design; use of self-report measures; quality of care measured by a single item	Longitudinal studies and broader testing in primary care settings recommended

														indirect). The largest effect was on the practice environment (β = 0.53)		
10	481	Assessment of Relationship between Structural Empowerment and Resonant Leadership on the Performance of Healthcare Providers in Saudi Arabia	Alharbi, A.A. et al.	2024	Saudi Arabia	Descriptive correlational study	Quantitative	260 healthcare providers & managers in one Saudi hospital (The study does not specify the professional category of participants)	Managerial, Clinical	Resonant leadership (Emotional intelligence–based, 4 dimensions: self-awareness, social awareness, self-management, relationship management)	Resonant leadership	Resonant leadership positively related to workers' performance. Structural empowerment, unexpectedly, showed a negative correlation with performance.	Job Performance	To assess the relationship of resonant leadership and structural empowerment with healthcare providers' performance	Resonant leadership was rated very high across all four dimensions (overall mean = 4.41, SD = 0.28; 88.2%). Structural empowerment was also high (overall mean = 17.22, SD = 1.33), with the highest sub-dimensions being opportunities (M = 4.47, SD = 0.41) and resources (M = 4.44, SD = 0.41). Healthcare workers' performance was rated excellent (overall mean = 16.12, SD = 0.44; 89.6%). Correlation analysis showed that resonant leadership was positively correlated with both structural empowerment and performance ($p < 0.01$), while structural empowerment was negatively correlated with performance ($p < 0.01$)	Conducted in a single hospital (limiting generalizability), and the negative correlation between empowerment and performance contrasts with prior literature.	Recommend training new healthcare leaders in resonant leadership techniques and expanding the study across diverse institutional settings for broader applicability.

11	434	An Investigation of the Saudi Healthcare System's Readiness for Change in the Light of Vision 2030: The Role of Transformational Leadership Style	Mohammad Faleh Alharbi	2018	Saudi Arabia	Primary empirical research; quantitative, cross-sectional survey	Quantitative	83 middle managers from 18 public hospitals in the Al-Qassim region, Saudi Arabia (The study does not specify the professional category of participants)	Managerial	Transformational leadership (including its subcomponents: idealized influence, inspirational motivation, intellectual stimulation, individual consideration)	Transformational	Perceived transformational leadership style was positively associated with healthcare workers' (middle managers') readiness for organizational change, across emotional, cognitive, and intentional dimensions. Leadership perception explained 30% of the variance in change readiness.	Change Readiness and Leadership Self-Efficacy	To examine whether perceived transformational leadership style influences the readiness for change among healthcare workers in the Saudi healthcare system in the context of Vision 2030 reforms.	he study, based on 83 middle managers from 18 public hospitals in Al-Qassim, found that transformational leadership was positively correlated with readiness for organizational change ($r = 0.56$, $p < 0.01$). Regression analysis showed that transformational leadership significantly predicted readiness for change, explaining 30% of the variance ($R^2 = 0.30$, $F = 36.59$, $p < 0.001$). Subcomponents of transformational leadership (idealised behaviour, inspirational motivation, intellectual stimulation, and individual consideration) all showed significant positive associations with emotional, cognitive, and intentional readiness for change.	Conducted in one region (Al-Qassim), limiting generalizability; cross-sectional design limits causal inference; self-reported data introduces potential bias; other leadership styles (e.g., transactional, servant) not explored.	Replicate in other regions; consider longitudinal designs; include other leadership styles and leadership levels; explore mediators and moderators such as organizational culture and commitment to change.

12	459	Leadership Style Among Middle Managers in Saudi Ministry of Health	AlHarthi, A.S. et al.	2013	Saudi Arabia	Cross-sectional descriptive study	Quantitative	30 middle managers and 91 subordinates from the Saudi Ministry of Health using the MLQ	Managerial, Administrative, Clinical	Transformational / Transactional / Laissez-faire	Laissez-faire, Transactional, Transformational	Transformational leadership showed strong positive correlations with all three outcomes: satisfaction, perceived effectiveness, and extra effort Laissez-faire leadership was negatively correlated with all three outcomes Transactional leadership had a moderate positive association, particularly through contingent reward	Job Performance / Job Satisfaction	To examine leadership styles of middle managers as perceived by themselves and their subordinates, identify which styles correlate with workforce outcomes (satisfaction, effectiveness, extra effort), and compare perspectives across demographic variables.	Mean scores for transformational leadership ranged between 2.90–3.45 across leaders and raters, exceeding those for transactional (≈2.48–2.52) and laissez-faire (≈1.22–1.26). Contingent reward had relatively high mean ratings (leaders 3.45; raters 3.25). Correlation analysis showed transformational leadership was strongly and positively associated with satisfaction ($r = .72$, $p < 0.05$), effectiveness ($r = .81$, $p < 0.05$), and extra effort ($r = .80$, $p < 0.05$). Transactional leadership also correlated positively but at lower levels (satisfaction $r = .20$; effectiveness $r = .44$; extra effort $r = .35$, all $p < 0.05$). Laissez-faire leadership correlated negatively with all outcomes (satisfaction $r = –.48$; effectiveness $r = –.46$; extra effort $r = –.43$, all $p < 0.05$).	The study's limitations include a small sample size, confinement to MOH headquarters in Riyadh, potential bias from self-reporting and convenience sampling, and the absence of a longitudinal or causal design limiting insights into long-term impacts	Further research is recommended across different levels and regions using longitudinal designs and broader sampling, with an emphasis on developing training programs for middle managers grounded in transformational leadership principles.

13	436	Impact of Leadership Styles on the Employees' Engagement in Private Healthcare Industry of UAE	Zeeshan Ali, Arooj Niaz	2024	United Arab Emirates	Quantitative cross-sectional study	Quantitative	357 healthcare professionals (doctors, nurses, administrative staff) in private hospitals across the UAE	Administrative, Clinical	Democratic / Authoritative / Laissez-faire	Autocratic, Democratic, Laissez-faire, Transactional	Democratic and Authoritative leadership styles showed strong positive correlations with employee engagement, while Laissez-faire had a weaker positive relationship; engagement was associated with improved teamwork, patient care, satisfaction, and reduced burnout.	Work Engagement	The study aimed to identify prevalent leadership styles in the UAE private healthcare sector, measure employee engagement levels, analyze correlations between leadership styles and engagement, and provide recommendations to enhance engagement through effective leadership practices.	Democratic leadership showed a moderate positive correlation with employee engagement ($r = .484$, $p < .001$), explaining 23.4% of the variance ($R^2 = .234$). Authoritative leadership demonstrated a stronger positive correlation ($r = .554$, $p < .001$), accounting for 30.7% of the variance ($R^2 = .307$). Laissez-faire leadership showed a weaker but statistically significant correlation ($r = .238$, $p < .001$), explaining only 5.7% of the variance ($R^2 = .057$). Overall, democratic and authoritative leadership styles were stronger predictors of employee engagement compared to laissez-faire	The cross-sectional design limits causal interpretation, and the study's focus on private hospitals in Dubai and the broader UAE may not be generalizable to the public sector or other GCC countries.	Future research should include longitudinal studies, explore leadership practices in the public sector, assess the effective use of laissez-faire leadership in specific contexts, and benchmark against best practices both within and beyond the region.

14	474	Clinical nurse managers' leadership styles and staff nurses' work engagement in Saudi Arabia: A cross-sectional study	Alluhaybi, A. et al.	2024	Saudi Arabia	Primary research – Cross-sectional, correlational survey	Quantitative	278 staff nurses from four public hospitals in Makkah, Saudi Arabia	Nursing	Transformational, Transactional, Passive-Avoidant	Laissez-faire, Transactional, Transformational	Work engagement (vigour, dedication, absorption); significant positive correlation with transformational and transactional styles; negative with passive-avoidant	Work Engagement	Examine the relationship between clinical nurse managers' leadership styles and staff nurse work engagement	Transformational leadership was the most prevalent style (M = 3.37, SD = 0.70), followed by transactional leadership (M = 3.30, SD = 0.71), while passive-avoidant leadership was least common (M = 2.55, SD = 0.90). Nurses reported high work engagement (overall M = 4.03, SD = 1.05 on a 6-point scale), with the dedication subscale scoring highest (M = 4.23, SD = 1.24). Correlation analysis showed a strong positive relationship between transformational leadership and work engagement ($r = 0.65$, $p < 0.01$), a positive relationship between transactional leadership and work engagement ($r = 0.56$, $p < 0.01$), and a negative association with passive-avoidant leadership ($r = -0.12$, $p < 0.05$). Nationality was a significant factor: non-Saudi nurses reported higher scores for transformational leadership (M = 3.45 vs. 3.26) and higher engagement (M = 4.23 vs. 3.73) compared with Saudi nurses	Convenience sampling, regional focus (Makkah only), cross-sectional design, self-report bias, limited data on nurse managers' demographics or training	Call for further qualitative research to understand the influence of cultural and demographic factors on leadership perception and engagement in Saudi Arabia

