

A Systematic Literature Review on the Impact of Leader-Member Exchange (LMX) and Nurse Morality in the Healthcare Sector

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DOI: <https://dx.doi.org/10.47772/IJRISS.2025.90300152>

Received: 27 February 2025; Accepted: 03 March 2025; Published: 04 April 2025

ABSTRACT

This systematic literature review examines the impact of Leader-Member Exchange (LMX) on nurse morality within healthcare settings. LMX theory, which emphasizes the quality of leader-member relationships, significantly influences nurses' ethical decision-making, moral distress, and job performance. Given the ethical complexities of healthcare, understanding how leadership dynamics shape nurses' moral behaviour is crucial for improving patient care and organizational effectiveness. Using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, this review systematically analysed 40 peer-reviewed studies published between 2020 and 2024, sourced from Scopus and Web of Science. The findings indicate that high-quality LMX relationships foster trust, enhance moral sensitivity, and mitigate moral distress, leading to improved ethical decision-making among nurses. On the other hand, low-quality LMX relationships correlate with increased moral distress, ethical disengagement, and reduced job satisfaction, negatively affecting patient care outcomes. Transformational leadership was identified as a key enabler in strengthening LMX relationships, while transactional leadership contributed to ethical erosion and nurse disengagement. The review also highlights structural barriers such as heavy workloads, leadership training deficiencies, and organizational constraints that hinder the development of strong LMX relationships. To address these challenges, healthcare organizations must invest in leadership development programs, ethical training, and supportive workplace cultures that prioritize open communication and trust. Future research should explore the moderating effects of institutional policies, cultural factors, and longitudinal LMX dynamics on nurse morality. Strengthening LMX relationships can significantly enhance ethical nursing practices, ultimately benefiting patient care and healthcare system sustainability.

Keywords: Leader-Member Exchange (LMX), nurse morality, systematic literature review, nursing leadership, healthcare sector.

INTRODUCTION

Leader-Member Exchange (LMX) theory, developed by Graen and Uhl-Bien (1995), emphasizes the quality of the relationship between leaders and their followers, recognizing that high-quality exchanges can lead to improved outcomes for both individuals and organizations. LMX significantly influences nurses' behaviours, job satisfaction, and moral decision-making (Pan et al., 2021). Understanding how LMX affects nurse morality is crucial for enhancing nurse well-being and optimizing patient care in high-stakes healthcare environments where ethical dilemmas occur daily (Robinson, 2024). Nurse morality encompasses ethical decision-making processes, moral distress, and professional conduct, all of which are vital to maintaining high standards of patient

care (Haahr et al., 2020). The leader-nurse relationship shapes nurses' navigating these ethical challenges (Safavi et al., 2022). Research literature indicates that positive LMX relationships are associated with enhanced dedication to patient care, heightened moral sensitivity, and diminished moral distress among healthcare professionals (Zoric et al., 2023). In contrast, low-quality LMX relationships may exacerbate moral distress and negatively impact nursing performance (Cooper, 2020).

A positive LMX relationship fosters trust and respect between nurses and their leaders, cultivating a collaborative and supportive work environment (Ivziku et al., 2024). This is particularly relevant in healthcare, where emotional demands are high, and nurses frequently encounter complex, high-pressure situations (Goudarzian et al., 2024). Nurses experiencing high-quality LMX relationships are likelier to feel empowered, demonstrate higher engagement, and uphold organizational ethical standards (Irshad et al., 2021). Consequently, LMX relationships can shape how nurses handle moral dilemmas, providing the necessary support to navigate moral distress and make informed ethical decisions that benefit patients and the broader healthcare system (Alanazi et al., 2024). These leadership-nursing interactions influence individual behaviour and shape organizational culture, ultimately affecting ethical conduct and patient care outcomes.

Towards a Systematic Review Framework on the Impact of Leader-Member Exchange (LMX) and Nurse Morality in the Healthcare Sector

A systematic review is a rigorous approach to synthesizing existing literature to understand a specific topic comprehensively, using transparent and standardized procedures to identify, evaluate, and integrate relevant studies (Booth et al., 2021). Although research on LMX and nurse morality is growing, few systematic reviews have holistically examined LMX's influence on nurse morality across diverse healthcare settings. Existing studies often focus on isolated aspects like leadership styles, nurse behavior, or specific outcomes, creating a fragmented understanding of the broader implications of LMX (Dechawatanapaisal, 2018). This fragmented approach underscores the need for a comprehensive synthesis of LMX research, considering various organizational contexts and cultural factors influencing nurse ethics. This review addresses this gap by synthesizing LMX implementation patterns across healthcare environments, exploring how LMX relationships shape nursing ethics, mitigate moral distress, and promote ethical decision-making through consistent leadership support. Unlike previous studies that lack methodological transparency in outlining review procedures such as database selection, inclusion/exclusion criteria, and search terms, this review establishes a rigorous framework for replicability and comprehensive literature coverage. A structured and thorough analysis aims to identify best practices for fostering positive LMX relationships that enhance nurses' moral development, ethical behavior, and patient care outcomes. The central research question guiding this review is: How does LMX influence nurse morality in healthcare organizations, and what are the implications for patient care and nursing performance?

