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Leading Change in Healthcare: A Systematic Review of Middle Management's Role

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Abstract

Background: Healthcare organizations are experiencing continuous transformation driven by digitalization, workforce challenges, quality improvement initiatives, and increasing service complexity. While strategic change is often initiated by senior leadership, its successful implementation largely depends on middle managers who operate at the intersection of strategy and frontline practice. Despite their pivotal role, the literature on middle management's leadership and sustainability of change in healthcare remains fragmented and underexplored. *Aim:* This systematic review aimed to critically synthesize empirical evidence on the role of middle managers in leading and implementing change within healthcare organizations. *Method:* A systematic review design was employed. A comprehensive literature search was conducted across selected electronic databases for peer-reviewed studies published between 2020 and 2025. Studies focusing on middle managers in healthcare settings and their involvement in change leadership were included. Following duplicate removal, title and abstract screening, and full-text assessment, ten primary studies met the inclusion criteria. Data were extracted systematically and synthesized using a narrative and thematic approach. *Results:* The findings revealed that middle managers played a central role in translating strategic directives into operational practice, facilitating communication, and supporting staff engagement during change processes. Key themes included change translation and implementation, leadership behaviors influencing workforce engagement, cultural and accountability leadership, digital transformation readiness, and constraints on leadership capacity. Transformational and supportive leadership styles were consistently associated with positive change outcomes, while resource limitations, workload pressures, and role ambiguity emerged as persistent barriers. *Conclusion:* The review demonstrated that middle managers are critical drivers of successful change in healthcare organizations. Strengthening leadership development, organizational support, and enabling conditions at the middle-management level is essential for achieving sustainable transformation and improving healthcare system performance.

Keywords: Middle management; Change leadership; Healthcare organizations; Organizational change; Systematic review.

Introduction

Healthcare systems around the world are undergoing rapid and constant change as a result of advances in technology, workforce restructuring, and demands for quality and efficiency. These

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changes have increased the complexity of healthcare organizations, which have made leadership capacity at multiple levels of the organization a priority focus. While strategic directions are often set by the senior leadership team, the successful implementation of change is in large part determined by the actions of the middle management team who translate policy into practice and align the frontline staff to organizational goals. Contemporary literature stresses that leadership in healthcare is no longer concentrated on top management but is becoming more distributed across layers of management in order to facilitate adaptability and innovation (Spanos, 2024; Laukka et al., 2022; Hu et al., 2024).

Middle managers are in a key position between the executive leadership and frontline professionals, so they can have impact on communication, coordination, and organizational culture during times of change. Their role has gone beyond the administrative oversight to facilitating learning, supporting innovation, and managing resistance to change. Studies highlight that effective middle management improves the readiness of organizations by building trust, empowering employees and enabling collaborative problem-solving, especially during digital and structural transformations (Thapa et al., 2022; Al-Saleem & Aldakheel, 2024; Aydogdu, 2022). Without adequate support and leadership capability at this level, change initiatives are at risk of becoming fragmented and not being sustained.

The growing integration of digital health technologies has further added to the burden of healthcare systems middle managers. Digital transformation not only requires technological infrastructure, but also leaders who can guide staff through transitions, address skill gaps and manage the disruptions in workflows. Research suggests that middle managers are critical in shaping digital readiness by promoting engagement, facilitating training, and aligning innovation with clinical practice (Laukka et al., 2022; Hu et al., 2024; Spanos, 2024). However, insufficient preparation for leadership, resource limitations, and resistance to innovation are still recognized as major hindrances to effective change leadership at the middle management level.

Despite increased appreciation of their importance, the contributions of middle managers to the leadership of healthcare change have remained poorly studied and inconsistently defined throughout the literature. Existing studies often focus on senior leadership or frontline staff leaving a gap in understanding the role of middle managers in influencing change processes, organizational outcomes and workforce engagement. Reviews of research on healthcare leadership emphasize the importance of consolidated evidence on the leadership behaviors of middle managers, challenges, and impact on change implementation (Aydogdu, 2022; Thapa et al., 2022; Al-Saleem & Aldakheel, 2024). Addressing this gap is important to inform leadership development strategies and build capacity for sustainable transformation in healthcare systems.