15	453	Transactional Versus Transformational Style of Leadership—Employee Perception of Leadership Efficacy in Public and Private Hospitals in Kuwait	Faten Fahad Al-Mailam	2004	Kuwait	Primary research; cross-sectional survey	Quantitative	266 employees (administrators and physicians) from four public and private hospitals	Administrative, Clinical	Transformational and Transactional	Transactional, Transformational	Higher perceived leadership efficacy among those who rated their leaders as transformational; lower perceived turnover; links to higher morale and satisfaction implied	Organizational Commitment and Turnover Intention	To assess whether employees perceive transformational leaders as more effective than transactional ones, and whether this perception differs between public and private hospitals	Transformational leadership was significantly associated with higher employee perceptions of leadership efficacy. ANOVA demonstrated strong effects of leadership style on perceived efficacy (Hospital Directors: $F = 32.41$, $p < .001$; Department Heads: $F = 34.84$, $p < .001$). Mean leadership scores for both hospital directors ($M = 26.89$) and department heads ($M = 25.74$) were below the midpoint of 33, indicating a predominantly transformational style. Employees in private hospitals were more likely to perceive their leaders as transformational compared to those in public hospitals (e.g., Department Heads: private $M = 24.41$ vs. public $M = 27.28$, $p < .001$). Reported turnover rates were low across institutions (physicians and nurses: 8–10% annually; administrators: <5%), consistent with the positive impact of transformational leadership	Cross-sectional design; perception-based responses; did not measure job satisfaction or turnover directly using validated instruments	Recommends the adoption of transformational leadership in Kuwaiti hospitals; suggests leadership training to enhance these qualities; notes value in applying transformational leadership concepts in Middle Eastern settings

16	211	Relationship between Leadership Style and Organisational Culture with Intention to Leave Expatriates in Saudi Health Care System	Foud Alorhiri, Richard Giordano, Alan Borthwick	2019	Saudi Arabia	Cross-sectional, questionnaire-based	Quantitative	354 Expatriate clinical and non-clinical staff	Administrative, Clinical	Transformational, Transactional	Transactional, Transformational	Transformational leadership was associated with lower intention to leave; this relationship was partially mediated by organisational culture. Transactional leadership showed no significant impact on intention to leave.	Organizational Commitment and Turnover Intention	To examine the direct and indirect effects of transformational and transactional leadership styles and organisational culture on expatriates' intention to leave	transformational leadership had a significant negative correlation with intention to leave (r = –.239, p < .01), while transactional leadership showed no significant relationship (β = .101, n.s.). Organisational culture was strongly correlated with both transformational leadership (r = .636, p < .01) and transactional leadership (r = .567, p < .01), and negatively with intention to leave (r = –.259, p < .01). Regression analysis confirmed that organisational culture partially mediated the relationship between transformational leadership and intention to leave (β = –.341, p < .01), but not for transactional leadership. Reliability testing indicated strong internal consistency (Cronbach's α = .75–.78 across scales).	Conducted in a single hospital; focused only on expatriates; did not include national staff; limited generalisability	Future research should examine the influence of national culture and expand to multi-site studies across diverse healthcare settings in the GCC region

17	337	Does emotional intelligence and empowering leadership affect psychological empowerment and work engagement?	Alotaibi, S.M. et al.	2020	Saudi Arabia	Quantitative empirical study	Quantitative	174 staff nurses in five private hospitals in Riyadh	Nursing	Empowering Leadership	Empowering	Positive relationship with psychological empowerment and work engagement	Work Engagement	To examine the role of emotional intelligence and empowering leadership in enhancing psychological empowerment and work engagement	Structural equation modelling showed that emotional intelligence (EI) was strongly associated with empowering leadership (β = 0.772, t = 17.149, p < .001) and psychological empowerment (β = 0.398, t = 3.872, p < .001). EI had no significant direct effect on work engagement (β = 0.183, n.s.). Empowering leadership significantly predicted both psychological empowerment (β = 0.383, t = 3.668, p < .001) and work engagement (β = 0.548, t = 5.067, p < .001). Psychological empowerment did not significantly predict work engagement (β = 0.140, n.s.). The model explained 59.6% of variance in EI, 54% in psychological empowerment, and 65% in work engagement, indicating high predictive power. Effect sizes (f^2) suggested EI had a large effect on EL (1.475) and moderate on psychological empowerment (0.140), while EL had a large effect on work engagement (0.307)	Limited to private hospitals in Riyadh; generalizability to public sector or other regions not established	Expand research to public hospitals and other GCC countries; investigate additional leadership styles and their components

18	327	The role of empowering leadership and psychological empowerment on nurses' work engagement and affective commitment	Al Otaibi, S.M. et al.	2023	Saudi Arabia	Quantitative empirical study – cross-sectional survey	Quantitative	231 nurses in a university hospital in Saudi Arabia	Nursing	Empowering Leadership	Empowering	Empowering leadership significantly increased affective commitment, which in turn significantly enhanced work engagement. There was no significant direct effect of empowering leadership on work engagement, but psychological empowerment acted as a mediator between the two.	Organizational Commitment and Turnover Intention / Work Engagement	To investigate how empowering leadership and psychological empowerment affect nurses' affective commitment and work engagement, and whether psychological empowerment mediates these relationships.	Empowering leadership (EL) significantly predicted psychological empowerment (β = 0.717, p < .001) and affective commitment (β = 0.238, p < .01), but not work engagement (β = 0.058, n.s.). Psychological empowerment (PE) was significantly associated with both affective commitment (β = 0.293, p < .001) and work engagement (β = 0.158, p < .05). Affective commitment (AC) strongly predicted work engagement (β = 0.690, p < .001). Mediation analysis confirmed that PE mediated the relationships between EL and AC (β = 0.210, p < .001) and between EL and work engagement (β = 0.113, p < .05). The structural model explained 51.5% of variance in PE, 24% in AC, and 55.6% in WE. Effect size analysis showed EL had a large effect on PE (f^2 = 1.060), while AC had a large effect on WE (f^2 = 0.813)	Single-site (one university hospital); cross-sectional design; limited generalizability to other settings or countries.	Conduct multi-site and longitudinal studies across different GCC countries; explore alternative leadership styles for comparison.

19	218	Leadership styles and job satisfaction among healthcare providers in primary health care centers	Alqahtani, A.M.A. et al.	2021	Saudi Arabia	Cross-sectional primary research	Quantitative	25 PHC managers and 300 PHC providers (physicians, nurses, paramedics)	Managerial, Clinical	Transformational, Transactional (Management-by-exception, Contingent reward), Laissez-faire	Laissez-faire, Transactional, Transformational	Job satisfaction varied by leadership style. Laissez-faire leadership showed strongest positive correlation with multiple job satisfaction dimensions; followed by transactional (especially contingent reward and management-by-exception); transformational showed weakest correlation.	Job Satisfaction	To explore the relationship between managers' leadership styles and job satisfaction among healthcare workers in PHCCs in Aseer Region, Saudi Arabia.	34% of PHC providers were satisfied with their jobs. Laissez-faire leadership showed the strongest positive correlation with multiple job satisfaction domains ($r = 0.417$, $p < 0.01$), followed by transactional leadership through contingent reward ($r = 0.354$, $p < 0.01$) and management-by-exception ($r = 0.301$, $p < 0.01$). Transformational leadership had the weakest correlation with job satisfaction ($r = 0.214$, $p < 0.05$). Job satisfaction was significantly lower among pharmacists, those earning <10,000 SAR, and employees with <5 years' experience. About 48% of PHC managers reported no formal leadership training, highlighting a skills gap in effective leadership practices	Cross-sectional design limits causal inference. Generalizability is limited to the Aseer Region. Approximately half of PHCC managers lacked formal leadership training.	Recommend improved training for PHC managers in transformational and transactional leadership to enhance provider satisfaction. Need for broader national studies across other regions and healthcare levels.

20	195	Examining the relationship between nursing staff demographics, work characteristics, and toxic leadership in Saudi Arabia: a cross-sectional approach	Alqarawi, N. et al.	2025	Saudi Arabia	Descriptive cross-sectional study	Quantitative	691 clinical nurses from public and private hospitals in Qassim region	Nursing	Toxic leadership (traits: narcissism, unpredictability, self-promotion, abusive supervision, authoritarianism)	Toxic	Higher toxic leadership perception among younger, female, non-Saudi, and more educated nurses; associated with burnout, dissatisfaction, and intent to leave.	Psychological Harm and Burnout / Job Satisfaction / Organizational Commitment and Turnover Intention	To examine how demographics and work characteristics relate to perceived toxic leadership among nurses in Saudi Arabia.	Moderate prevalence of toxic leadership (mean TLS = 103.21 ± 30.09; mean percent = 61.51%). Among toxic traits, narcissism scored highest (71.68%), followed by unpredictability (59.42%) and self-promotion (59.39%). Abusive supervision (56.46%) and authoritarianism (60.61%) were also prominent. Younger nurses (20–29 years) reported significantly higher toxic leadership scores ($p < .001$), with a negative correlation between age and TLS ($B = –5.227$, $p = .045$). Female nurses reported more abusive supervision ($p < .05$), and single nurses reported higher self-promotion and unpredictability ($p < .05$). Nurses with postgraduate education had higher TLS scores ($B = 6.015$, $p = .005$). Non-Saudi nurses, especially Indians, reported the highest TLS scores ($B = 5.009$, $p = .004$). Toxic leadership was most prevalent in emergency and medical units ($p < .001$) and in non-reference hospitals ($B = 2.894$, $p < .001$). Regression analysis showed demographic and workplace factors explained 9.9% of variance in toxic leadership ($R^2 = 0.099$, $p < .001$)	Convenience sampling; cross-sectional design; self-report bias; excluded leader perspectives.	Include leaders' perspectives; adopt multi-stakeholder designs; explore qualitative insights; test interventions in high-stress settings.