METHODOLOGY

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standards were followed in executing this systematic literature review to guarantee an open and thorough review procedure. The PRISMA method consists of four stages: identification, screening and eligibility. PRISMA is a set of guidelines and a checklist intended to foster more transparency and elevate the standard for reporting in systematic reviews. A systematic literature review is a method for synthesizing and evaluating the most recent information in an area of study by thoroughly reviewing and synthesizing relevant literature. Researchers are advised to adhere to the PRISMA guidelines while conducting a systematic literature review to ensure that their work is thoroughly recorded and properly assessable by others. According to O'Dea et al. (2021), following PRISMA guidelines enhances transparency, facilitates the critical review and synthesis of research findings and improves the overall calibre of systematic literature reviews.

Source

Scopus and Web of Science are two of the most widely recognized and frequently used databases for scholarly research and publication. Web of Science includes over 32,000 peer-reviewed publications from 80 countries, while Scopus indexes more than 42,000 journals globally. Both databases provide comprehensive citation tracking, allowing researchers to monitor the impact of their work through citation counts and h-index metrics

(Singh et al., 2021). Given their extensive coverage and reliability, Scopus and Web of Science serve as the primary sources for acquiring relevant publications in this research.

Identifying

The first step in the systematic review process was to identify relevant studies through a comprehensive database search. To ensure a thorough search, a set of carefully selected keywords was used to capture studies that examine the relationship between LMX and nurse morality in healthcare settings. The search terms included: “Leader-Member Exchange,” “LMX,” “nurse morality,” “ethical decision-making,” “nurse leadership,” “moral distress,” and “healthcare ethics.” These search terms were applied to article titles, abstracts, and keywords to capture the most relevant studies.

Screening

The research pool was narrowed down at this stage using various criteria and limitations. Only English-language publications were considered for inclusion to prevent mistranslations or misunderstandings. The review was limited to studies published between 2020 and 2024, ensuring that the research is recent and reflects the most up-to-date understanding of the relationship between LMX and nurse morality in healthcare contexts. In line with the focus on current knowledge generation, books, dissertations, and conference papers were excluded, as these are not typically the primary sources of new empirical evidence in healthcare research (Linnenuecke et al., 2020). Thus, only peer-reviewed journal articles were included in the screening process.

The research was further narrowed to studies that explicitly discuss the role of LMX in influencing nurse morality, ethical decision-making, or moral distress within healthcare settings. Articles were also required to employ either qualitative or quantitative research designs that directly examined the effects of LMX relationships on nurses’ ethical conduct, decision-making, and overall job satisfaction in healthcare environments.

Table 1: The Inclusion Criteria

Criteria	Requirement
Language	English
Year	2020-2024
Type of Publication	Journal articles
Research Design	Qualitative and quantitative
Focus	The role of LMX in nurse morality and ethical decision-making in healthcare

As a result of this screening process, 120 potential full-text articles were identified, with 70 articles sourced from Scopus and 50 from Web of Science.

Eligibility

These articles were then reviewed for eligibility based on the inclusion and exclusion criteria. After applying the selection criteria and performing a full-text review, 49 articles were deemed eligible for inclusion in the final synthesis.

