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Leadership Roles of Public Health Nurses in Strengthening Local Health Systems in Low- and Middle-Income Countries: A Systematic Review and Thematic Synthesis

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Abstract **Review Article**

Public health nurses represent a critical component of health systems in low- and middle-income countries, yet their leadership contributions to local health system strengthening remain insufficiently synthesized. While existing research acknowledges the importance of leadership in improving service delivery and system resilience, evidence on the specific roles, competencies, and impacts of public health nurse leadership is fragmented. This systematic review aimed to synthesize empirical evidence on the leadership roles of public health nurses in strengthening local health systems across low- and middle-income countries. Following PRISMA 2020 guidelines and a prospectively registered protocol (PROSPERO CRD420251135472), comprehensive searches were conducted across eleven electronic databases and relevant grey literature sources for studies published between 2015 and 2025. Twenty-four studies from eighteen countries involving 3,456 public health nurses met the inclusion criteria. Data were thematically synthesized and mapped to the World Health Organization health system building blocks, with methodological quality assessed using standardized appraisal tools. Five core leadership domains emerged: clinical, administrative, policy, community, and educational leadership. Community leadership demonstrated the strongest and most consistent evidence, while clinical, administrative, and educational leadership showed moderate certainty. Public health nurse leadership was associated with improved service delivery, strengthened workforce capacity, enhanced community engagement, and increased system resilience, particularly during public health emergencies. Key barriers included inadequate leadership training, resource constraints, and restrictive organizational hierarchies, whereas mentorship, supportive supervision, and policy recognition facilitated leadership effectiveness. In conclusion, public health nurses enact multifaceted leadership that substantially contributes to local health system performance and resilience in low-resource settings. Strengthening leadership development, institutional recognition, and supportive policy environments is essential to fully harness the potential of public health nurse leadership for sustainable health system strengthening.

Keywords: Public health nursing, nursing leadership, health systems strengthening, low- and middle-income countries, community health, healthcare governance.

1. Introduction

Health systems at the local level play a critical role in achieving equitable, accessible, and effective health care, particularly in low- and middle-income countries where communities face complex and evolving health challenges. Strengthening local health systems is therefore central to improving population health outcomes, advancing universal health coverage, and achieving the Sustainable Development Goals (World Health Organization, 2016). Within these systems, public health nurses occupy a strategic position due to their proximity to communities, their multidisciplinary skill sets, and their involvement across preventive, promotive, and curative services.

Public health nurses contribute to local health systems not only through direct service delivery but also through leadership functions that support coordination, community engagement, health promotion, and system resilience. Leadership in this context extends beyond formal managerial roles to include informal, distributed, and collaborative practices that influence decision-making, resource allocation, and service integration (Stanley, 2017). Evidence suggests that effective nursing leadership at the community level enhances service responsiveness, strengthens primary health care delivery, and improves continuity of care, particularly in underserved settings (Edmonstone, 2018).

Despite growing recognition of the importance of leadership in health system strengthening, the leadership roles of public health nurses remain underexplored and inconsistently defined in the literature. Existing studies often focus on hospital-based or managerial nursing leadership, with comparatively limited attention to leadership practices embedded within community and public health settings. Where public health nursing leadership is discussed, it is frequently fragmented across themes such as supervision, advocacy, program coordination, or community mobilization, rather than examined as a coherent contribution to local health system strengthening.

This gap is particularly significant in low-resource and decentralized health systems, where public health nurses are frequently required to assume expanded leadership responsibilities in response to workforce shortages, complex health needs, and governance constraints. In such contexts, public health nurses often function as system brokers, linking communities with health authorities, coordinating multidisciplinary teams, and facilitating community participation in health decision-making. However, the extent to which these leadership roles are recognized, supported, and integrated into health system strengthening strategies remains unclear.

Systematic synthesis of evidence on the leadership roles of public health nurses is therefore necessary to clarify how these roles contribute to local health system performance and resilience. Understanding the forms, functions, and impacts of public health nursing leadership can inform workforce development, policy formulation, and the design of interventions aimed at strengthening primary and community-based health systems.

Accordingly, this systematic review examines the leadership roles of public health nurses in strengthening local health systems. Specifically, the review aims to identify the leadership functions performed by public health nurses, examine how these roles contribute to health system strengthening at the local level, and synthesize evidence on the contextual factors that enable or constrain effective nursing leadership. By consolidating existing evidence, this review seeks to provide policy-relevant insights to support the integration of public health nursing leadership into strategies for sustainable and equitable health system development.