21	461	Leadership Styles and Job Satisfaction among Nurses of Medical-Surgical Floors in Governmental Hospitals in Qassim Region, Saudi Arabia	Alrashedi, M.A. et al.	2022	Saudi Arabia	Cross-sectional study	Quantitative	437 registered nurses working in three Ministry of Health hospitals in Qassim on medical-surgical floors	Nursing	Transformational / Transactional	Transactional, Transformational	Transformational leadership was more positively associated with job satisfaction than transactional leadership, which was also positively associated but to a lesser extent.	Job Satisfaction	To explore the type of leadership style used by nurse leaders and its effect on job satisfaction among nurses in public hospitals in Qassim	transformational (M = 2.18 ± 1.04) and transactional (M = 2.12 ± 1.02) leadership styles were practiced at moderate levels. Nurses reported moderate job satisfaction (M = 3.49 ± 1.30). Correlation analysis showed strong positive associations between job satisfaction and both transformational leadership ($r = 0.677$, $p < 0.05$) and transactional leadership ($r = 0.671$, $p < 0.05$). Regression analysis indicated that transformational leadership was the stronger predictor of job satisfaction ($\beta = 0.41$, $t = 3.50$, $p < 0.01$) compared to transactional leadership ($\beta = 0.28$, $t = 2.43$, $p < 0.05$). Among transformational subscales, idealized attributes ($r = 0.664$) and intellectual stimulation ($r = 0.659$) had the highest correlations with job satisfaction	The study's limitations include its cross-sectional design, use of convenience sampling, focus on only three hospitals in one region, and potential for response bias.	Future research should include broader studies across more hospitals and regions in Saudi Arabia, with a focus on training nurse leaders in transformational leadership. Future research should include broader studies across more hospitals and regions in Saudi Arabia, with a focus on training nurse leaders in transformational leadership.

22	457	Exploring the leadership styles of nurse managers in Hail, Saudi Arabia: A cross-sectional analysis	Alrashidi, S. et al.	2024	Saudi Arabia	Cross-sectional quantitative study	Quantitative	372 nurses in public hospitals in Hail (critical care and inpatient wards)	Nursing	Transformational / Transactional / Laissez-faire	Laissez-faire, Transactional, Transformational	Higher job satisfaction, greater willingness to exert extra effort, and increased perceived leader effectiveness associated with transformational leadership	Job Satisfaction / Job Performance	To explore the dominant nursing leadership styles in Hail as perceived by staff nurses and examine their impact on organizational outcomes	Transformational leadership had the highest mean score (M = 2.56 ± 0.75) compared to transactional (M = 2.27 ± 0.68), with differences significant ($p < .001$). Correlation and regression analyses showed transformational leadership had the strongest positive associations with leadership outcomes: effectiveness ($R^2 = 0.828$, $\beta = 1.02$, $p < .001$), extra effort ($R^2 = 0.786$, $\beta = 0.94$, $p < .001$), and satisfaction ($R^2 = 0.760$, $\beta = 0.96$, $p < .001$). Transactional leadership also showed positive but weaker associations (effectiveness $R^2 = 0.36$, extra effort $R^2 = 0.32$, satisfaction $R^2 = 0.31$, all $p < .001$). Laissez-faire leadership had weak correlations with outcomes ($r = 0.195–0.247$, $p < .001$). Subgroup analysis showed transformational leadership was perceived more strongly by male nurses, Saudis, and those with ≤1 year experience. Within transformational subscales, inspirational motivation had the strongest correlation with outcomes	Cross-sectional design, self-reported data, limited generalizability (single city and department)	Recommend developing leadership programs to enhance transformational leadership traits among nurse managers

23	232	The leadership styles of primary healthcare center managers and center performance outcomes in Riyadh, Saudi Arabia: A correlational study	Alrubaysh, M.A. et al.	2022	Saudi Arabia	Descriptive cross-sectional study	Quantitative	65 PHC managers and 65 raters (including HCWs such as nurses, doctors, and administrators)	Managerial, Administrative, Clinical	Transformational, Transactional, Passive Avoidant (Laissez-faire)	Laissez-faire, Transactional, Transformational	Positive correlations between transformational and transactional styles with satisfaction, extra effort, and effectiveness; negative correlation with passive avoidant style. Staff perceived better outcomes under transformational leadership.	Job Satisfaction / Job Performance	To identify leadership styles among PHC center managers in Riyadh and examine their association with perceived performance outcomes.	Transformational leadership (M = 3.55 ± 0.41) had the highest mean score, followed by transactional (M = 3.42 ± 0.56) and passive avoidant (M = 0.93 ± 0.82). Subscales with the highest scores were intellectual stimulation (M = 3.72) and contingent reward (M = 3.65), while laissez-faire was lowest (M = 0.71). Positive outcomes were also moderate to high: satisfaction (M = 3.86), effectiveness (M = 3.84), and extra effort (M = 3.60). Correlation analysis showed transformational and transactional leadership positively correlated with extra effort (r = 0.504; r = 0.574), effectiveness (r = 0.679; r = 0.348), and satisfaction (r = 0.621; r = 0.180, all p < .05). Passive avoidant leadership was negatively correlated with all three outcomes (extra effort r = –0.182, effectiveness r = –0.311, satisfaction r = –0.386, all p < .05)	Sample limited to Riyadh region; male-dominated sample; only self-report and perception data; limited generalizability.	Further research recommended to verify preferred leadership styles across broader healthcare settings and populations in Saudi Arabia.

24	130	Transformational Nurse Leaders and Nurse Well-Being: Examining Mediating Influences of Organizational Justice and Quality of Work Life	Abeer Nuwayf Alruwaili	2025	Saudi Arabia	Sequential Explanatory Design	Mixed Methods	580 registered nurses from 5 public hospitals in Jouf region	Nursing	Transformational leadership	Transformational	Reduced emotional exhaustion, increased job satisfaction, lower perceived stress; effects mediated by organizational justice and quality of work life.	Psychological Harm and Burnout / Job Satisfaction	Investigate direct and indirect effects of transformational leadership on nurse well-being, focusing on organizational justice and QWL as mediators	Transformational leadership was strongly associated with improved nurse well-being. Regression analysis showed that TL significantly reduced emotional exhaustion (β = –0.48, p < .001), lowered perceived stress (β = –0.46, p < .001), and increased job satisfaction (β = 0.53, p < .001) . Mediation analysis confirmed that both organizational justice and quality of work life (QWL) significantly mediated these relationships, with indirect effects ranging from –0.34 to 0.38 (all p < .001). The model explained up to 63% of variance in job satisfaction and 54% in stress reduction. Reliability of scales was high (Cronbach's α = 0.87–0.96). Qualitative findings from 25 focus groups reinforced the quantitative results: nurses emphasized the importance of inspirational motivation, individualized consideration, intellectual stimulation, and idealized influence, and described how fair treatment, supportive environments, and opportunities for professional growth enhanced their well-being	Limited to one region (Jouf), only included nurses, potential self-reporting bias	Replicate across broader GCC settings and with diverse healthcare worker groups; explore longitudinal effects

25	446	Impacts of Leadership Style on Staff Job Satisfaction in Primary Health Care Organisations	Abdullah Megza Alrwili	2022	Saudi Arabia	Empirical study (survey + qualitative interviews)	Mixed Methods	120 healthcare workers across 40 PHCCs in Al-Jouf region (physicians, nurses, admin, etc.)	Administrative, Clinical	Initiating Structure, Consideration; also references Transformational, Transactional, Charismatic, Authoritarian, Democratic	Autocratic, Charismatic, Democratic, Relationship-oriented, Task-oriented, Transactional, Transformational	Positive association between leadership behavior and job satisfaction (salary, work hours, recognition, participation); perceived welfare and fairness linked to satisfaction	Job Satisfaction	To examine how employees perceive leadership styles at PHCCs and how these styles affect job satisfaction; to evaluate current nomination methods for PHCC managers	Quantitative results showed overall moderate-to-high job satisfaction, with mean scores of 3.58 for salary, 3.35 for hours of work, 4.16 for service delivery, 4.13 for recognition from superiors, and 3.78 for participation in decisions (on a 5-point scale). Leadership qualities most strongly associated with satisfaction included being understandable (M = 4.35, Median = 5), treating staff equally (M = 4.60, Median = 5), and showing concern for welfare (M = 4.35, Median = 5). Negative traits such as refusing to explain actions (M = 2.51) and failing to take necessary action (M = 2.20) were linked to lower satisfaction. Chi-square tests confirmed significant associations between leadership behaviours and satisfaction measures—for example, leaders being easy to understand was significantly associated with satisfaction with hours worked ($p < .01$) and service delivery ($p < .05$) Qualitative interviews highlighted concerns about the nomination process for PHCC managers, revealing shortages of qualified leaders, reliance on outdated appointment methods, and weak	Single-region study; possible response bias; self-reported data; limited generalizability outside Al-Jouf	Revise PHCC manager appointment criteria; invest in leadership training; explore broader implementation of effective leadership behaviors

															training systems. Managers described relying on teamwork, decentralisation, and self-esteem/respect to maintain staff satisfaction, but also stressed the need for reforms in appointment criteria and structured training to build leadership competency		