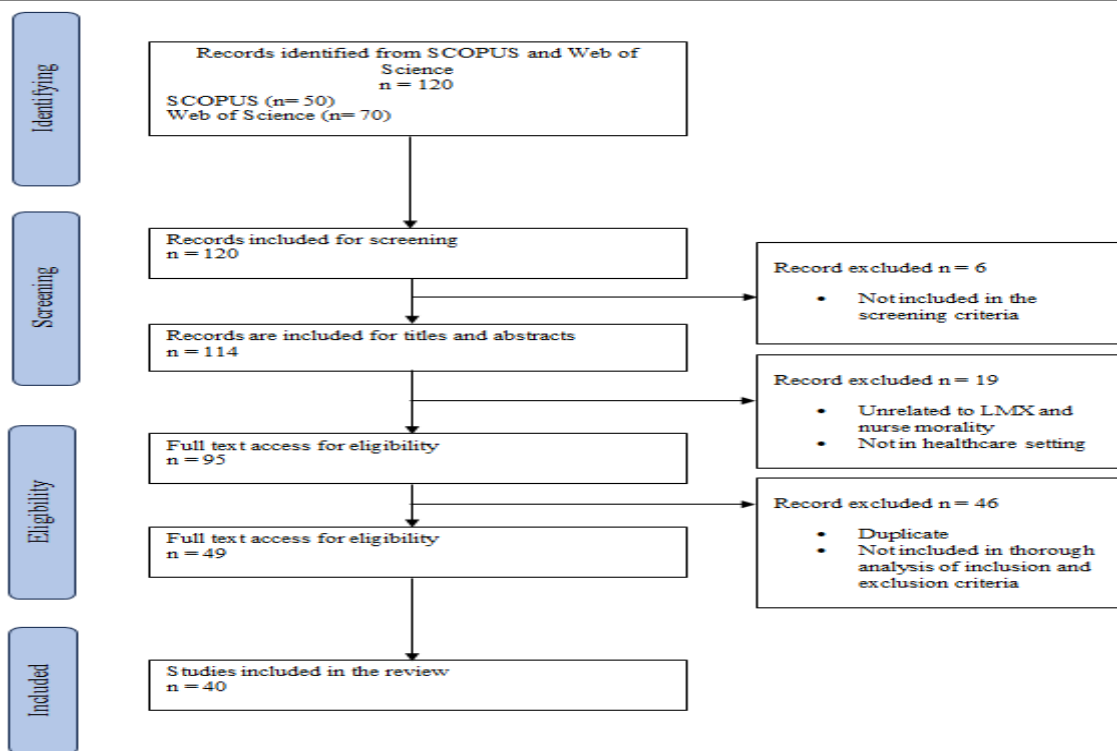


Diagram 1: PRISMA Diagram

Table 1: Analysis of the study included

No	Authors	Research Design	Method	Results	Study Setting
1	Cooper, H. (2020)	Quantitative study	Survey	Examined the relationship between LMX and turnover intention. Positive LMX linked to reduced turnover intention.	Healthcare organizations with nursing staff
2	Qureshi, F. A., Zaman, Q., & Butt, M. (2020)	Quantitative study	Survey	Identified perceived organizational support as a mediator between LMX and innovative work behavior.	Hospitals in Pakistan
3	Sa'adah, N., & Rijanti, T. (2022)	Quantitative study	Survey	Found that LMX positively impacts organizational citizenship and employee performance in public health centers.	Public health centers
4	López-Ibort, N., et al. (2021)	Quantitative study	Survey	LMX quality influences nurses' job satisfaction and commitment to the healthcare organization.	Spanish healthcare organizations
5	Kim, S., Jeong, S. H., & Seo, M. H. (2022)	Qualitative study	Review of Literature	Synthesized data showing LMX positively impacts nurse leadership outcomes and organizational effectiveness.	Multiple healthcare settings (systematic review)
6	Irshad, M., et al. (2021)	Quantitative Study	Survey	Found LMX quality impacts nurses' pro-social behavior,	Healthcare settings in Pakistan

				especially in situations requiring rule-breaking for patient care.	
7	Bennouna, A., et al. (2024)	Quantitative Study	Survey	Identified LMX as crucial in enhancing workplace well-being and safety behavior among nurses.	Hospitals in the Middle East
8	Hien, P. H. (2023)	Quantitative study	Survey	Showed a positive link between LMX quality and employee trust, job satisfaction, and organizational commitment.	Healthcare settings in Vietnam
9	Robinson, A. J. (2024)	Qualitative	Interview	Examined how LMX fosters high performers in healthcare settings through trust and motivation.	Healthcare leadership context (case study)
10	Alsadaan, N., et al. (2023)	Qualitative	Literature Review	Highlighted that LMX influences nursing staff performance and morale, improving organizational effectiveness.	Multiple healthcare organizations (systematic review)
11	Zhang, N., et al. (2021)	Quantitative study	Survey	LMX positively impacts the ethical climate and nursing behavior in both public and private hospitals.	Public and private hospitals in China
12	Wang, X., Zhou, L., Wen, X., & Gou, L. (2024)	Quantitative Study	Survey	Investigated how ethical leadership through LMX enhances nurses' moral courage in China.	Hospitals in China
13	Ghazanfari, M. J., et al. (2022)	Qualitative Study	Interviews	Examined the role of LMX in mitigating moral distress among nurses, highlighting key coping strategies.	Healthcare settings in Iran
14	Eche, I. J., et al. (2023)	Qualitative study	Literature Review	Identified trends in moral distress among oncology nurses, showing a negative correlation with LMX quality.	Oncology departments in hospitals (systematic review)
15	Prompahakul, C., et al. (2021)	Mixed-Methods Study	Survey + Interviews	Combined quantitative and qualitative data to show that LMX affects moral distress and job satisfaction among nurses.	Hospitals in Thailand
16	Pérez-López, E., et al. (2021)	Qualitative study	Case Study	Explored the ethical challenges nurses face, emphasizing the importance of supportive LMX relationships.	Nursing homes in Spain
17	Zorić, K., et al. (2023)	Quantitative study	Survey	Investigated the impact of ethical climate and LMX on nurse burnout in hospitals in Serbia.	Hospitals in Serbia

18	Pakizekho, S., Barkhordari-Sharifabad, M. (2022)	Quantitative study	Survey	Showed that ethical leadership through LMX enhances nurses' moral courage and job satisfaction.	Healthcare settings in Iran
19	Specchia, M. L., et al. (2021)	Qualitative study	Literature Review	Reviewed leadership styles in nursing and their impact on job satisfaction, emphasizing transformational leadership.	Multiple healthcare organizations (systematic review)
20	Kazin Ystaas, L. M., et al. (2023)	Qualitative study	Literature Review	Synthesized findings on the positive impact of transformational leadership on nursing outcomes and patient care.	Multiple healthcare settings (systematic review)
21	Jankelová, N., & Joniaková, Z. (2021)	Quantitative study	Survey	Investigated the relationship between transformational leadership and nurses' job satisfaction, moderated by communication skills.	Slovakian healthcare organizations
22	Zorić, K., et al. (2023)	Quantitative study	Survey	Found that LMX and ethical climate have a significant impact on nurse burnout in Serbian hospitals.	Serbian hospitals
23	Robbins, B., & Davidhizar, R. (2020)	Qualitative Study	Case Study	Focused on the benefits and limitations of transactional leadership in healthcare, finding that transactional leadership often hinders moral decision-making.	U.S. healthcare settings
24	El-Gazar, H. E., & Zoromba, M. A. (2021)	Quantitative Study	Survey	Explored the relationship between ethical leadership and flourishing among nurses, finding a positive impact on moral behavior.	Egyptian healthcare settings
25	Pattali, S., et al. (2024)	Quantitative Study	Survey	Showed that transactional leadership negatively influences nurse turnover intention, moderated by perceived organizational support.	Healthcare organizations in the Middle East
26	Bellali, T., et al. (2024)	Quantitative study	Survey	Investigated the impact of transactional leadership on nursing staff's satisfaction, focusing on empowerment.	Greek healthcare organizations
27	Al-Rjoub, S., et al. (2024)	Quantitative Study	Survey	Examined how transformational and transactional leadership impact nurse care performance and patient outcomes.	Hospitals in Jordan
28	Richards A (2020)	Qualitative Study	Case Study	Examined transactional leadership's limitations in	U.S. healthcare leadership settings