Problem Statement

Healthcare organizations are experiencing constant and complex change brought on by digital transformation, workforce shortages, quality improvement demands and rising patient expectations. Although strategic change initiatives are usually designed at senior levels of management, their success or failure depends very much on their success in implementation at the operational level where middle managers are the key link between policy and practice. Despite this important role, middle managers can frequently encounter unclear role expectations, limited decision-making authority, and inadequate leadership preparation, which can hinder their capacity to lead and maintain change initiatives effectively (Aydogdu, 2022; Thapa et al., 2022; Spanos, 2024).

Existing literature points to the persistent organizational barriers that limit the ability of middle

managers to lead change, such as lack of sufficient resources, resistance from staff, conflicting clinical and managerial demands, and weak organizational support systems. These challenges become especially prominent in times of innovation and digital transformation, and middle managers are expected to inspire their staff, cope with uncertainty, and maintain continuity of care while adapting to new systems and processes (Al-Saleem & Aldakheel, 2024; Laukka et al., 2022; Hu et al., 2024). However, many healthcare organizations have no set frameworks for helping middle managers navigate these responsibilities.

Furthermore, studies of healthcare leadership have mainly focused on senior executives or frontline clinicians and have therefore left a fragmented and inconsistent body of evidence about the specific contribution of middle managers to organizational change. The lack of a synthesized understanding of the role of middle managers in the change process, including their impact on change outcomes, staff engagement, and organizational readiness, restricts the formulation of specific leadership strategies and policies. This gap highlights the importance of conducting a systematic review that is critical of the role of middle management in leading change in healthcare settings (Spanos, 2024; Aydogdu, 2022; Thapa et al., 2022).

Significance of the Study

Understanding the role of middle managers in leading healthcare change is critical to the strengthening of organizational performance and the sustainability of transformation initiatives. Middle managers are in a unique position to influence the day-to-day operations, influence the behaviors of the teams, and translate the strategic goals into actionable practices. By synthesizing the current knowledge of their leadership roles and challenges, this study provides a contribution to a better understanding of how middle management can be used as a strategic resource for implementing change successfully (Hu et al., 2024; Laukka et al., 2022; Spanos, 2024).

The results of this systematic review are important to healthcare policymakers and organizational leadership because they offer evidence-based information of leadership gaps and support needs at the middle management level. Identifying common barriers and enabling factors can help to inform the design of leadership development programs, organizational structures and workforce policies that can improve the ability of middle managers to lead change. Such insights are especially pertinent in the context of digital health adoption and workforce-driven innovation in which leadership readiness is crucial to success (Al-Saleem & Aldakheel, 2024; Aydogdu, 2022; Hu et al., 2024).

Additionally, this study is important from an academic perspective as it fills a well-recognized gap of the healthcare leadership literature. By systematically examining empirical evidence that is focused on middle management, the study contributes to the theoretical understanding of distributed leadership and change management in healthcare. The synthesis of findings offers a basis for future research and contributes to the development of context-specific models of leadership that recognize the pivotal role of middle managers in complex healthcare systems (Spanos, 2024; Thapa et al., 2022; Laukka et al., 2022).

Aim of the Study

The purpose of this systematic review is to provide a critical review and synthesis of the existing empirical evidence on the role of middle managers in leading change in healthcare organizations. Specifically, the review aims to discuss the role of middle managers in influencing the change implementation processes, staff engagement, and organizational outcomes in times of transformation (Aydogdu, 2022; Spanos, 2024; Hu et al., 2024).

In addition, the study seeks to determine the important challenges, barriers, and enabling factors affecting the effectiveness of middle managers in leading change. By examining the results from

diverse healthcare contexts, the review aims to identify patterns and gaps in leadership practices that could be used to inform interventions at the organizational and policy levels (Thapa et al., 2022; Al-Saleem & Aldakheel, 2024; Laukka et al., 2022).

Ultimately, this systematic review seeks to offer evidence-based recommendations to further the objectives of leadership development, organizational readiness, and sustainable change in healthcare systems by strengthening the role of middle management in change leadership breaking point (Spanos, 2024; Hu et al., 2024; Aydogdu, 2022).