26	151	Towards understanding the influence of innovative work behavior on healthcare organizations' performance: the mediating role of transformational leaders	Alshahrani, I. et al.	2023	Saudi Arabia	Cross Sectional	Quantitative	587 healthcare professionals from 10 departments across 5 hospitals within the Dammam Health Network (DHN), Eastern Province, Saudi Arabia (The category of the professionals was not mentioned)	Clinical	Transformational	Transformational	Transformational leadership was positively associated with employees' innovative work behavior, which in turn contributed to improved task and organizational performance, influenced by motivation, knowledge sharing, autonomy, competence, and relatedness, though leadership did not significantly mediate the performance outcome.	Job Performance	To explore the impact of innovative work behavior on organizational performance and assess the mediating role of transformational leadership in this relationship	Results showed that innovative work behavior (IWB) had a strong positive effect on organizational performance (β = 0.568, p < 0.001). Motivation (β = 0.364, p < 0.001) and knowledge sharing (β = 0.357, p < 0.001) significantly influenced IWB, which explained 38.3% of its variance (R^2 = 0.383). In turn, IWB explained 29.4% of the variance in organizational performance (R^2 = 0.294). Autonomy, competence, and relatedness significantly contributed to motivation (β = 0.478, 0.285, and 0.185 respectively, all p < 0.001). IWB was also positively related to transformational leadership behaviors (β = 0.467, p < 0.001), but transformational leadership did not significantly mediate the relationship between IWB and organizational performance (β = –0.06, p = 0.122). Reliability was high (Cronbach's α = 0.82–0.98 across constructs), and the structural model showed acceptable fit (GoF = 0.569)	The study is limited by its single-region focus, reliance on self-reported data, cross-sectional design, and reduced participant reach due to COVID-19 restrictions.	Future research should use longitudinal and mixed-method designs, include diverse regions and healthcare settings, and explore how public-private partnerships and open innovation support innovative work behavior.

27	489	Laissez-Faire Leadership Positively Impacts Organisational Commitment in Healthcare Centres in Qatar	Shaher Alshamari	2020	Qatar	Cross-sectional study	Quantitative	335 healthcare workers from five public healthcare centres in Qatar including nurses, doctors, pharmacists, dentists, managers	Managerial, Clinical	Laissez-faire	Laissez-faire	Increased affective, normative, and continuance commitment	Organizational Commitment and Turnover Intention	To examine the impact of laissez-faire leadership on organisational commitment in public healthcare centres in Qatar	a significant positive relationship between laissez-faire leadership and organisational commitment. Regression analysis showed that laissez-faire leadership significantly predicted affective commitment (β = 0.266, p < .001, R^2 = 0.040), normative commitment (β = 0.470, p < .001, R^2 = 0.178), and continuance commitment (β = 0.489, p < .001, R^2 = 0.079). The strongest effect was observed for normative commitment. Reliability was high, with Cronbach's α = 0.85 for the Laissez-Faire Leadership scale and α ranging from 0.734 to 0.826 for the organisational commitment subscales	Non-random sampling; limited to public healthcare centres; single leadership style studied; possible social desirability bias in self-reported data	Further research should explore other leadership styles and replicate the study in different healthcare settings with broader sampling methods

28	491	Impact of Transformational and Transactional Leadership Styles on Affective Organizational Commitment: Analyzing the Conditional Role of Organizational Mission-driven Culture in Qatari Primary Health Care Corporation	Alshamari, S. et al.	2024	Qatar	Conference Paper	Quantitative	1,029 healthcare workers at 23 Primary Health Care Corporation (PHCC) centers in Qatar (including nurses, pharmacists, and other clinical staff)	Clinical	Transformational / Transactional	Transactional, Transformational	Transformational leadership positively and significantly influenced affective organizational commitment, while transactional leadership alone had no significant direct effect; however, mission-driven culture moderated this relationship.	Organizational Commitment and Turnover Intention	To examine the relationships between transformational and transactional leadership styles, mission-driven organizational culture, and affective organizational commitment among PHCC employees	transformational leadership was positively and significantly associated with affective organizational commitment ($\beta = 0.534$, $p < 0.05$), supporting the hypothesis that transformational leaders foster stronger emotional attachment to the organization. Transactional leadership alone had no significant effect ($\beta = 0.081$, $p = 0.329$), but when moderated by organizational mission-driven culture, it became significantly associated with affective commitment (interaction $\beta = 0.451$, $\Delta R^2 = 0.043$, $p < 0.05$). At high levels of mission-driven culture, transactional leadership also predicted affective commitment ($\beta = 0.532$, $t = 4.85$, $p < 0.05$). Reliability was strong, with Cronbach's α ranging from 0.729 to 0.940 across constructs. The findings indicate that transformational leaders reinforce organizational culture, while transactional leaders' effectiveness depends on alignment with mission-driven culture	The study was conducted only in PHCC, limiting its generalizability across the broader Qatari or GCC health sector, relied on a cross-sectional design, and did not explore other potential mediating or moderating variables.	Future research should explore ambidextrous leadership as a balance between transformational and transactional styles, and examine the mediating and moderating roles of organizational culture in the relationship between leadership styles and affective organizational commitment.

29	433	Nursing Leadership in the Ministry of Health Hospitals of Saudi Arabia	Farhan Alshammari	2014	Saudi Arabia	Thesis	Quantitative	33 Nurse Managers and 315 Staff Nurses in public MoH hospitals, Hail region	Managerial, Nursing	Transformational, Transactional, Laissez-faire	Laissez-faire, Transactional, Transformational	Assessed job satisfaction, willingness to exert extra effort, and perceived leadership effectiveness. Transformational and contingent reward styles positively correlated with satisfaction and effort. Laissez-faire and passive management-by-exception negatively correlated.	Job Satisfaction / Job Performance	To explore leadership styles among nurse managers, compare self and staff perceptions, and assess correlations between leadership styles and staff outcomes like satisfaction and extra effort.	laissez-faire leadership was rated highest by nurse managers (M = 3.12), alongside individualised consideration (M = 3.11) and contingent reward (M = 3.11) . However, correlation analysis indicated that transformational leadership was most strongly associated with positive outcomes. Specifically, extra effort and job satisfaction had strong positive correlations with transformational components: idealised influence (attributed r = 0.82–0.86; behavioural r = 0.83–0.85), inspirational motivation (r = 0.87–0.88), intellectual stimulation (r = 0.80–0.81), and individualised consideration (r = 0.84–0.87). Contingent reward also correlated positively (r = 0.85–0.87). Management-by-exception (active) showed moderate positive correlations (r = 0.58–0.62), whereas management-by-exception (passive) (r = –0.43 to –0.51) and laissez-faire (r = –0.42 to –0.49) were negatively correlated with both extra effort and job satisfaction .	Single-region focus (Hail); results not generalizable across Saudi Arabia; excluded private sector; cross-sectional design limits causal inference.	Extend research to private sector and other regions of KSA; evaluate post-training leadership perception changes; support leadership training for nurse managers.

30	464	Impact of Leadership Style on Employee Commitment in King Abdullah Medical City	Yousef Omar Takrouni	2020	Saudi Arabia	Thesis	Quantitative	348 healthcare workers at King Abdullah Medical City (doctors, nurses, technicians)	Clinical	Democratic, Autocratic, Laissez-faire, Bureaucratic	Autocratic, Bureaucratic, Democratic, Laissez-faire	Democratic and laissez-faire leadership styles were associated with higher employee commitment through increased morale, autonomy, and participation, while autocratic and bureaucratic styles had weaker or mixed effects, often linked to stress and reduced motivation.	Organizational Commitment and Turnover Intention	To determine the influence of different leadership styles on employee commitment in a healthcare setting (King Abdullah Medical City)	democratic leadership had the strongest positive effect on employee commitment, with a mean agreement of 32.8% on key items such as promoting creativity, equal treatment, and supportive work environments. Laissez-faire leadership also showed a positive effect (25%), particularly for offering flexibility and autonomy in decision-making. Bureaucratic leadership accounted for 16.6% agreement, mainly for encouraging teamwork and consistency, while autocratic leadership had the weakest overall agreement (9.3%), though staff acknowledged its clarity in rules and procedures. Correlation and regression analyses confirmed significant positive associations between democratic and laissez-faire leadership and higher levels of commitment, while autocratic and bureaucratic styles were linked with lower employee engagement in decision-making and growth. Reliability testing showed strong internal consistency across constructs, with Cronbach's α ranging from 0.705 to 0.907, and 0.921 overall	Single-site study; limited generalizability; use of self-reported survey data; lacks triangulation	Suggests further study with mixed methods; broader institutional comparisons recommended