				healthcare, focusing on its failure to address nurses' ethical concerns.	
29	Zeng, D., et al. (2022)	Quantitative study	Survey	Investigated the effects of intrinsic and extrinsic motivation on nurse engagement, finding transactional leadership was less effective in promoting moral engagement.	Chinese healthcare settings
30	Alsadaan, N., et al. (2023)	Qualitative study	Literature Review	Reviewed the impact of nurse leadership behaviors on nursing staff performance, showing a positive relationship with transformational leadership.	Multiple healthcare organizations (systematic review)
31	Heikkilä, M., et al. (2022)	Qualitative Study	Interviews	Explored how intensified job demands and moral distress among nurses affect organizational change, mediated by LMX.	Finnish healthcare organizations
32	Mekonnen, M., & Bayissa, Z. (2023)	Quantitative Study	Survey	Investigated leadership styles' influence on organizational readiness for change among health professionals.	Ethiopian healthcare settings
33	Lin, Y., Liu, F., & Wang, S. (2022)	Quantitative Study	Survey	Examined the role of transformational leadership in promoting ethical behaviors in healthcare teams, mediated by trust and job satisfaction.	Healthcare settings in China
34	Al-Dossary, R. N. (2022)	Quantitative Study	Survey	Studied leadership style, work engagement, and organizational commitment among nurses in Saudi Arabia.	Saudi Arabian hospitals
35	Abd-EL Aliem, S. M. F., & Abou Hashish, E. A. (2021)	Quantitative study	Survey	Investigated transformational leadership's impact on nurses' organizational resilience and job involvement.	Egyptian hospitals
36	Al Otaibi, S. M., et al. (2023)	Quantitative Study	Survey	Explored empowering leadership and its relationship to nurses' work engagement and affective commitment.	Saudi Arabian healthcare settings
37	Szilvassy, P., & Širok, K. (2022)	Quantitative Study	Survey	Examined the importance of work engagement in primary healthcare settings, with a focus on leadership styles.	Primary healthcare settings in Europe
38	Huang, M., Ouyang, Y., Huang, Q., & Xu, G. (2024)	Qualitative Study	Interviews	Explored moral courage from nurse leaders' perspectives, highlighting the role of ethical leadership in decision-making.	Healthcare settings in China

39	Ahmed, M., & Khan, M. I. (2023)	Quantitative Study	Survey	Investigated the paradoxical impact of ethical leadership on unethical pro-organizational behavior in healthcare settings.	Pakistani hospitals
40	Willie, M. (2024)	Qualitative Study	Case Study	Focused on high-quality LMX relationships and their role in organizational success, with an emphasis on nurse leadership.	U.S. healthcare leadership settings

RESULTS

Research Design and Methodology

Among the 40 studies included in this review, most employed quantitative research methods (n=28), while qualitative designs were used in nine (9) studies. A smaller number of studies (n=3) adopted a mixed-methods approach, combining qualitative and quantitative techniques to explore the relationship between LMX and nurse morality. The quantitative research primarily used surveys and questionnaires to evaluate the influence of LMX relationships on nurses' moral distress, job satisfaction, ethical decision-making, and patient care outcomes. Some of this research used longitudinal approaches to analyse LMX effects over time, while others used cross-sectional survey methodologies. In contrast, the qualitative studies included literature reviews, case studies, and interviews to investigate nurses' experiences with moral distress, ethical decision-making, and leadership behaviours. The mixed-methods studies integrated survey- and interview-based techniques, comprehensively analysing how LMX influences nurse behaviour in healthcare settings.

Study Setting

Nurse morality, ethical decision-making, and professional well-being are influenced by LMX relationships in various healthcare settings, as evidenced by the studies included in this review. Most research (n=28) was conducted in hospitals, where nurses frequently deal with heavy patient loads, complex moral distress, and urgent decision-making. These researches shed light on how LMX relationships support nurses in resolving ethical dilemmas, upholding their integrity, and enhancing patient care under pressure. The demanding nature of acute care hospitals makes them a crucial setting for understanding how leadership dynamics influence moral distress, job satisfaction, and ethical nursing practices. Beyond hospital settings, five (5) studies were conducted in public health centres, focusing on how LMX relationships affect ethical conduct, leadership engagement, and professional decision-making in community healthcare settings. Compared with hospital environments, public health centres frequently have fewer resources and focus more on preventative treatment, which influences how moral dilemmas emerge. The research in these contexts examined how leadership affects nurses' capacity to respect ethical principles while attending to broader public health concerns.

Three (3) research delve into LMX relationships in nursing homes, where nurses commonly face ethical dilemmas, including emotional labour, end-of-life care, and long-term patient relationships. These studies demonstrated how supportive leadership could mitigate moral distress and improve nurses' ability to make ethical decisions when delivering care to elderly patients. Given the unique ethical challenges in geriatric care, LMX relationships in this setting were shown to be particularly influential in nurturing a compassionate and ethically responsible nursing workforce. Finally, four (4) studies were conducted in primary healthcare settings, where nurses typically work in outpatient clinics and non-emergency care facilities. These studies examined how LMX relationships foster nurse autonomy, ethical decision-making, and professional responsibility in settings where immediate life-threatening situations are less frequent but ethical challenges still arise. Leadership dynamics in primary healthcare significantly impacted nurses' ability to maintain ethical standards, communicate effectively with patients, and engage in morally sound decision-making in day-to-day practice.