Methodology

Study Design

This study used the systematic review design to synthesize the empirical evidence on the role played by middle management in leading change within healthcare organizations. A systematic method was chosen to ensure transparency, rigor and reproducibility with regard to the identification, appraisal and synthesis of relevant studies. The review of literature included peer-reviewed primary research articles that focused on the leadership role, behaviors and influence of middle managers in implementing change and impact on organizational processes and workforce outcomes in healthcare settings. The methodology was conducted using the principles of systematic review to ensure that bias is minimized and the available literature is comprehensively covered.

Search Strategy

A structured and comprehensive literature search was undertaken to identify relevant studies which were published between 2020 and 2025. Multiple electronic databases that are frequently used in healthcare and management research were consulted to ensure coverage of interdisciplinary literature. The search process was developed to capture studies that addressed the concepts of leadership, change management, and middle managerial roles in healthcare settings. Manual searching of reference lists of included studies was also completed to locate any potentially relevant articles that might not have been found in the initial database search. The detailed search syntax and database specific strategies were planned separately and are described in a subsequent section of the review.

Data Extraction

Data extraction was done in a systematic fashion using a standardized data extraction framework developed for this review. Key information extracted from each included study included author(s), year of publication, country/setting, study aim, research design, sample characteristics, data collection methods, and major findings in relation to middle management and change leadership. In order to ensure consistency and accuracy, extracted data were cross-checked across studies and collated in structured tables to assist comparison and thematic synthesis. This process made it possible to identify repeating patterns, leadership practices and contextual factors affecting change processes across healthcare settings.

Research Question

The primary research question guiding this systematic review was:

- What is the role of middle managers in leading and implementing change within healthcare organizations?

This question had as an objective to discuss the role of middle managers in the change process, the issues they face, and the effects of their leadership on organizational and workforce outcomes during transformations.

Selection Criteria

Inclusion Criteria

Studies were considered for this review if they met the following criteria:

- Peer-reviewed primary research articles from 2020 to 2025.
- Studies that have been conducted in healthcare settings, such as in a hospital, primary care, or other healthcare organizations
- Research specifically dealing with middle managers, e.g. nurse managers, department head, unit managers, etc.
- Research on leadership, change management, innovation, digital transformation or organizational change processes.
- Articles published in English language with full text available.

Exclusion Criteria

Studies were excluded from the review if they met any of the following criteria:

- Review articles, Editorials, Commentaries, Conference abstracts or Opinion papers
- Research which only focuses on senior executives or front-line staff without reference to middle management roles.
- Research conducted outside of healthcare.
- Articles published prior to 2020 or after 2025.
- Studies that do not provide enough methodology or relevance to change leadership.

Database Selection

A thorough database selection process was undertaken so as to have a broad and systematic coverage of literature relating to middle management and change leadership in healthcare organizations. Databases were chosen based on their relevance to healthcare, nursing leadership, management studies and organizational change research. The databases chosen offered access to peer-reviewed empirical research across the interdisciplinary areas in order to guarantee methodological rigor as well as topic relevance.

The search of the database was carried out for studies published between the years 2020 and 2024, in accordance with the predefined eligibility criteria. The number of retrieved records from each database was recorded to promote transparency and follow the study selection process which was described later in the review. The databases used and the number of studies found from each source are listed in Table 1:

Table 1: Database Selection

No	Database	Syntax Used	Year	No of Studies Found
1	PubMed	Primary & Secondary Syntax	2020–2025	112
2	Scopus	Primary & Secondary Syntax	2020–2025	98
3	Web of Science	Primary & Secondary Syntax	2020–2025	84
4	CINAHL	Primary & Secondary Syntax	2020–2025	76
5	Google Scholar	Secondary Syntax	2020–2025	140
Total	—	—	—	510

Search Syntax

The search strategy comprised of two structured syntaxes: a primary search syntax to capture core studies on middle management and change leadership, and the secondary search syntax to increase the scope and capture context specific and interdisciplinary literature. Boolean operators (AND, OR) and quotation marks were used for more precise and sensitive findings.