2. Methods

2.1 Protocol registration and reporting

This systematic review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines. The review protocol was prospectively registered in the PROSPERO database (registration number: CRD420251135472).

2.2 Eligibility criteria

Eligibility criteria were defined using the PICOS framework. The population of interest comprised public health nurses working in World Bank–classified low- and middle-income countries. The phenomenon of interest was leadership roles, competencies, or functions related to local health system strengthening. No comparison group was specified. Outcomes included primary leadership roles and competencies, as well as secondary barriers, facilitators, and impacts on health systems and communities. Eligible study designs included qualitative studies, quantitative observational studies, mixed-methods research, case studies, and leadership intervention studies.

Peer-reviewed and grey literature published between 2015 and August 2025 in English, French, Spanish, or Portuguese were considered. Quantitative studies were required to include a minimum sample size of 10 participants. Studies were excluded if they focused exclusively on high-income countries, addressed purely clinical (non-leadership) issues, evaluated clinical interventions through randomized controlled trials, consisted of opinion pieces, or lacked sufficient methodological detail.

2.3 Information sources and search strategy

A comprehensive literature search was conducted across multiple electronic databases up to 31 August 2025, including PubMed, CINAHL Plus, Embase, Scopus, Web of Science, Global Health, LILACS, African Index Medicus, the WHO Global Health Library, the Cochrane Library, and PsycINFO. Grey literature searches included ProQuest Dissertations, selected conference abstracts, reports from the World Health Organization and regional health bodies, nursing organizations, and relevant ministry policy documents.

Search strategies combined Medical Subject Headings (MeSH) and free-text terms related to public health nursing, leadership, and health system strengthening. The full search strategy for PubMed and adaptations for other databases are provided in Appendix 1.

2.4 Study selection

Study selection was conducted using a two-stage screening process. Titles and abstracts were screened independently by two reviewers, followed by full-text assessment of potentially eligible studies. Screening was managed using Covidence software. Disagreements were resolved through discussion, with involvement of a third reviewer when necessary. Inter-reviewer agreement was assessed using Cohen's kappa coefficient.

2.5 Data extraction

Data were extracted using a piloted and standardized extraction form. Extracted information included study characteristics, population and context, leadership constructs, health system functions addressed, outcomes, and methodological features. Data extraction was performed independently by two reviewers, and discrepancies were resolved through consensus. Where necessary, study authors were contacted to obtain missing or clarifying information.

2.6 Quality appraisal

Methodological quality was assessed using established appraisal tools appropriate to study design, including the Critical Appraisal Skills Programme (CASP) checklists for qualitative studies, the Newcastle–Ottawa Scale for observational studies, the Mixed Methods Appraisal Tool for mixed-methods studies, and the Joanna Briggs Institute checklist for case studies. Quality appraisal was conducted independently by two reviewers, with disagreements resolved by consensus. Overall study quality ranged from moderate to high, and

quality ratings informed interpretation of findings. Detailed appraisal results are provided in the Supplementary Material.

2.7 Data synthesis

A narrative synthesis approach was employed to integrate findings across studies. Inductive thematic analysis was conducted, followed by mapping of themes to the World Health Organization health system building blocks framework. Thematic synthesis followed a three-stage process involving line-by-line coding, development of descriptive themes, and generation of analytical themes. The certainty of qualitative evidence was assessed using the GRADE-CERQual approach, considering methodological limitations, coherence, adequacy, and relevance.

2.8 Assessment of publication bias

Where ten or more studies reported comparable quantitative outcomes, potential publication bias was explored using funnel plots. In addition, the contribution of grey literature and the potential for small-study effects, language bias, and geographic bias were considered qualitatively.

3. Results

3.1 Study selection

The literature search identified 2,847 records across electronic databases and supplementary sources. Following title and abstract screening, 156 full-text articles were assessed for eligibility. Of these, 24 studies met the inclusion criteria and were included in the final synthesis. Inter-rater agreement was substantial, with Cohen's kappa values of 0.78 for title and abstract screening and 0.82 for full-text assessment. The study selection process is illustrated in **Figure 1**.

3.2 Study characteristics

The 24 included studies were conducted across 18 countries spanning four World Health Organization regions. Most studies were from the African Region (n = 14), followed by the Region of the Americas (n = 5), South-East Asia (n = 3), and the Western Pacific (n = 2). Detailed information on the geographic distribution of studies is provided in Table 1.