The variation in study settings provides a comprehensive understanding of how LMX relationships impact nurses' ethical behaviour and job satisfaction in different healthcare environments. The findings suggest that

while strong LMX relationships benefit nurses in all settings, their impact varies depending on each healthcare context's ethical complexities, work demands, and leadership structures.

LMX and Nurse Morality

The relationship between LMX and nurse morality is fundamental to understanding how leadership dynamics influence ethical behaviour in nursing practice (Cooper, 2020; Qureshi et al., 2020; Sa'adah & Rijanti, 2022; López-Ibort et al., 2021; Kim et al., 2022). High-quality LMX relationships, characterized by mutual respect, trust, and support, are consistently associated with enhanced ethical decision-making within healthcare settings (Irshad et al., 2021; Beeoun et al., 2024; Robinson, 2024). Nurses who perceive positive relationships with their leaders demonstrate heightened moral sensitivity, defined as the capacity to recognize and address ethical issues and dilemmas effectively (Alsadaan et al., 2023; Zhang & Zhang, 2023). Such relationships foster adherence to ethical standards in patient care and promote a workplace culture where moral principles are upheld (Zhang et al., 2021). Contrariwise, low-quality LMX relationships are often linked to increased moral distress, arising when nurses encounter constraints that prevent them from acting by their ethical beliefs due to inadequate leadership support (Wang et al., 2024). This moral distress has been correlated with adverse outcomes, including professional burnout, job dissatisfaction, and a decline in the quality of patient care (Prompahakul et al., 2021; Ghazanfari et al., 2022; Eche et al., 2023). A lack of trust and insufficient communication in these relationships creates an environment where nurses may feel unsupported in navigating ethical challenges, ultimately leading to moral disengagement (Pérez et al., 2021). Consequently, nurses in low-LMX contexts often struggle to make ethically sound decisions in high-pressure situations, directly impacting patient well-being. The quality of the LMX relationship, therefore, emerges as a crucial determinant of nurses' ability to manage ethical dilemmas and uphold moral standards in clinical practice (Zorić et al., 2023; Zhang et al., 2021; Cooper, 2020; Kalyar et al., 2020). Nurses engaged in high-quality LMX relationships feel empowered to make ethically comprehensive decisions, while those in low-quality relationships experience heightened ethical conflict and a diminished capacity to deliver high-quality patient care. (Bennouna et al., 2024; Ivziku et al., 2024; Alanazi et al., 2024; Bellali et al., 2024; Al Otaibi et al., 2023). Addressing these dynamics through effective leadership practices is essential for promoting ethical behaviour and enhancing healthcare outcomes.

Leadership Styles and Nurse Behavior

The literature highlights the crucial influence of leadership styles in LMX relationships on nurse behaviour and moral development. Transformational leadership, often associated with high-quality LMX relationships, has consistently demonstrated a positive impact on nurse morality by fostering an environment of trust, shared values, and ethical guidance (Kazin Ystaas et al., 2023; Zorić et al., 2023; Jankelová & Joniaková, 2021). Transformational leaders inspire ethical conduct by setting high moral standards and embedding professional values into daily practice (Robbins & Davidhizar, 2020). Through this approach, nurses align their ethical principles with organizational goals, cultivating a culture of ethical decision-making and accountability (El-Gazar & Zoromba, 2021). Furthermore, transformational leadership's supportive and empowering nature enables nurses to express moral concerns and act with integrity, reinforced by recognizing and appreciating ethical behaviour (Pattali et al., 2024).

In contrast, transactional leadership tends to undermine nurse morality by prioritizing task completion and performance metrics over ethical considerations (Bellali et al., 2024; Al-Rjoub et al., 2024; Richards, 2020). This leadership style emphasizes extrinsic motivators such as rewards and punishments, often at the expense of fostering shared values and ethical standards (Pérez et al., 2021). As a result, nurses operating under transactional leaders may prioritize job security and material incentives over patient-centred care and moral sensitivity (Zeng et al., 2022). This lack of ethical alignment contributes to a disengaged workforce with reduced ethical awareness and increased moral distress (Alsadaan et al., 2023). The evidence suggests that while transformational leadership strengthens LMX relationships and promotes ethical nursing practices, transactional leadership fosters a compliance-driven culture that can erode nurse morality and professional satisfaction (Mekonnen & Bayissa, 2023; Lin et al., 2022; Pérez et al., 2021).

Impact on Patient Care

High-quality LMX relationships play a pivotal role in enhancing patient care outcomes. The existing literature consistently demonstrates that when nurses receive robust support from leaders who cultivate positive LMX dynamics, their alignment with organizational ethical standards strengthens, resulting in improved patient care (Al Otaibi et al., 2023; Al-Dossary, 2022; Abd-EL Aliem & Abou Hashish, 2021). Nurses who perceive their leaders as trustworthy and supportive exhibit higher engagement levels, directly correlating with their commitment to delivering quality patient care (Hien, 2023). This engagement fosters adherence to best practices and ethical decision-making, ultimately prioritizing patient well-being (Szilvassy & Sirok, 2022; Robinson, 2024). Moreover, effective LMX relationships empower nurses to navigate ethical dilemmas with greater confidence and competence. Leaders facilitating open dialogues on ethical issues and providing guidance during morally challenging situations significantly enhance nurses' capacity for sound ethical judgment (Huang et al., 2024). This supportive environment fosters improved communication and collaboration within healthcare teams, essential components of high-quality patient care (Ahmed & Khan, 2023; Hien, 2023). Conversely, poor LMX relationships often lead to moral disengagement and reduced ethical sensitivity among nurses (Ghazanfari et al., 2022; Irshad et al., 2021; Kim et al., 2022). A lack of leadership support in ethical decision-making processes contributes to uncertainty and hesitation, impeding timely and effective patient care interventions (Pérez et al., 2021; Prompahakul et al., 2021; Haahr et al., 2020; Heikkilä et al., 2022). Therefore, fostering high-quality LMX relationships benefits individual nurses and ensures that healthcare organizations maintain ethical standards aligned with superior patient care outcomes.