31	19	Leadership style and organisational commitment among nursing staff in Saudi Arabia	Al-Yami, M. et al.	2018	Saudi Arabia	Cross-sectional Survey	Quantitative	219 nurses and nurse managers in two Ministry of Health hospitals	Managerial, Nursing	Transformational, Transactional, Passive-Avoidant (Laissez-faire)	Laissez-faire, Transactional, Transformational	Higher organizational commitment associated with transformational leadership; negative correlation with passive/avoidant styles	Organizational Commitment and Turnover Intention	To examine how nurse managers' leadership styles relate to nurses' organizational commitment in Saudi Arabia	Transformational leadership was the dominant style (nurse managers: M = 3.24 ± 0.49; staff nurses: M = 2.52 ± 0.75), followed by transactional leadership (M = 2.96 vs. 2.50), with passive-avoidant styles least evident (M = 0.84 vs. 1.36). Organisational commitment was significantly higher among nurse managers (M = 5.49 ± 0.96) compared with staff nurses (M = 4.97 ± 0.99, t = 3.44, p = .01), and also higher among non-Saudi nurses (M = 5.21 ± 0.89) compared with Saudi nurses (M = 4.53 ± 1.33, t = –2.93, p = .01). Correlation analysis showed transformational leadership was positively related to organisational commitment (r = .374, p < .01), especially through inspirational motivation (r = .387, p < .01) and individualised consideration (r = .333, p < .01). Transactional leadership, particularly contingent reward, was also positively correlated with commitment (r = .409, p < .01). In contrast, passive-avoidant leadership correlated negatively with commitment (r = –.240, p < .01). Hierarchical regression confirmed that transformational leadership explained an	Arabic Organizational Commitment Questionnaire was not previously validated; self-report bias; limited to two hospitals; cross-sectional design limits causal inference	Suggests leadership training, cultural adaptation of tools, further studies on nurse retention and leadership development

																additional 9% of variance in organisational commitment after controlling for demographic variables, while transactional and passive-avoidant styles added little explanatory power		

32	469	Health Professionals Work Engagement at Public Health Facilities and Its Relationship with Clinical Managers' Leadership Style and Self-Determination	Al Zahrani, M.Y. et al.	2024	Saudi Arabia	Cross-sectional Survey	Quantitative	233 public health professionals in 11 public health centers in Jeddah	Clinical	Transformational, Transactional, Laissez-faire	Laissez-faire, Transactional, Transformational	Positive correlation between transformational leadership and work engagement/self-determination; negative correlation with laissez-faire leadership	Work Engagement	To examine the relationship between clinical managers' leadership style and public health professionals' self-determination and work engagement	transformational leadership was strongly and positively correlated with self-determination ($r = 0.754$, $p < 0.001$) and moderately correlated with work engagement ($r = 0.575$, $p < 0.001$). Transactional leadership showed no significant correlation with self-determination ($r = 0.047$, $p = 0.384$) and only a weak positive association with work engagement ($r = 0.129$, $p = 0.017$). Laissez-faire leadership was negatively correlated with both self-determination ($r = –0.711$, $p < 0.01$) and work engagement ($r = –0.478$, $p < 0.01$). Overall, public health professionals reported moderate levels of work engagement ($M = 37.45$, $SD = 2.34$) and structural self-determination ($M = 76.45$, $SD = 11.23$), with transformational leadership identified as the style most supportive of positive outcomes	Limited to one zone in Jeddah, cross-sectional design, lacks control for confounding variables, editorial and grammatical inconsistencies	Explore relationship between leadership style and cognitive demand; consider broader demographic and organizational variables

33	213	A study of staff nurses' perceptions of nursing leadership styles and work engagement levels in Saudi general hospitals	Asiri, M. et al.	2023	Saudi Arabia	Cross-sectional Survey	Quantitative	383 staff nurses in 3 public hospitals	Nursing	Transformational, Transactional, Laissez-faire	Laissez-faire, Transactional, Transformational	Strong positive correlation between transformational/transactional styles and staff work engagement; laissez-faire had no significant effect	Work Engagement	To determine the relationship between nurse managers' leadership styles and the levels of work engagement of staff nurses	Transformational leadership had the highest mean score (M=2.34, SD=0.94) followed by transactional leadership (M=2.03, SD=0.68), while laissez-faire leadership scored the lowest (M=1.49, SD=0.99); within subscales, idealized influence (behaviors) was highest (M=2.46, SD=0.96) and contingent reward was the strongest transactional factor (M=2.27, SD=1.00). Work engagement overall was at an average level (mean total=4.08), with dedication scoring highest (M=4.80, SD=1.38) and vigor lowest (M=4.02, SD=1.42); 36.8% of nurses were at very high levels of dedication, 34.2% at average vigor, and 34.9% at average absorption. Correlation analysis showed strong positive associations between transformational leadership and work engagement (r=0.591, p<0.001) and between transactional leadership and work engagement (r=0.546, p<0.001), while laissez-faire leadership had a weak, non-significant negative correlation (r=-0.023, p=0.649)	Convenience sampling limits generalizability; cross-sectional design prevents causality inference; self-reported data may introduce bias	Recommend multi-setting, longitudinal, and experimental designs to assess causality and broaden generalizability

34	164	The association of leadership styles and empowerment with nurses' organizational commitment in an acute health care setting	Samirah A. Asiri et al.	2016	Saudi Arabia	Cross-sectional Survey	Quantitative	332 nurses at King Abdulaziz Medical City (acute care units)	Nursing	Transformational, Transactional, Laissez-Faire	Laissez-faire, Transactional, Transformational	Transactional and Laissez-Faire styles positively correlated with commitment; Transformational had weaker or negative correlation; autonomy linked to higher commitment	Organizational Commitment and Turnover Intention	To assess effects of perceived leadership style and psychological empowerment on nurses' organizational commitment	Nurses perceived moderate psychological empowerment overall (mean=4.70, SD=0.90), with the highest dimension being meaning (M=5.16, SD=0.95) and the lowest being impact (M=4.21, SD=1.13). Organizational commitment was moderate overall (M=4.32, SD=1.43), with normative commitment scoring highest (M=4.54, SD=1.06), followed by continuance (M=4.46, SD=1.11), and affective lowest (M=4.02, SD=3.46). Leadership style perceptions showed transformational leadership (M=2.55, SD=0.75) higher than transactional (M=2.12, SD=0.64) and laissez-faire (M=1.26, SD=1.02), with inspirational motivation (M=2.65, SD=0.86) the strongest transformational subscale and contingent reward (M=2.50, SD=0.87) the strongest transactional factor. Correlation analysis revealed that organizational commitment was negatively associated with transformational leadership (r=-0.113, p=0.045) and the meaning dimension of empowerment (r=-0.130, p=0.019), but positively associated with transactional leadership (r=0.124, p=0.028). Regression analysis showed that transactional leadership	Single-site study; limited to acute care nurses; findings may not generalize across settings or countries	Replicate in other healthcare settings and GCC countries; examine additional drivers of empowerment and retention

															(p=0.027), laissez-faire leadership (p=0.012), autonomy (p=0.016), and nurse nationality (Arab p=0.027, American p=0.001) were significant predictors of commitment, together explaining about 20% of the variance in organizational commitment		