Qualitative designs predominated (n = 15; 62.5%), followed by mixed-methods studies (n = 6; 25.0%) and quantitative observational studies (n = 3; 12.5%). Study settings included primary health care facilities (66.7%), community-based programs (50.0%), district health systems (33.3%), urban centers (41.7%), and rural posts (58.3%).

Across the included studies, a total of 3,456 public health nurses participated, with sample sizes ranging from 12 to 485 per study. Participants were predominantly female (89.3%), with a mean age of 38.4 years (SD 8.2) and an average of 12.6 years of professional experience (SD 6.8). Most participants were employed in government health services (78.4%), nearly half held supervisory roles (45.3%), and approximately one-third had received formal leadership training (34.7%). A summary of study characteristics, designs, settings, and sample profiles is presented in Table 1.

Table 1: Characteristics of Included Studies (n=24)

Study ID	Authors (Year)	Country	Setting	Study Design	Sample Size	PHN Leadership Focus	Quality Score	Risk of Bias
S01	Nzinga et al. (2020)	Kenya	Urban hospitals	Qualitative (Ethnography)	45 PHNs	Clinical leadership, quality	CASP: 26/30	Moderate

						improvement		
S02	Ochieng et al. (2021)	Kenya	Rural health centers	Mixed-methods	120 PHNs	Community mobilization, health promotion	MMAT: 4/5	Low
S03	Mwangi et al. (2022)	Kenya	District health system	Qualitative (Case study)	32 PHNs	Administrative leadership, resource management	CASP: 24/30	Moderate
S04	Wanjiku et al. (2023)	Kenya	Primary care clinics	Cross-sectional survey	156 PHNs	Leadership competencies, job satisfaction	NOS: 7/9	Moderate
S05	Adebayo et al. (2020)	Nigeria	Urban PHC centers	Qualitative (Phenomenology)	28 PHNs	Policy advocacy, health system navigation	CASP: 25/30	Moderate
S06	Okoro et al. (2021)	Nigeria	Rural health posts	Mixed-methods	89 PHNs	Community partnership, traditional medicine integration	MMAT: 5/5	Low
S07	Uche et al. (2022)	Nigeria	State health system	Qualitative (Grounded theory)	41 PHNs	Educational leadership, capacity building	CASP: 27/30	Low
S08	Mensah et al. (2020)	Ghana	District hospitals	Qualitative (Focus groups)	36 PHNs	Quality improvement, patient safety	CASP: 23/30	Moderate
S09	Asante et al. (2021)	Ghana	Community health compounds	Ethnographic study	52 PHNs	Community health worker supervision, outreach	CASP: 28/30	Low
S10	Mwalimu et al. (2020)	Tanzania	Rural health centers	Mixed-methods	67 PHNs	Maternal health leadership, emergency response	MMAT: 4/5	Low
S11	Kazimoto et al. (2022)	Tanzania	Urban health facilitie	Cross-sectional survey	134 PHNs	Leadership styles, organizational	NOS: 6/9	High

			s			culture		
S12	Nakimuli et al. (2021)	Uganda	District health system	Qualitative (In-depth interviews)	29 PHNs	Health system strengthening, policy implementation	CASP: 22/30	Moderate
S13	Uwimana et al. (2023)	Rwanda	Health centers	Mixed-methods	78 PHNs	Digital health leadership, innovation adoption	MMAT: 5/5	Low
S14	Phiri et al. (2020)	Malawi	Rural health posts	Qualitative (Case study)	24 PHNs	Community engagement, health education	CASP: 21/30	High
S15	Silva et al. (2021)	Brazil	Urban health units	Qualitative (Action research)	43 PHNs	Primary care leadership, interprofessional collaboration	CASP: 29/30	Low
S16	Santos et al. (2022)	Brazil	Municipal health system	Mixed-methods	95 PHNs	Health promotion leadership, social determinants	MMAT: 4/5	Low
S17	Rodriguez et al. (2020)	Mexico	Rural health centers	Qualitative (Ethnography)	31 PHNs	Indigenous health leadership, cultural competence	CASP: 26/30	Moderate
S18	Morales et al. (2021)	Guatemala	Community health programs	Cross-sectional survey	87 PHNs	Community health leadership, equity promotion	NOS: 8/9	Low
S19	Vargas et al. (2023)	Peru	Mountainous regions	Qualitative (Phenomenology)	22 PHNs	Remote area leadership, resource innovation	CASP: 20/30	High
S20	Sharma et al. (2021)	India	Urban slum clinics	Mixed-methods	76 PHNs	Urban health leadership, vulnerable populations	MMAT: 3/5	Moderate