Barriers and Enablers

Despite the clear benefits of high-quality LMX relationships, several barriers hinder their development in healthcare organizations. One significant barrier is organizational constraints, including heavy workloads, understaffing, and limited time for leaders to cultivate meaningful relationships with their staff (Willie, 2024; Alanazi et al., 2024; Al-Rjoub et al., 2024; Bellali et al., 2024). These constraints often prevent leaders from engaging with nurses in a way that fosters trust and mutual respect, impeding the formation of strong LMX dynamics (Alsadaan et al., 2023). Furthermore, nurses in resource-limited environments frequently perceive their managers as too focused on operational demands to engage in substantive discussions about ethical or moral issues (Ghazanfari et al., 2022). This lack of engagement can exacerbate moral distress and weaken the ethical climate within healthcare settings (Eche et al., 2023). Another notable barrier is the insufficiency of leadership training programs emphasizing ethical guidance and effective communication (Kim, Jeong, & Seo, 2022). When leaders lack the skills to foster trust and navigate ethical dilemmas, the quality of LMX relationships suffers, leading to increased nurse disengagement and moral distress (Irshad et al., 2021). The absence of comprehensive leadership development initiatives limits the capacity of healthcare managers to support their teams in addressing ethical challenges (Zorić et al., 2023).

On the other hand, several enablers facilitate establishing strong LMX relationships in healthcare environments. An organizational culture prioritizing ethical principles and values is a critical foundation for fostering positive LMX dynamics (Bennouna et al., 2024; Haahr et al., 2020; Zhang et al., 2021). When healthcare institutions emphasize ethical leadership and moral sensitivity, they encourage leaders to engage with their staff in ways that promote trust and respect (Kim et al., 2022). Effective communication channels between leaders and nurses enhance relationship-building and collaborative ethical decision-making (Heikkilä et al., 2022). Leadership training programs focused on empathy, interpersonal communication, and ethical decision-making also play a pivotal role in strengthening LMX relationships (Alsadaan et al., 2023). Leaders equipped with these skills are better prepared to recognize and address moral distress among their teams, fostering an environment where nurses feel supported and empowered in their ethical practice (Mekonnen & Bayissa, 2023). Healthcare organizations can mitigate the barriers to high-quality LMX relationships and enhance ethical standards across their institutions by investing in such training and cultivating a culture of open dialogue and mutual respect.

Table 2: Summary of Key Themes, Barriers and Enablers in LMX and Nurse Morality in Healthcare Settings.

Key Theme	Description	Key Findings	Barriers	Enablers
LMX and Nurse Morality	High-quality LMX relationships enhance ethical decision-making, moral sensitivity, and ethical standards in nurses.	Nurses with high-quality LMX relationships are more likely to adhere to ethical standards and display moral sensitivity (Cooper, 2020; Qureshi et al., 2020; Sa'adah & Rijanti, 2022; López-Ibort et al., 2021; Kim et al., 2022).	Moral distress in low-LMX relationships due to lack of leadership support and ethical guidance (Wang et al., 2024; Prompahakul et al., 2021; Pérez et al., 2021).	Trust, respect, and open communication create an ethical work environment where nurses feel morally empowered (Zhang et al., 2021; Alsadaan et al., 2023).
Leadership Styles and Nurse Behavior	Transformational leadership strengthens LMX through trust, shared values, and ethical leadership, while transactional leadership weakens it.	Transformational leadership supports moral development, nurse engagement, and ethical awareness (El-Gazar & Zoromba, 2021; Specchia et al., 2021; Kazin Ystaas et al., 2023; Jankelová & Joniaková, 2021).	Transactional leadership's focus on compliance, rewards, and punishments leads to disengagement and moral distress (Bellali et al., 2024; Al-Rjoub et al., 2024; Richards, 2020).	Transformational leadership fosters ethical sensitivity and moral courage in nurses (Robbins & Davidhizar, 2020; El-Gazar & Zoromba, 2021).
Impact on Patient Care	Strong LMX relationships correlate with better nurse engagement, adherence to ethical standards, and improved patient care.	Nurses with supportive LMX relationships are more committed to patient care and ethical decision-making (Al Otaibi et al., 2023; Al-Dossary, 2022; Abd-EL Aliem & Abou Hashish, 2021; Hien, 2023).	Lack of leadership support results in moral distress and ethical uncertainty in nurses (Pérez et al., 2021; Ahmed & Khan, 2023).	Supportive leaders help nurses navigate ethical dilemmas, leading to better patient care (Huang et al., 2024; Hien, 2023; Al-Dossary, 2022).
Barriers to High-Quality LMX	Organizational and leadership constraints that hinder effective LMX relationships.	Heavy workloads, limited leadership training, and lack of mentorship hinder the development of strong LMX relationships (Willie, 2024; Ghazanfari et al., 2022; Alsadaan et al., 2023).	Time constraints, lack of leadership training, and unsupportive organizational culture (Kim, Jeong, & Seo, 2022; Irshad et al., 2021; Zorić et al., 2023).	Ethical leadership training, coaching, and leadership development programs can enhance LMX quality (Mekonnen & Bayissa, 2023; Kim et al., 2022).
Enablers of High-Quality LMX	Factors that promote positive LMX and strengthen ethical decision-making in nursing practice.	Ethical leadership, open communication, and leadership development programs improve LMX and nurse morale (Robinson, 2024; Bennouna et al., 2024).	Inconsistent organizational policies and lack of leadership development programs (Heikkilä et al., 2022;	Supportive leadership, structured communication, and training in ethical decision-making improve LMX