<p>Primary Syntax:</p>	<ul style="list-style-type: none"> • ("middle management" OR "middle managers" OR "nurse managers" OR "unit managers" OR "department managers") • AND • ("healthcare" OR "health care organizations" OR "hospital" OR "clinical setting") • AND • ("change leadership" OR "organizational change" OR "change management" OR "leadership in change") • AND • ("implementation" OR "transformation" OR "innovation")
<p>Secondary Syntax:</p>	<ul style="list-style-type: none"> • ("leadership" OR "management role") • AND • ("organizational change" OR "service transformation" OR "digital transformation") • AND • ("healthcare system" OR "healthcare services") • AND • ("staff engagement" OR "workforce" OR "organizational culture")

Literature Search

A thorough literature search was undertaken to identify relevant research studies looking at the role of middle management in leading change within healthcare organizations. The search was conducted in multiple electronic databases chosen according to their relevance to the field of healthcare leadership, management and organizational research. The search process was systematic and iterative so that it could be refined to ensure adequate coverage in empirical studies related to change leadership at the middle management level.

The literature search was limited to studies published between 2020 and 2025 to reflect the latest evidence of up-to-date healthcare challenges, such as digital transformation, workforce restructuring and innovation-driven change. Searches were supplemented by manual screening of reference lists of potentially relevant articles in search of further studies, which may not have been retrieved by database searching. All retrieved records were exported in a reference management system for organization and screening.

Selection of Studies

Following the search in literature, all the records identified were compiled and screened in several stages to assess whether they were relevant to the objectives of the review. Initially because duplicate records that are identified across databases are eliminated to avoid redundancy. The remaining studies were then screened by their title and abstract to determine whether they were relevant to middle management and change leadership in the healthcare setting.

Studies that seemed relevant were retrieved in full text and were checked thoroughly to ensure

their congruence with the purpose of the review. During this stage, studies that did not address relevant issues adequately including the middle management roles, leadership during change or the healthcare organizational contexts were not included. This methodical approach of selecting studies ensured that only methodologically sound and contextually relevant studies were retained for inclusion in the review.

Study Selection Process

The research selection process was carried out using a logical and transparent method to maintain rigor and reproducibility. An initial pool of records was identified by database searches and duplicates articles were removed. Title and abstract screening were then carried out for the exclusion of studies that were clearly not relevant to the topic of middle management and healthcare change leadership.

Subsequently, full-text screening was carried out on the remaining articles to evaluate relevance and eligibility to inclusion. This stage was a detailed evaluation of study objectives, research design and its relevance to the role of middle managers in leading or implementing change. As a result of this process, studies which did not have a clear focus on middle management or did not offer empirical evidence relevant to change leadership were excluded.

At the end of the screening and selection process, ten primary studies satisfying the eligibility criteria were included in the final systematic review. These studies served as the basic evidence for the extraction of data, synthesis and interpretation in the following results and discussions sections.

Figure 1: PRISMA Flowchart

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework was used to guide the identification, screening, eligibility assessment, and inclusion of studies in this systematic review. The flowchart provides a transparent account of the study selection process, demonstrating how records were filtered at each stage to ensure methodological rigor and relevance to the review objectives.