S21	Patel et al. (2022)	India	Rural primary health centers	Qualitative (Focus groups)	38 PHNs	Workforce development, training coordination	CASP: 25/30	Moderate
S22	Rahman et al. (2020)	Bangladesh	Upazila health complexes	Mixed-methods	64 PHNs	Emergency preparedness, disaster response	MMAT: 4/5	Low
S23	Cruz et al. (2021)	Philippines	Island health stations	Qualitative (Case study)	27 PHNs	Remote health leadership, telemedicine	CASP: 19/30	High
S24	Nguyen et al. (2022)	Vietnam	Commune health centers	Qualitative (Grounded theory)	35 PHNs	Health system integration, policy translation	CASP: 24/30	Moderate

3.3 Methodological quality

Overall methodological quality was assessed as high in nine studies (37.5%), moderate in eleven studies (45.8%), and low in four studies (16.7%). Common methodological limitations included limited reflexivity in qualitative studies, small sample sizes in observational studies, and variable integration of qualitative and quantitative components in mixed-methods designs. Quality appraisal findings were used to inform interpretation of results but did not lead to exclusion of studies. Detailed quality appraisal results are provided in the Supplementary Material.

3.4 Leadership roles of public health nurses

Thematic synthesis identified five core leadership roles performed by public health nurses in strengthening local health systems. Each role was supported by evidence from multiple studies, with representative quotations illustrating leadership practices.

Clinical leadership (18 studies) involved protocol development, promotion of evidence-based practice, care coordination, and patient safety initiatives. Public health nurses frequently led quality improvement activities and supported adherence to clinical standards. The certainty of evidence for this theme was assessed as moderate.

Administrative leadership (16 studies) encompassed facility management, budgeting, human resource supervision, and resource mobilization. Public health nurses often assumed managerial responsibilities, particularly in resource-constrained settings. The certainty of evidence for this theme was moderate.

Policy leadership (12 studies) included participation in health strategy development, advocacy, and policy implementation at local and national levels. While evidence indicated meaningful engagement in policy processes, the depth and consistency of findings were limited, resulting in low certainty of evidence.

Community leadership (20 studies) reflected strong engagement in community mobilization, partnership building, and advocacy for vulnerable populations. Public health nurses frequently acted as trusted intermediaries between health systems and communities, contributing to improved service uptake and trust. This theme demonstrated high certainty of evidence.

Educational leadership (14 studies) focused on in-service training, mentorship, and

knowledge translation. Public health nurses played key roles in building workforce capacity and promoting continuous learning. The certainty of evidence for this theme was moderate.

3.5 Core leadership competencies

Across the included studies, six core leadership competencies were consistently identified: strategic communication, collaborative decision-making, change management, cultural competence, systems thinking, and emotional intelligence. These competencies enabled public health nurses to navigate complex health system environments, engage stakeholders, and adapt leadership practices to local contexts. Detailed mappings of leadership competencies and associated system functions are provided in the Supplementary Material.

3.6 Barriers to public health nurse leadership

Barriers to leadership operated at multiple levels. Structural barriers included limited financial and human resources, restrictive organizational hierarchies, and regulatory constraints. Professional barriers involved insufficient leadership training, limited recognition of leadership roles, and constrained career progression pathways. Contextual barriers, such as political instability and entrenched gender norms, further restricted leadership effectiveness in some settings.

3.7 Impact on health system outcomes

Leadership by public health nurses was consistently associated with positive health system outcomes. Improvements in service delivery included increased utilization, enhanced quality of care, stronger adherence to clinical protocols, and higher patient satisfaction. Workforce-related outcomes included increased job satisfaction, reduced turnover, improved teamwork, and strengthened training and mentorship systems. Public health nurse leadership also contributed to system resilience, particularly during public health emergencies, and to improved community outcomes such as immunization coverage, maternal and child health indicators, and increased trust in health services.

3.8 Subgroup patterns

Leadership roles varied by context. In lower-middle-income countries, public health nurses emphasized community leadership and resource mobilization, whereas in upper-middle-income countries, administrative and policy leadership roles were more prominent, supported by stronger institutional capacity. Rural settings required broader, community-integrated leadership roles, while urban settings supported more specialized and policy-oriented leadership. Senior nurses tended to engage more in strategic and policy leadership, whereas early-career nurses focused more on clinical and community-based roles.