			Alsadaan et al., 2023).	effectiveness (Mekonnen & Bayissa, 2023).
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DISCUSSION

Impact of Leader-Member Exchange (LMX) on Nurse Morality

While the positive impact of high-quality LMX relationships on nurse morality and patient care is well-documented, this review also reveals critical gaps and challenges that must be addressed. LMX relationships enhance ethical decision-making and reduce moral distress (Irshad et al., 2021; Alsadaan et al., 2023). However, their influence on nurse morality extends beyond immediate decision-making and into long-term professional integrity. High-quality LMX relationships foster a strong sense of ethical responsibility, strengthen moral sensitivity, and promote a supportive environment where nurses feel empowered to uphold ethical standards even in high-pressure situations (Bennouna et al., 2024). Effective LMX makes nurses more likely to report unethical behaviour, advocate for patient rights, and contribute to ethical workplace culture (Bennouna et al., 2024). Moreover, these relationships play a vital role in shaping moral courage — the ability to take ethical action despite fear or external pressures — which is crucial in complex and often morally ambiguous healthcare environments (Huang et al., 2024). Nurses in high-quality LMX settings experience excellent psychological safety, encouraging open discussions about ethical concerns and collaborative decision-making (Bennouna et al., 2024). This dynamic improves patient outcomes and enhances nurse satisfaction, retention, and long-term commitment to ethical practice (Ivziku et al., 2024). However, the adverse effects of low-quality LMX relationships cannot be overlooked. The association between inadequate leadership support and increased moral distress among nurses underscores the importance of effective leader-follower dynamics (Wang et al., 2024). Moral distress, arising from constraints that prevent nurses from acting according to their ethical beliefs, often leads to professional burnout, job dissatisfaction, and a decline in patient care quality (Prompahakul et al., 2021; Ghazanfari et al., 2022; Eche et al., 2023). This emphasizes how leadership shortcomings contribute to ethical disengagement and heighten the risk of compromised healthcare outcomes (Pérez et al., 2021). Therefore, LMX serves as a foundational pillar in cultivating a resilient, ethically driven nursing workforce capable of navigating the evolving challenges of healthcare with integrity and compassion. However, the adverse effects of low-quality LMX relationships cannot be overlooked. Thus, the finding shows that LMX serves as a foundational pillar in cultivating a resilient, ethically driven nursing workforce capable of navigating the evolving challenges of healthcare with integrity and compassion.

Moreover, the emphasis on transformational leadership as a model for fostering LMX relationships presents valuable opportunities to enhance ethical accountability and professional development in healthcare settings (Al-Rjoub et al., 2024; Abd-EL Aliem & Abou Hashish, 2021; Kazin Ystaas et al., 2023). Transformational leadership, by promoting shared values, vision, and ethical standards (Kazin Ystaas et al., 2023), inspires nurses to align their professional practice with organizational goals and moral principles. When effectively implemented, this leadership style creates an environment of mutual respect, trust, and collaboration, empowering nurses to take ethical actions and advocate for patient rights (Al Otaibi et al., 2023). To fully harness these benefits, healthcare organizations should address operational challenges like understaffing, heavy workloads, and limited training opportunities (Ghazanfari et al., 2022) by investing in comprehensive leadership development programs and providing adequate resources (Pakizekho & Barkhordari-Sharifabad, 2022). Adopting complementary strategies, such as distributed leadership models and mentorship initiatives led by senior nurses, can further enhance LMX relationships, ensuring sustainable, ethical practice and professional growth across healthcare teams (Lin et al., 2022).

Implications for Patient Care and Nursing Performance

The positive relationship between LMX quality and nurse behaviour improves patient care outcomes (Kim et al., 2022). Nurses with strong LMX relationships are more likely to be morally engaged and make ethical decisions, ensuring that patient safety, dignity, and care quality are upheld (Zhang et al., 2021). The leader's role greatly influences the ethical behaviour of nurses in creating a climate of mutual respect and trust, which has a

direct effect on the overall quality of care provided (Wang et al., 2024). For example, transformational leadership fosters an ethical environment that supports patient-centred care and is linked to high-quality LMX relationships (Zorić et al., 2023). Nurses who perceive their leaders as supportive and committed to ethical standards tend to feel more empowered to act in patients' best interests, resulting in better care practices, fewer errors, and higher patient satisfaction (Irshad et al., 2021). Conversely, in low-quality LMX relationships, nurses may experience moral distress, which can lead to burnout and reduced patient care quality (Ghazanfari et al., 2022). Chughtai & Afsar (2021) has examined that nurses' perceptions of their managers' ethical behaviour strongly predict their engagement in ethical decision-making and quality patient care. Consequently, improving LMX quality benefits patient outcomes as well as the ethical growth of nurses (Bowers et al., 2021; Cheng et al., 2020; Pérez et al., 2021).