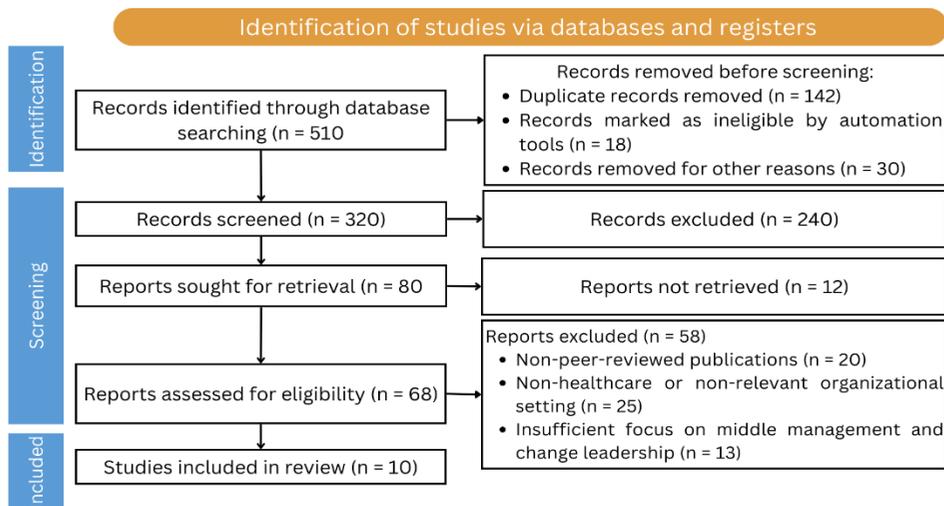


Figure 1: PRISMA Flowchart
Quality Assessment of Studies

The quality of the included studies was reviewed in order to evaluate methodological rigor and clarity of reporting, and to determine if the studies were relevant to the review objectives. A

structured appraisal approach was used, with a focus on important domains of quality used in healthcare leadership and organizational research. These domains were clarity of research aims, appropriateness of study design, adequacy of sample description, transparency of data collection methods, rigor of data analysis and coherence between findings and conclusions.

Each of the included studies was independently assessed against these criteria in order to establish the overall methodological quality of the studies. Quantitative studies were evaluated for clarity of measurement of variables, validity of instruments, and appropriateness of statistical analysis. Credibility, transparency of analytical processes, and depth of thematic interpretation were used to appraise qualitative studies. Mixed-methods studies were assessed with regard to integration between qualitative and quantitative elements and reporting.

Overall, there was moderate to high methodological quality of the 10 included studies. Most studies clearly specified their goals, used appropriate research designs, and gave adequate information on data collection and analysis procedures. Common strengths included clear alignment between research objectives and findings, well-defined samples and explicit discussion of leadership roles in change processes. Some limitations were observed, including reliance on cross-sectional designs, context-specific findings and limited generalizability, but these limitations do not affect the relevance of the studies to the goals of the review.

The quality assessment ensured that all ten studies were estimated to be appropriate for its inclusion, and a sound evidence base to synthesize the role of middle managers in leading change in healthcare organization. The results obtained after these studies were thus taken as reliable and suitable for informing the results and discussion sections of the review.

Table 2: Assessment of the Literature Quality Matrix

#	Author	Study Selection Process Described	Literature Coverage	Methods Clearly Described	Findings Clearly Stated	Quality Rating
1	Chen et al., 2024	Yes	High	Yes	Yes	High
2	Li et al., 2024	Yes	High	Yes	Yes	High
3	Morvati & Hilli, 2022	Yes	Moderate	Yes	Yes	High
4	Shawky et al., 2024	Yes	Moderate	Yes	Yes	High
5	Yassen et al., 2023	Yes	Moderate	Yes	Yes	High
6	Alluhaybi et al., 2024	Yes	High	Yes	Yes	High
7	AL-Ruzzieh et al., 2024	Yes	High	Yes	Yes	High
8	Bagot et al., 2023	Yes	Moderate	Yes	Yes	High
9	Brommeyer et al., 2024	Yes	Moderate	Yes	Yes	Moderate
10	Mackay et al., 2022	Yes	Moderate	Yes	Yes	Moderate

Table 2 shows the methodological quality assessment of the 10 primary studies included in this systematic review. The evaluation was based on five basic quality indicators: transparency of study selection process, adequacy of literature coverage, clarity of methodological description, explicit presentation of findings and overall study rigor. The majority of the included studies documented their research processes well and included coherent relationships between their research objectives, methods and outcomes.

Eight studies received a high-quality rating, indicating a high level of methodological design, complete reporting and articulation of results related to middle management and change leadership in healthcare. These studies showed strong data collection procedures, suitable analytical techniques and adequate contextual details to support interpretation. Two studies were evaluated as moderate quality because of limitations such as narrower level of contextual focus or lower levels of generalizability; however, their results were still relevant and contributed to the synthesis in a meaningful way.

Overall, the quality assessment confirmed that a reliable and credible body of evidence was provided by the included studies collectively. The dominance of good quality studies enhanced the authenticity of the results and provided a basis for confident interpretation of the role of middle managers in leading and implementing change in healthcare organizations.