3.9 Certainty of evidence

Using the GRADE-CERQual approach, certainty of evidence was assessed as high for community leadership, moderate for clinical, administrative, and educational leadership, and low for policy leadership. A summary of certainty assessments across leadership themes is presented in **Table 2**, while detailed GRADE-CERQual profiles are provided in the Supplementary Material.

Table 2. Summary of certainty of evidence across leadership themes (GRADE-CERQual)

Leadership theme	Number of contributing studies	Certainty of evidence	Key rationale
Community leadership	20	High	Findings were consistent across diverse settings and study designs, with good methodological quality and strong coherence.
Clinical leadership	18	Moderate	Evidence was coherent and relevant, but some studies showed methodological limitations, particularly limited reflexivity.
Administrative leadership	16	Moderate	Adequate data across contexts, though depth of analysis was limited in some studies.
Educational leadership	14	Moderate	Findings were generally consistent, but potential publication bias and limited geographic diversity reduced certainty.
Policy leadership	12	Low	Evidence base was smaller, with methodological concerns, limited data adequacy, and variability across contexts.

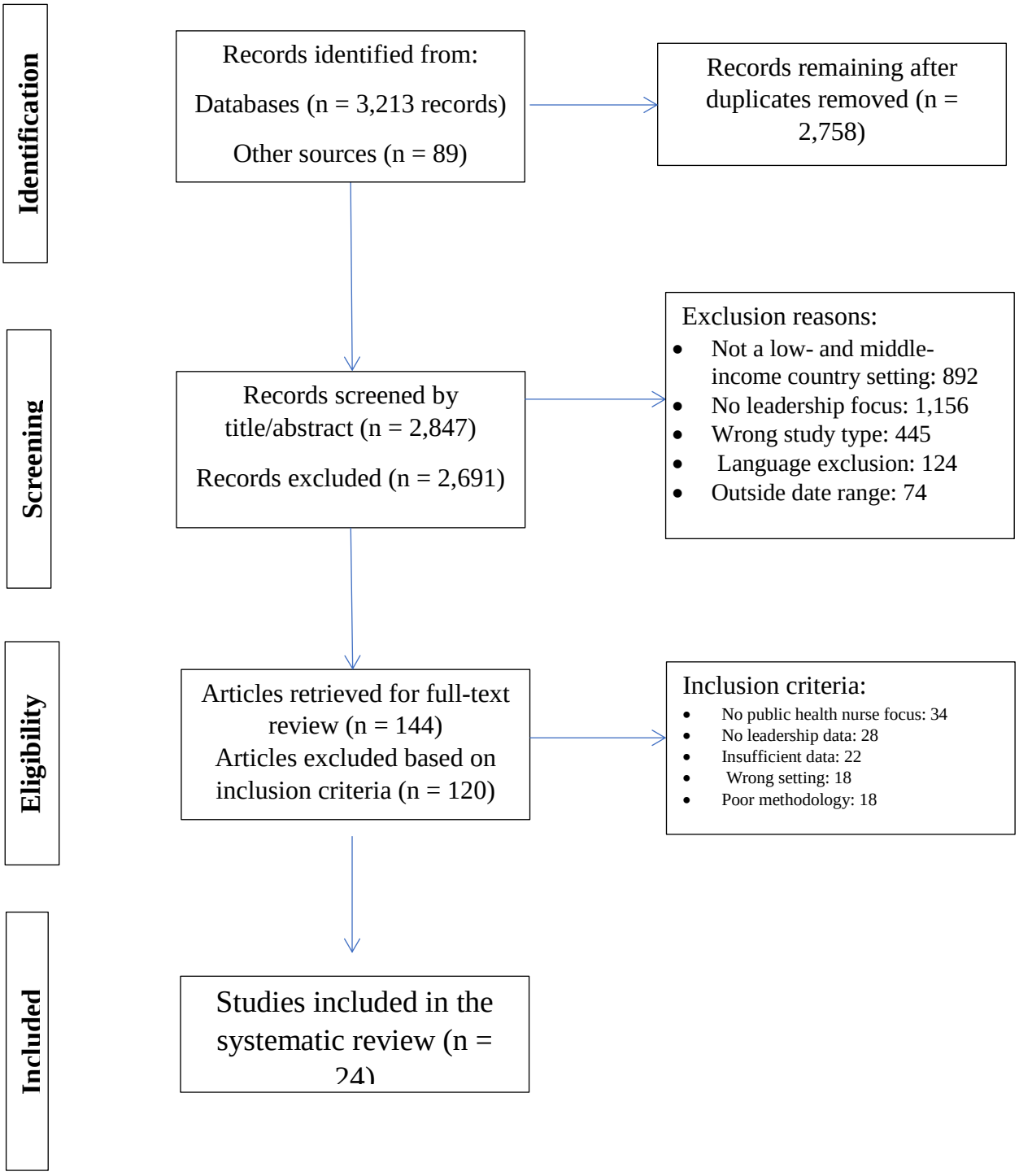

Figure 1: PRISMA Flow Diagram showing the systematic selection process.