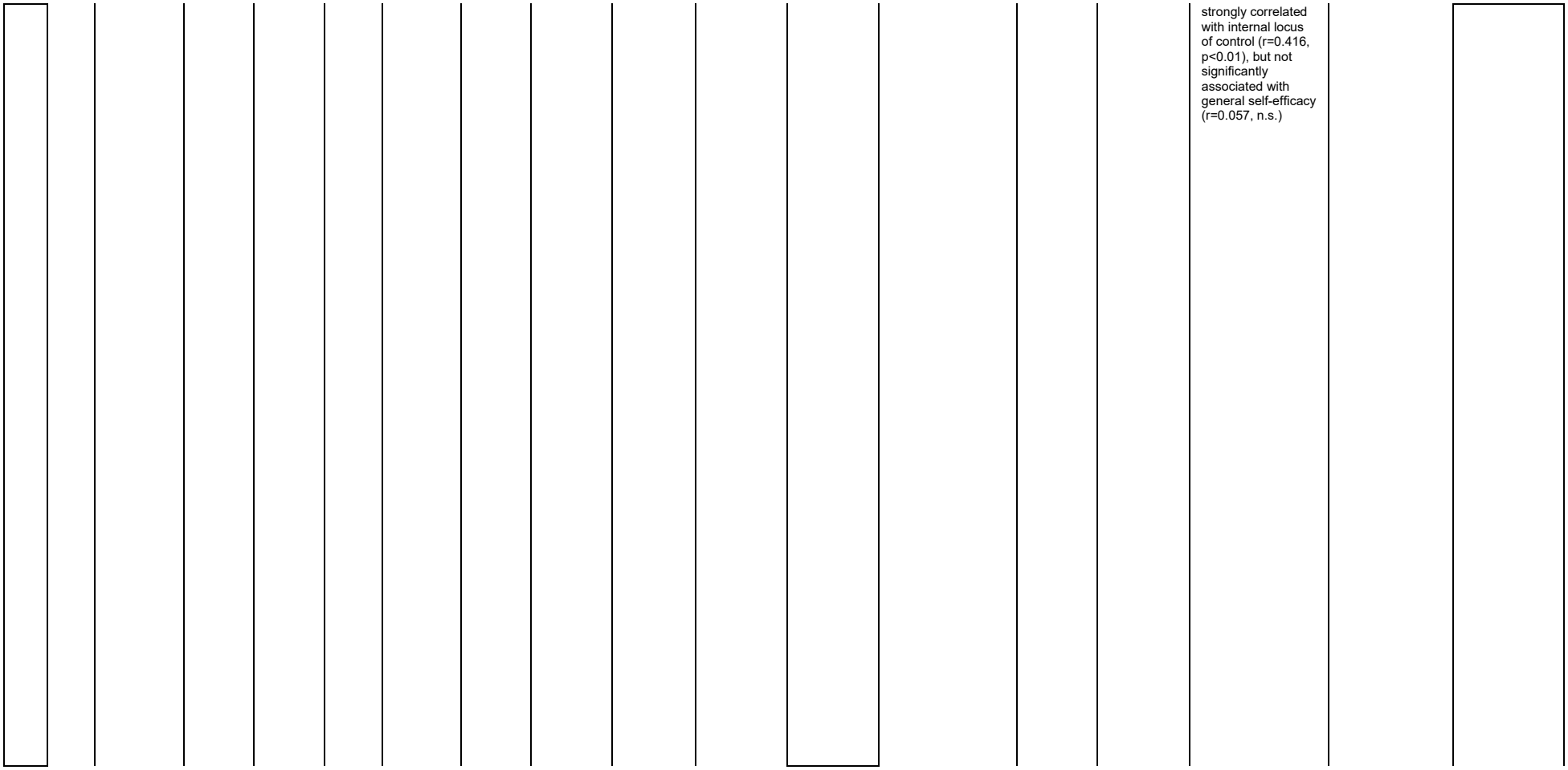
35	204	Role of Leadership Style in Enhancing Health Workers Job Performance	Bhatti, M.A. & Alyahya, M.	2021	Saudi Arabia	Survey	Quantitative	284 healthcare workers from public and private hospitals (The paper does not specify the categories of workers)	Administrative, Clinical	Transformational, Transactional, Laissez-faire, Multicultural, Servant	Laissez-faire, Servant, Transactional, Transformational, Servant, Multicultural	Job performance (self-rated); transformational and multicultural styles showed significant positive impact; servant style showed weak influence; transactional and laissez-faire were not significant	Job Performance	To identify which leadership styles significantly influence job performance of healthcare workers in Saudi Arabia	transformational leadership (M=3.58, SD=0.28) and multicultural leadership (M=3.47, SD=0.39) had strong positive effects on job performance, while servant leadership (M=2.89, SD=0.37) showed a weaker effect and transactional leadership (M=2.11, SD=0.31) and laissez-faire leadership (M=1.57, SD=0.22) had no significant influence. Regression analysis showed that transformational leadership (β=0.51, t=6.01, p<0.001) and multicultural leadership (β=0.58, t=8.57, p<0.001) significantly improved job performance, explaining 69% of the variance (R^2=0.69), whereas transactional leadership (β=0.18, t=1.25), laissez-faire leadership (β=0.29, t=2.01) and servant leadership (β=0.38, t=2.88) did not show significant predictive power	Limited to five leadership styles; self-report bias; single country context; no role-specific or qualitative insights	Explore additional leadership styles; apply peer- or supervisor-rated performance; test in other sectors beyond healthcare

36	175	Chameleon Leadership and Innovative Behavior in the Health Sector: The Mediation Role of Job Security	Omar Durrah, Ahmad Kahwaji	2023	Oman	Empirical Study	Quantitative	282 administrative healthcare employees from various healthcare institutions in Oman (non-clinical workforce)	Administrative	Chameleon Leadership (with sub-dimensions: External Control and Relativistic Beliefs)	Chameleon	External control had a positive effect on job security, which in turn positively influenced innovative behavior, though chameleon leadership showed no direct effect on innovation and job security did not mediate this relationship.	Job Performance	To examine the relationship between chameleon leadership behaviors and innovative behavior in the healthcare sector, and to assess whether job security mediates that relationship	chameleon leadership behaviors—external control (M=3.86, SD=0.79) and relativistic beliefs (M=3.29, SD=0.97)—had no direct effect on innovative behavior (EC→IB β=-0.102, p=0.365; RB→IB β=-0.043, p=0.220). External control significantly predicted job security (β=0.213, t=1.995, p=0.047), while relativistic beliefs did not (β=0.141, p=0.183). Job security itself had a significant positive impact on innovative behavior (β=0.209, t=2.617, p=0.009). Mediation analysis indicated that job security did not mediate the relationship between either external control or relativistic beliefs and innovative behavior. The structural model explained small variance in outcomes (R^2=0.076 for innovative behavior, R^2=0.044 for job security) and had moderate model fit (GoF=0.197).	Focused only on administrative staff in Oman, the study relied on self-reported data, limiting generalizability due to its narrow context and use of a leadership style not widely validated in health systems research.	Future research should include clinical staff across multiple GCC countries, explore chameleon leadership in other sectors, incorporate observational methods alongside self-reports, and examine related variables like cultural intelligence and employee advocacy.

37	499	Effect of Nurse Managers' Leadership Styles on Organizational Commitment of Nurses Working at Taif Governmental Hospitals in Kingdom of Saudi Arabia	El Dahshan et al.	2017	Saudi Arabia	Cross-sectional descriptive survey	Mixed Methods	570 nurses at King Abdul Aziz and King Faisal Governmental Hospitals in Taif	Nursing	Transformational and Transactional	Transactional, Transformational	Positive correlation between leadership style and organizational commitment (affective, normative, continuance)	Organizational Commitment and Turnover Intention	To explore and describe nurse managers' leadership styles and their effect on nurses' organizational commitment	74.4% of nurses perceived their managers as using transformational leadership and 65.6% as using transactional leadership. The majority of nurses demonstrated high organizational commitment across all three dimensions: 78.6% had affective commitment, 84.2% continuance commitment, and 71.6% normative commitment, with overall organizational commitment reported in 87.1% at King Faisal Hospital and 76.8% at King Abdul Aziz Hospital. Transformational leadership was rated higher than transactional leadership in both hospitals, and both leadership styles were found to have statistically significant positive correlations with organizational commitment ($p<0.05$)	Cross-sectional design; self-report bias; results to be interpreted cautiously	Replication in other settings and inclusion of additional variables like job satisfaction, empowerment, turnover, and retention

38	148	The mediating role of moral courage in the relationship between ethical leadership and error reporting behavior among nurses in Saudi Arabia	Elhihi et al.	2025	Saudi Arabia	Cross-sectional primary research	Quantitative	269 clinical nurses at King Abdullah Medical City, Makkah	Nursing	Ethical leadership	Ethical	Increased moral courage and error reporting behavior	Professional Behavior, Ethics, and Safety Practices	To investigate the relationship between ethical leadership and error reporting behavior, with moral courage as a mediator	Descriptive analysis showed favorable perceptions of ethical leadership (M=4.08, SD=0.59), moral courage (M=4.26, SD=0.48), and error reporting behavior (M=4.31, SD=0.65). Correlation results indicated significant positive associations of ethical leadership with moral courage (r=0.416, p<0.001) and error reporting behavior (r=0.487, p<0.001), as well as between moral courage and error reporting behavior (r=0.355, p<0.001). Structural equation modeling confirmed that ethical leadership had a direct positive effect on error reporting behavior (β=0.58, p<0.001) and on moral courage (β=0.35, p<0.001), while moral courage also significantly predicted error reporting behavior (β=0.30, p=0.01). Mediation analysis revealed that moral courage partially mediated the link between ethical leadership and error reporting (indirect effect β=0.11, p=0.01; BC 95% CI [0.02, 0.21]), with the total effect of ethical leadership on error reporting behavior being substantial (β=0.69, BC 95% CI [0.51, 0.89]). The model explained 32% of the variance in error reporting behavior and demonstrated good fit indices	Cross-sectional design, reliance on self-reporting, single-institution setting limits generalizability	Suggest longitudinal and multi-center studies; explore other leadership styles such as transformational leadership

39	318	The impact of authentic leadership on nurses' locus of control and general self-efficacy during the COVID-19 pandemic	Analita Gonzales	2023	Saudi Arabia	Cross Sectional	Mixed Methods	268 staff nurses in 2 public hospitals in Tabuk	Nursing	Authentic leadership	Authentic	Significant correlations with internal/external locus of control; no significant correlation with General Self-Efficacy (GSE)	Change Readiness and Leadership Self-Efficacy	To examine the relationship between authentic leadership, locus of control, and general self-efficacy in nurses during COVID-19	Participants perceived their leaders as effective authentic leaders (M=57.16, SD=8.03), reported a stronger external locus of control (M=45.38, SD=7.87) and moderate internal locus of control (M=24.95, SD=4.60), and demonstrated relatively high self-efficacy (M=25.12, SD=4.76). Significant differences were found by nationality, where non-Saudis perceived higher authentic leadership (61.98 vs 55.51, p<0.001) and higher self-efficacy (26.22 vs 24.75, p=0.027). Ward assignment also mattered, with non-COVID ward nurses reporting higher authentic leadership (58.03 vs 54.13, p=0.001) and higher external locus of control (45.92 vs 43.53, p=0.038). Age was associated with both authentic leadership (highest among those aged 35–50, M=59.27, p=0.003) and internal locus of control (highest in those aged 51+, M=27.67, p=0.002). Civil status showed that divorced/separated nurses rated authentic leadership higher (M=67.47, p<0.001). Correlation analysis showed authentic leadership was moderately positively correlated with external locus of control (r=0.366, p<0.01) and	Convenience sampling, regional focus, self-reported measures, absence of qualitative depth	Leadership training programs for nurse managers; further study of internal locus of control in healthcare professionals


strongly correlated with internal locus of control (r=0.416, p<0.01), but not significantly associated with general self-efficacy (r=0.057, n.s.)