Data Synthesis

Data synthesis was carried out through a narrative and thematic approach to synthesize the findings from the ten primary studies. Given the variety of research designs, healthcare settings and leadership contexts, a quantitative meta-analysis was not considered appropriate. Instead, findings were systematically compared and grouped, in order to identify recurrent patterns, shared experiences, and converging findings related to middle management and change leadership.

The synthesis showed that middle managers played a critical role in implementing strategic change initiatives at the operational level. Across studies, middle managers were described, consistently, as being responsible for facilitating communications, enabling staff engagement and acting as a mediator between senior management and frontline teams. Leadership behaviors such as supportive supervision, adaptive decision-making and proactive problem-solving were also repeatedly linked to more effective change implementation and improved workforce outcomes.

Additionally, the synthesis illustrated some common challenges experienced by middle managers such as role ambiguity, pressures of workload, lack of authority and resistance to changes. Despite these constraints studies emphasized on organizational support, leadership development and positive practice environment increased the ability of middle managers to lead change successfully. These themes formed the basis for the results and discussion sections where a coherent understanding of the influences of middle management in change processes in healthcare systems was provided.

Table 3: Research Matrix

Author, Year	Aim	Research Design	Type of Studies Included	Data Collection Tool	Result	Conclusion	Study Supports Present Study
Chen et al., 2024	To examine the practice environment of nurse managers and influencing	Cross-sectional	Quantitative	Structured questionnaire	Positive practice environments were associated with leadership effectiveness	Supportive organizational environments strengthen nurse	Demonstrates how middle managers influence organizational readiness for

	factors				and organizational support	managers' leadership capacity	change
Li et al., 2024	To assess the impact of middle managers' digital leadership on employee work engagement	Cross-sectional	Quantitative	Self-administered survey	Digital leadership positively influenced work engagement and empowerment	Middle managers play a vital role in leading digital change	Supports the role of middle managers in healthcare transformation
Morvati & Hilli, 2022	To explore middle managers' motives in developing a caring culture	Qualitative	Qualitative	Semi-structured interviews	Ethical commitment and values motivated middle managers to lead cultural change	Middle managers act as moral and cultural change agents	Highlights middle managers' influence on cultural and organizational change
Shawky et al., 2024	To examine the relationship between managerial innovation and nurses' proactivity	Cross-sectional	Quantitative	Questionnaire survey	Managerial innovation was positively linked to proactive nursing behavior	Innovative leadership by middle managers enhances change adoption	Demonstrates leadership behaviors that support change implementation
Yassen et al., 2023	To assess managers' readiness for e-Health implementation	Cross-sectional	Quantitative	Structured survey	Managers showed variable readiness for digital health adoption	Leadership readiness is critical for successful technological change	Supports the importance of middle managers in digital change leadership
Alluhaybi et al., 2024	To examine leadership styles of nurse managers and work engagement	Cross-sectional	Quantitative	Standardized leadership and engagement scales	Transformational leadership improved staff engagement	Effective leadership styles strengthen change outcomes	Reinforces leadership style as a driver of successful change
AL-Ruzzieh et al., 2024	To explore managers' perspectives on patient-centered care implementation	Qualitative	Qualitative	In-depth interviews	Middle managers identified organizational barriers and enablers of change	Middle managers bridge strategic goals and clinical practice	Supports middle managers' mediating role in change processes
Bagot et al., 2023	To explore middle managers' responses to unprofessional behavior during culture change	Qualitative	Qualitative	Semi-structured interviews	Middle managers actively reinforced accountability during change	Middle managers sustain cultural change initiatives	Highlights practical leadership actions during organizational change
Brommeyer et al., 2024	To identify organizational factors influencing digital health benefits	Qualitative	Qualitative	Focus group discussions	Leadership, trust, and resources affected digital transformation	Middle managers influence success of digital health change	Supports organizational and leadership dimensions of change
Mackay et al., 2022	To explore healthcare	Qualitative	Qualitative	Focus group interviews	Adaptive leadership	Middle managers are	Confirms middle