The influence of LMX on nursing performance is also profound. High-quality LMX relationships foster an environment where nurses are motivated, supported, and confident in making ethical decisions (Lin et al., 2022). Stronger performance, such as increased productivity, cooperation, and clinical abilities, is more likely to be displayed by nurses who feel appreciated by their leaders (Kim et al., 2022). This support is especially crucial in healthcare settings, where nurses are frequently pressured by high workloads and challenging workplace environments (Zorić et al., 2023). Moreover, transformational leadership within high-quality LMX relationships encourages nurses to embrace shared organizational goals, fostering a collective effort towards improving care standards (Jiang et al., 2024). The positive reinforcement from leaders, such as recognition and trust, enables nurses to feel more committed to their work and more capable of meeting the challenges inherent in their roles (Alsadaan et al., 2023). This leads to enhanced nursing performance, individually and collectively, directly impacting the broader organizational goals of quality patient care and operational efficiency (Zhang et al., 2021). On the other hand, poor LMX relationships are often associated with increased nurse turnover, lower job satisfaction, and decreased nursing performance (Pérez et al., 2021). Burnout and decreased workplace engagement are more common among nurses employed in these settings, which can result in less-than-ideal performance and more absenteeism (Sa'adah & Rijanti, 2022). Effective patient care delivery requires a cohesive and supportive nursing team, which is hampered by low LMX relationships.

Barriers and Enablers of LMX Implementation

Addressing the barriers to effective LMX implementation is crucial for maximizing these benefits. Organizational constraints such as heavy workloads, understaffing, and limited leadership training hinder the development of high-quality LMX relationships (Ghazanfari et al., 2022; Specchia et al., 2021). These challenges are compounded by inadequate communication channels and a lack of structured mentorship programs, which weaken the foundation of trust and mutual respect essential for strong LMX dynamics (Ivziku et al., 2024). These barriers indicate a systemic issue where healthcare leaders often prioritize immediate operational pressures over ethical leadership and staff development (Kim et al., 2022). Moreover, the lack of integration between human resource practices and leadership development further exacerbates these challenges, limiting the organization's capacity to foster sustainable and supportive work environments (Shahrulnizam et al.). To overcome these barriers, healthcare organizations must adopt multifaceted and sustained strategies. A key priority is ensuring staffing adequacy and effective workload management through comprehensive workforce planning and the introduction of flexible staffing models (Zeng et al., 2022). Leaders can engage more meaningfully with their teams by maintaining manageable workloads and fostering supportive LMX relationships (López-Ibort et al., 2021). Equally important is the investment in leadership development programs tailored to ethical decision-making, emotional intelligence, and interpersonal communication (El-Gazar & Zoromba, 2021). Integrating these programs into continuous professional development initiatives enables leaders at all levels to support their staff's moral and professional growth (Huang et al., 2024). Another essential strategy involves establishing formal mentorship structures to strengthen LMX relationships (Alsadaan et al., 2023). Pairing experienced nurses with newer staff members creates opportunities for knowledge transfer, emotional support, and collaborative problem-solving (Bellali et al., 2024). To ensure their sustainability and impact, these mentorship programs should be well-resourced and aligned with institutional goals (Al Otaibi et al., 2023). On the other hand, enablers such as ethical leadership training, structured mentorship initiatives, and an organizational culture that prioritizes open communication and shared values play a crucial role in strengthening LMX relationships (Bennouna et al., 2024). The effectiveness of these enablers depends on their

consistent application and alignment with long-term institutional strategies (Pan et al., 2021). Without sustained commitment and adequate resource allocation, these initiatives risk becoming superficial interventions rather than transformative practices (Haahr et al., 2020). Therefore, healthcare leaders must champion these efforts, embedding them into organizational policies and performance evaluation metrics to ensure enduring success.

FUTURE RESEARCH RECOMMENDATIONS

Future research should focus on exploring the dynamics between LMX and nurse morality across different healthcare settings, identifying key factors that mediate or moderate this relationship and providing a deeper understanding of the mechanisms through which leadership influences ethical behaviour. Investigating the impact of institutional regulations, cultural variables, and transformational leadership practices can offer valuable insights into how leadership quality shapes moral sensitivity, ethical decision-making, and professional conduct among nurses. Longitudinal studies are essential to assess the long-term impact of consistent leadership support on nurse well-being, job satisfaction, and patient outcomes while examining how external factors, such as evolving healthcare policies and technological advancements, interact with LMX over time. Such research could also provide practical guidance on enhancing leadership strategies, strengthening ethical standards, and fostering a supportive work environment, ultimately improving overall patient care quality in diverse and evolving healthcare settings.

CONCLUSION

In conclusion, this systematic review underscores the crucial role LMX plays in shaping nurse ethics and enhancing patient care. Strong LMX relationships are linked to higher moral sensitivity, better ethical conduct, and improved patient outcomes. Despite these benefits, challenges like organizational constraints, work pressures, and insufficient leadership training often hinder the development of effective LMX dynamics. To address these barriers, healthcare organizations should invest in leadership development programs, prioritize ethical decision-making support, and implement organizational reforms that foster a more supportive work culture. Strengthening LMX relationships enhances nurse morale and job satisfaction and elevates the overall quality of patient care, making it imperative for healthcare institutions to prioritize these efforts.

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