40	290	The Association of Transformational Leadership on Safety Practices Among Nurses: The Mediating Role of Patient Safety Culture	Hamdan, M. et al.	2024	Saudi Arabia	Cross Sectional	Quantitative	200 nurses were surveyed in a medical city in Riyadh, Saudi Arabia, which includes three hospitals and two specialized centers	Nursing	Transformational leadership	Transformational	Improved safety practices including medication administration, fall prevention, and handover safety	Professional Behavior, Ethics, and Safety Practices	To test whether patient safety culture mediates the relationship between transformational leadership and nurses' safety practices	Transformational leadership showed a significant positive association with nursing safety practices (β = 0.216, t = 3.850, p < 0.001) and with patient safety culture (β = 0.666, t = 10.128, p < 0.001). Patient safety culture was strongly associated with safety practices (β = 0.631, t = 9.268, p < 0.001). Mediation analysis confirmed that patient safety culture partially mediated the relationship between transformational leadership and nursing safety practices, with a significant indirect effect (β = 0.420, t = 5.787, p < 0.001). The model explained 58.3% of the variance in patient safety culture and 60.9% of the variance in nursing safety practices	Cross-sectional design; single-site; reliance on self-reported data; no comparison with other leadership styles	Explore other leadership styles and mediators/moderators; use longitudinal and qualitative methods; include patient perspectives

41	442	Nurses' Perceptions of Nursing Leadership Styles in the Eastern Healthcare Cluster in Saudi Arabia	Harb et al.	2022	Saudi Arabia	Cross-sectional	Quantitative	577 nurses from Eastern Health Cluster (public sector)	Nursing	Transformational, Transactional, Passive-Avoidant	Laissez-faire, Transactional, Transformational	Transformational and transactional leadership positively correlated with staff-reported satisfaction, extra effort, and perceived managerial effectiveness. Passive-avoidant leadership showed negative correlation with these outcomes.	Job Satisfaction / Job Performance	To examine nurses' perceptions of leadership styles used by their managers and assess their correlation with outcome factors such as effectiveness, satisfaction, and extra effort.	Nurses perceived transformational and transactional leadership styles to be used more frequently than passive-avoidant style. Positive correlations found between transformational/transactional styles and effectiveness, extra effort, and satisfaction; negative correlations with passive-avoidant style.	Single-cluster setting limits generalizability; self-report bias; lower-than-expected response rate; lengthy questionnaire may have affected completion.	Recommend national-level, mixed-methods studies to assess leadership perception and impact; greater inclusion of nursing leadership education and succession planning programs.

42	259	Transformational leadership and work engagement as mediators on nurses' job performance in healthcare clinics: work environment as a moderator	Hasan, A.A. et al.	2023	United Arab Emirates	Empirical Study	Quantitative	352 nurses working in healthcare clinics across the UAE	Nursing	Transformational Leadership	Transformational	Improved job performance (task performance, interpersonal facilitation, job dedication), increased work engagement, moderated by work environment	Job Performance / Work Engagement	To examine the effect of transformational leadership on nurses' job performance, with work engagement as a mediator and work environment as a moderator	Transformational leadership (TL) was strongly correlated with work engagement (r = 0.897) and job performance (r = 0.871); path analysis confirmed TL had a significant positive effect on work engagement (β = 0.897, p < 0.001), which in turn predicted job performance across task performance (β = 0.824, p < 0.001), interpersonal facilitation (β = 0.854, p < 0.001), and job dedication (β = 0.622, p < 0.001); work engagement mediated the TL–job performance relationship (β range = 0.593–0.841, p < 0.001), while the work environment moderated it (β range = 0.574–0.837, p < 0.001); demographic analysis showed significant differences by gender and employment type for TL, WE, and WEV but not for overall job performance	Convenience sampling, overrepresentation from Abu Dhabi, cross-sectional design, limited generalizability, only nurses included	Include other healthcare cadres and private sector; longitudinal studies; explore additional leadership styles and job performance dimensions

43	119	Transformational Leadership, Psychological Empowerment, and Organizational Citizenship Behaviors among Nursing Workforce: A Single Mediation Analysis	Ibrahim, I.A. et al.	2024	Saudi Arabia	Cross-Sectional	Quantitative	305 registered nurses from King Khalid Hospital	Nursing	Transformational Leadership	Transformational	Positive impact on psychological empowerment and organizational citizenship behaviors (OCBs); psychological empowerment partially mediates this relationship	Job Performance	To explore the mediating effect of psychological empowerment between transformational leadership and OCBs in a nursing context	Transformational leadership (mean = 3.38, SD = 0.74) was positively correlated with both psychological empowerment (r = 0.507, p < 0.001; mean = 3.40, SD = 0.64) and organizational citizenship behaviors (r = 0.445, p < 0.001; mean = 3.54, SD = 0.53), while psychological empowerment also correlated positively with OCBs (r = 0.451, p < 0.001); mediation analysis showed that transformational leadership had a direct effect on psychological empowerment (B = 0.433, p < 0.001) and OCBs (B = 0.208, p < 0.001), psychological empowerment significantly predicted OCBs (B = 0.254, p < 0.001), and psychological empowerment partially mediated the TL–OCB relationship with a significant indirect effect (B = 0.110, CI: 0.058–0.166)	Limited to one hospital and one professional group (nurses); cross-sectional design limits causal inference; self-report bias	Recommend replication in diverse settings and professions; suggest longitudinal and mixed-method studies; advocate for leadership development programs

44	253	Traversing the Pathway from Authentic Leadership to Extra-Role Performance: Decoding the Mediating Effects of Knowledge-Sharing Behavior and Employee Creativity	Komal Khalid	2024	Saudi Arabia	Survey	Quantitative	362 healthcare workers (clinical and administrative staff) from public and private hospitals in 6 Saudi cities	Administrative, Clinical	Authentic leadership	Authentic	Increased extra-role performance, enhanced knowledge-sharing behavior, improved employee creativity	Job Performance	To examine the impact of authentic leadership on extra-role performance, mediated by knowledge-sharing behavior and employee creativity	Authentic leadership (AL) had a strong direct effect on extra-role performance (ERP) (β = .78, p < .001), knowledge-sharing behavior (KSB) (β = .85, p < .001), and employee creativity (EC) (β = .77, p < .001); KSB significantly predicted EC (β = .90, p < .001) and ERP (β = .81, p < .001), while EC also predicted ERP (β = .66, p < .001); the serial mediation analysis showed AL indirectly influenced ERP through KSB and EC (β = .51, p < .001, CI = .43–.60); model fit indices confirmed robustness (SRMR = .08, NFI = .94, R^2adj = .73 for KSB, .82 for EC, .84 for ERP, with large predictive relevance Q^2 values), indicating that AL enhances ERP both directly and indirectly by fostering knowledge sharing and creativity	Self-reported data; cultural constraints on transparency; does not compare AL with other styles; indirect links to patient outcomes	Suggested exploration of leadership effectiveness in crisis situations, comparative studies with other leadership styles, and leadership training tailored to Saudi cultural context

45	32	Leadership styles on job satisfaction and security among healthcare workers during the COVID-19 pandemic	Lina H. Khushe im	2024	Saudi Arabi a	Cross Sectional	Quantit ative	127 healthcar e workers (physician s, nurses, pharmaci sts, social workers) in public hospitals in KSA	Administr ative, Clinical	Transforma tional, Transaction al, Laissez-faire	Laissez-faire, Transaction al, Transforma tional	Significant negative correlation between job satisfaction and four leadership components: individual consideration, idealized influence, contingent reward, and inspirational motivation. Laissez-faire showed no significant correlation.	Job Satisfacti on	To examine the relationship between leadership styles and job satisfaction among Saudi Arabian healthcare workers	Overall job satisfaction was moderate (mean composite score 51.94 ± 15.60, Cronbach's α = 0.937), with 69.3% classified as satisfied and 30.7% not satisfied; correlation analysis revealed statistically significant negative associations between job satisfaction and idealized influence ($r = –0.19$, $p = 0.03$), inspirational motivation ($r = –0.63$, $p < 0.001$), individual consideration ($r = –0.34$, $p < 0.001$), and contingent reward ($r = –0.43$, $p < 0.001$), while laissez-faire leadership showed no significant association ($r = 0.12$, $p = 0.17$); independent t-tests showed significantly lower MLQ scores among satisfied workers compared to non-satisfied across 6 of 7 dimensions, suggesting transformational and transactional leadership were perceived to reduce satisfaction; demographic analysis showed higher satisfaction among males (75.73 vs 49.69, $p < 0.001$), private hospital staff (68.72 vs 45.31, $p < 0.001$), those with fewer than 12 years' experience, and younger or mid-career groups, while nurses reported the lowest satisfaction (mean 35.0) compared to pharmacists (61.62), physicians	The cross-sectional design limits causality, the small sample size affects generalizability, and reliance on self-reported data may introduce bias.	The study recommends leadership training programs tailored to healthcare and calls for further research into contextual factors and broader workforce outcomes.