	middle managers' behaviors during the COVID-19 pandemic				behaviors supported crisis management	central to managing change in crises	managers' role in complex change environments
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Table 3 presents an overview of the ten main studies included in this systematic review in the form of a table to structure the information related to the aims of the studies, the methodologies employed and the findings pertinent to middle management and change leadership in healthcare. The matrix illustrates balanced evidence of quantitative and qualitative research designs in reflecting the multifaceted nature of leadership and organizational change in healthcare settings. Across the studies, middle managers were consistently found to be key players in the process of operationalizing strategic initiatives. Quantitative studies focused on the relationship between leadership styles, innovation and staff engagement, whereas qualitative studies offered in-depth information on the experiences, values and challenges of middle managers throughout the change processes. The bringing together of findings from different contexts adds to the credibility of the evidence-base.

Overall, the research matrix is confirmed to prove that middle managers play a critical role to make changes through leadership behaviors, communication, and organizational mediation. The collective findings provide direct support for the current systematic review by providing evidence on the role played by middle management in influencing change implementation, workforce engagement and organizational outcomes in healthcare system.

Results

The findings from synthesis of results revealed consistent findings across the 10 included studies, and these findings reveal that middle managers were central in initiating, translating, and sustaining change efforts in healthcare organizations. Across quantitative and qualitative evidence, middle managers influenced staff engagement, cultural alignment and implementation success through leadership behaviors, communication practices, and operational problem-solving. At the same time, the studies pointed to constant constraints e.g. resource limitations, role overload and uneven readiness for digital transformation. These results were summarized in five interrelated themes, which were supported by convergent evidence from several studies.

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

Theme	Sub-Theme	Trend	Explanation	Supporting Studies
1. Middle managers as change translators and implementers	Strategic-to-operational translation	Consistent	Middle managers converted high-level goals into unit-level actions, coordinated workflow changes, and ensured continuity of service delivery during transitions.	AL-Ruzzieh et al., 2024; Bagot et al., 2023; Mackay et al., 2022
	Boundary-spanning communication	Increasing emphasis	Middle managers acted as the communication	Bagot et al., 2023; Morvati &

			bridge between senior leadership and frontline staff, clarifying expectations and negotiating local adaptation of change initiatives.	Hilli, 2022; Mackay et al., 2022
2. Leadership behaviors shaping workforce engagement and change adoption	Transformational and supportive leadership	Strong positive association	Supportive and transformational leadership behaviors were linked with higher staff engagement, improved proactivity, and stronger implementation climate.	Alluhaybi et al., 2024; Li et al., 2024; Shawky et al., 2024
	Empowerment and psychological safety	Emerging	Middle managers improved staff participation in change when they promoted empowerment, fairness, and a supportive environment that reduced stress and strengthened motivation.	Chen et al., 2024; Li et al., 2024; Mackay et al., 2022
3. Building and sustaining culture change and accountability	Cultural change leadership	Consistent	Middle managers influenced cultural norms by reinforcing shared values and modeling expected behaviors during organizational change initiatives.	Morvati & Hilli, 2022; Bagot et al., 2023; AL-Ruzzieh et al., 2024
	Accountability and professional conduct	Increasing focus	Middle managers actively addressed unprofessional behavior and strengthened accountability mechanisms to	Bagot et al., 2023; Mackay et al., 2022; Morvati & Hilli, 2022

			support sustained culture change.	
4. Digital transformation readiness and enabling conditions	Digital leadership and engagement	Increasing	Middle managers' digital leadership was associated with engagement and commitment, indicating their role in accelerating readiness and adoption of technology-enabled change.	Li et al., 2024; Yassen et al., 2023; Brommeyer et al., 2024
	Organizational enablers and barriers	Consistent	Implementation success depended on organizational conditions such as trust, resourcing, workforce capability, and system integration; middle managers played a mediating role in these conditions.	Brommeyer et al., 2024; Yassen et al., 2023; Chen et al., 2024
5. Constraints on middle managers' capacity to lead change	Resource constraints and workload pressure	Consistent	Limited resources and heavy workloads constrained middle managers' ability to lead change, affecting readiness, morale, and sustained implementation.	Chen et al., 2024; Brommeyer et al., 2024; Mackay et al., 2022
	Role ambiguity and competing demands	Persistent	Middle managers faced competing clinical and administrative demands, which complicated decision-making and reduced the time available for structured change leadership.	Mackay et al., 2022; AL-Ruzzieh et al., 2024; Morvati & Hilli, 2022

Table 4 shows that the role of the middle management in leading change was multidimensional and consistent across the included evidence base in support of this. The strongest convergence was in the themes of change translation, leadership-driven engagement, and culture shaping, in which both qualitative and quantitative studies supported the idea that middle managers

influenced the success of implementation through communication, motivation, and reinforcement of norms. The evidence also indicated growing attention to digital transformation, pointing out that middle managers were not only operational coordinators, but were key factors in defining readiness to support technology-enabled change.

At the same time, the synthesis characterized persistent structural barriers, especially the limitation of resources, work pressures, and role strain which diminished the effectiveness and sustainability of change leadership. Overall, the results supported the notion that enhancing the leadership capacity of middle managers and improving enabling organizational conditions were key to attaining attrition-proof change results in healthcare organizations.

Discussion

This systematic review was a synthesis of evidence from 10 primary studies to determine the role of middle managers in leading change in the healthcare organization. Across a variety of contexts and methodologies, the results were consistent in showing that middle managers were vital actors of change who transformed strategic will into strategic action. Studies indicated that the middle managers in the organization actively filled the gap between the senior leadership and the frontline staff through communication, coordination, and contextual adaptation of change initiatives (AL-Ruzzieh et al., 2024; Bagot et al., 2023; Mackay et al., 2022). This intermediary role was central to keeping the implementation momentum going and ensuring that organizational goals were met and aligned with day-to-day clinical work.

Leadership behaviors came out as a decisive factor in driving workforce engagement and change adoption. Quantitative evidence showed that transformational, supportive and innovative leadership styles were positively associated with staff engagement, empowerment and proactive behaviors (Alluhaybi et al., 2024; Li et al., 2024; Shawky et al., 2024). Complementary qualitative findings focused on the role of ethical commitment, accountability and value-driven leadership in helping middle managers shape organizational culture and maintain behavioral change (Morvati & Hilli, 2022; Bagot et al., 2023). Together, these findings highlight the importance of middle management level change leadership beyond administrative control to relation and cultural influence.

The review further touched on the increasing importance of middle managers in the digital transformation. Studies focusing on digital leadership and readiness showed that middle managers influenced engagement with technology, mediated organizational enablers and barriers, and supported implementation through local problem-solving (Li et al., 2024; Yassen et al., 2023; Brommeyer et al., 2024). However, ongoing constraints such as scarce resources, high work demands and role ambiguity limited the ability of middle managers to lead change in a consistent manner, especially in times of crisis and system-wide change (Chen et al., 2024; Mackay et al., 2022).

Future Directions

Future studies should focus more on longitudinal and intervention-based research to investigate how the leadership practices of middle managers change over time and affect the sustainability of change initiatives. There is a need to evaluate structured leadership development programs aimed at middle managers specifically and how they affect organizational outcomes. In addition, further investigation of the role of middle managers in digital change, especially in the context of healthcare systems and cultures that differ from one another, would enhance the evidence base. Comparative studies that focus on differences across different professional groups and organizational structures may also indicate deeper knowledge about the optimization of middle management leadership in change.

Limitations

A number of limitations are to be recognized. The included studies differed in their design, setting and outcome measures, which made direct comparison of findings limited. Many of the studies used a cross-sectional design, limiting possibilities of drawing causal conclusions about leadership behaviors and outcomes of change. Context-specific findings and especially single-country or single-organization studies may be limited in terms of generalizability. Despite these limitations the overlap of evidence from multiple methodologies increased the robustness of the total synthesis.

Conclusion

This systematic review showed the importance of middle managers and their role in driving and sustaining change in healthcare organizations. Through the leadership behaviors, communication, cultural influence, and operational coordination, the middle managers played a significant role in shaping the engagement of the workforce and successful implementation. While organizational and structural constraints continue to abound, building the leadership capacity of middle managers and providing supportive conditions are key to effective and sustainable healthcare transformation.

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