																(53.66), and others (60.72		

46	347	Exploring the Role of Leadership Styles in Innovation Teams: A Case Study of King Abdullah Medical City Makkah, Saudi Arabia	Maryam Waiel Kutob, Ghada Talat Alhothali	2021	Saudi Arabia	Case Study	Qualitative	36 staff members (clinical and non-clinical) from King Abdullah Medical City, involved in innovation teams	Administrative, Clinical	Autocratic, Democratic (Participative), Laissez-Faire	Autocratic, Democratic, Laissez-faire	Participative leadership improved teamwork and project completion, while autocratic leadership caused low morale and resistance, and laissez-faire leadership led to confusion, poor coordination, and project failure.	Job Performance	To examine how leadership styles influence innovation teams across Tuckman's stages and to understand team members' perspectives on leadership behavior and its impact on project progression.	Leadership style strongly influenced team progression through Tuckman's stages of development; participative (democratic) leadership emerged as the most effective, fostering collaboration, task sharing, harmony, and willingness to continue projects into the implementation phase, while autocratic leadership was associated with task focus and feelings of achievement but also conflict, limited participation, and reluctance to work together in future projects, and laissez-faire leadership was linked to unclear goals, role ambiguity, conflict mismanagement, and ultimately project failure, confirming its destructive impact on innovation team effectiveness .	Single-institution study with a small sample size, limited to innovation team contexts.	Leaders should develop adaptive leadership skills aligned with team development phases and consider contextual factors when applying leadership styles across different team types.

47	150	Authentic leadership and nurses' motivation to engage in leadership roles: The mediating effects of nurse work environment and leadership self-efficacy	Labrague, L.J. et al.	2021	Oman	Cross Sectional	Quantitative	1534 nurses working in 24 acute care hospitals	Nursing	Authentic leadership	Authentic	Increased motivation to engage in leadership roles, improved leadership self-efficacy, and positive perception of work environment	Change Readiness and Leadership Self-Efficacy	To assess the direct and indirect effects of nurse managers' authentic leadership on staff nurses' motivation to lead, mediated by nurse work environment and leadership self-efficacy	Nurse managers' authentic leadership was positively associated with staff nurses' motivation to engage in formal leadership roles, with the nurse practice environment (Cronbach's α = 0.91) and leadership self-efficacy (α = 0.87) acting as partial mediators of this relationship; authentic leadership (α = 0.93) significantly predicted both work environment and self-efficacy, which in turn predicted motivation to lead (α = 0.85), and mediation analysis using PROCESS macro confirmed significant indirect effects, underscoring that authentic leadership fosters healthier work environments and greater self-efficacy, thereby enhancing nurses' willingness to assume leadership roles .	Cross-sectional design limits causality; sample limited to one country; potential unmeasured variables	Recommend longitudinal studies; explore other influencing factors like leadership experience and competence

48	256	Exploring the Transformational Leadership Capacities of Nurse Supervisors in Saudi Arabia	Grace Ann Lim Lagura et al.	2024	Saudi Arabia	Cross Sectional	Quantitative	916 staff nurses from government hospitals in Saudi Arabia	Nursing	Transformational (Charisma, Social, Vision, Delegation, Execution), some reference to Transactional	Transactional, Transformational	Improved job satisfaction, morale, psychological well-being, teamwork, performance, and resilience	Psychological Harm and Burnout / Job Satisfaction / Job Performance	To examine how nurse supervisors in KSA practiced Transformational Leadership during COVID-19, and identify best practices & challenges	All six domains of Transformational Leadership (TL), Charisma, Social, Vision, Transactional, Delegation, and Execution, were frequently evident, with overall mean scores around 3.0 on a 4-point scale; the Charisma domain scored means of 2.84±1.01 to 3.09±0.93, Social 2.98±0.96 to 3.13±0.93, Vision 2.87±0.99 to 3.02±0.94, Transactional 2.63±1.06 to 3.14±0.91, Delegation 2.60±1.02 to 3.10±0.89, and Execution 2.81±0.95 to 3.29±0.85, indicating consistent practice across domains; Spearman's rho revealed strong positive correlations among all domain pairs except those involving Charisma, suggesting the interconnectedness of TL components; qualitative insights from supervisor interviews highlighted best practices such as shared goals, mentorship, recognition incentives, and supportive communication, while challenges included high patient loads, limited resources, language barriers, and nurse safety concerns, underscoring TL's role in fostering resilience, positive work environments, and improved team	Convenience sampling; self-reported data; lack of Focus Group Discussions/observations; limited generalizability	Recommend mixed-method studies; use of performance metrics; randomized sampling; broader qualitative exploration

															performance during crises		

49	62	Effect of Leadership Styles on Job Satisfaction Among Critical Care Nurses in Aseer, Saudi Arabia	Alshahrani FM, Baig LA	2016	Saudi Arabia	Cross Sectional	Quantitative	89 critical care nurses reporting to 8 head nurses in a tertiary hospital	Nursing	Transformational (TL), transactional (TA), laissez-faire	Laissez-faire, Transactional, Transformational	Transformational leadership correlated with higher job satisfaction; transactional and laissez-faire styles showed mixed or negative effects	Job Satisfaction	To assess the relationship between head nurses' leadership styles and job satisfaction of staff nurses in CCUs	All eight head nurses demonstrated both transformational (TF) and transactional (TA) leadership, though TA was more common; nurses working under leaders with higher TF scores reported significantly greater job satisfaction ($p < 0.05$), while those under TA-oriented leaders reported lower satisfaction; overall job satisfaction was moderate (mean ≈ 3.40 on a 6-point scale), with "nature of work" scoring highest ($M = 4.47 \pm 0.89$) and "operating conditions" lowest ($M = 2.45 \pm 0.76$); organizational outcomes correlated more strongly with TF than TA (TF vs. TA correlations: extra effort $r = 0.77$ vs. 0.63, effectiveness $r = 0.77$ vs. 0.55, satisfaction $r = 0.78$ vs. 0.50, all $p < 0.01$); regression analysis showed that leadership factors explained 23% of the variance in job satisfaction, with professional support ($\beta = 0.46$, $p = 0.007$) and laissez-faire ($\beta = 0.31$, $p = 0.01$) having positive effects, while intellectual motivation ($\beta = -0.29$, $p = 0.02$) and passive management-by-exception ($\beta = -0.22$, $p = 0.04$) predicted lower satisfaction	Single-hospital sample, self-reported data, small sample size limit generalizability	Recommend leadership training in TF style and further research on other satisfaction dimensions in nursing contexts

50	143	Effect of Leadership Styles on Turnover Intention among Staff Nurses in Private Hospitals: The Moderating Effect of Perceived Organizational Support	Pattali, S. et al.	2024	Bahrain	Cross Sectional	Quantitative	296 staff nurses from 8 private hospitals	Nursing	Transformational Leadership (TLE), Authentic Leadership (ALE)	Authentic, Transformational	Transformational and authentic leadership styles were significantly associated with lower turnover intention among nurses, with perceived organizational support moderating and strengthening these effects.	Organizational Commitment and Turnover Intention	To examine how TLE and ALE influence nurses' turnover intention in Bahrain and how POS moderates these relationships	Transformational leadership (TLE) and authentic leadership (ALE) had significant negative effects on turnover intention (TLE $\beta = 0.166$, $p < 0.05$; ALE $\beta = 0.281$, $p < 0.001$), while perceived organizational support (POS) also showed a significant negative effect on turnover intention ($\beta = 0.448$, $p < 0.001$); moderation analysis confirmed that POS strengthened the negative effect of TLE on turnover intention ($\beta = 0.225$, $p < 0.001$) but weakened the effect of ALE ($\beta = –0.177$, $p < 0.05$), and the overall structural model explained 71% of the variance in turnover intention, indicating that leadership style and organizational support together play a decisive role in predicting nurses' intent to leave private hospitals	Focused only on Bahrain; did not explore other leadership styles beyond TLE and ALE; data self-reported	Expand research to broader Arab region; investigate other leadership styles; refine frameworks with more variables beyond TIN

51	458	The Impact of Leadership Styles on Intention to Report Errors in the Healthcare Sector	Ensieh Taeidi	2023	United Arab Emirates	Thesis	Mixed Methods	16 interviews with nurses and unit managers and 272 survey responses from staff nurses at Latifa Hospital	Managerial, Nursing	Transformational leadership, Transactional leadership, Laissez-faire leadership	Laissez-faire, Transactional, Transformational	Examines how leadership styles influence nurses' willingness and intention to report errors; shows that both transformational and laissez-faire styles negatively affect the relationship between nurses' attitudes and their intention to report errors	Professional Behavior, Ethics, and Safety Practices	To explore how leadership styles directly and indirectly affect the intention of nurses to report errors, using a behavioral theory framework	The study found through 16 qualitative interviews that fear of blame, lack of management support, and unclear processes were key barriers to error reporting, with leadership style shaping psychological safety. The quantitative survey using structural equation modelling confirmed that attitude, subjective norms, and perceived behavioural control significantly predicted intention to report errors (with PBC strongest), and moderation analysis showed transformational and laissez-faire leadership weakened the positive attitude–intention link whereas transactional leadership influenced the subjective norm–intention pathway	The study was limited to one hospital, had a small sample size, and relied on self-reported data which may introduce bias	Future research should include multiple hospitals and settings, explore additional leadership styles, and investigate broader organizational and cultural factors that influence reporting behavior