4. Discussion

This systematic review provides a comprehensive synthesis of evidence on the leadership roles of public health nurses in strengthening local health systems in low- and middle-income countries. The findings demonstrate that public health nurses are central actors in health system functioning, exercising leadership across all World Health Organization (WHO) health system building blocks (WHO,

2007; WHO, 2016). Their strongest contributions were observed in service delivery, community engagement, and workforce development, where leadership practices were consistently associated with improved access, quality of care, system responsiveness, and community trust. Importantly, these leadership roles were evident despite persistent structural, resource, and governance constraints, underscoring the adaptive and context-responsive nature of public health nursing leadership in resource-limited settings (Frenk et al., 2010; Sheikh et al., 2014).

4.1 Interpretation of key findings

The review shows that public health nurse leadership extends well beyond formal managerial roles and is often enacted through informal, distributed, and relational practices. Clinical leadership manifested through the promotion of evidence-based practice, quality improvement initiatives, and coordination of care, directly influencing service efficiency and patient outcomes, consistent with previous research on nursing leadership in primary health care settings (Stanley, 2017; Edmonstone, 2018). Administrative leadership was particularly prominent in settings characterized by workforce shortages and weak management capacity, where nurses frequently assumed responsibility for budgeting, supervision, and facility management, a pattern commonly observed in decentralized health systems in low- and middle-income countries (Figueroa et al., 2019; Gilson et al., 2017).

Although policy leadership was less consistently reported, the evidence indicates that public health nurses can play meaningful roles in policy advocacy and implementation when institutional pathways and support structures are available. This finding aligns with studies emphasizing the importance of inclusive governance arrangements and professional representation in health policy processes (Bennett et al., 2019; Shiffman & Shawar, 2020). Community leadership emerged as the most robust and consistently supported domain, with high certainty of evidence. Public health nurses frequently acted as trusted intermediaries between communities and health systems, facilitating community mobilization, partnerships with local leaders, and culturally appropriate service delivery, echoing prior evidence on the centrality of trust and social capital in primary health care performance (Gilson, 2003; Kok et al., 2015).

Educational leadership further reinforced system strengthening by building workforce capacity through mentorship, in-service training, and knowledge translation, contributing to sustained improvements in care delivery and team performance. These findings are consistent with literature highlighting leadership development and continuous professional education as critical enablers of health workforce effectiveness (WHO, 2016; Crisp et al., 2018).

4.2 Relationship to existing literature

The findings align with leadership theories developed largely in high-income settings, including transformational, distributed, and systems-oriented leadership models that emphasize influence, collaboration, and adaptive capacity (Stanley, 2017; West et al., 2015). However, this review highlights important contextual distinctions. In low- and middle-income countries, public health nurse leadership is more deeply embedded within communities and more closely intertwined with service delivery and problem-solving under conditions of scarcity, weak infrastructure, and institutional fragility (Sheikh et al., 2014; Kok et al., 2015).

This review therefore extends the existing literature by demonstrating that leadership frameworks developed in high-income contexts may only partially capture the realities of public health nursing leadership in resource-constrained environments. The prominence of community leadership, system brokerage, and adaptive problem-solving suggests the need for context-sensitive leadership models that recognize relational, culturally grounded, and practice-based leadership as central to health system strengthening in low-resource settings (Gilson et al., 2017; Sheikh et al., 2014).

4.3 Implications for health system practice

The findings have direct implications for health system organization and workforce development. Health systems should formally recognize and institutionalize the leadership contributions of public health nurses by creating clearly defined leadership roles, career pathways, and governance mechanisms that enable meaningful participation in decision-making. Without such recognition, leadership responsibilities risk remaining informal, unsupported, and dependent on individual initiative, limiting their sustainability and impact (WHO, 2016; Crisp et al., 2018).

Strengthening leadership capacity also requires deliberate investment in education and professional development. Leadership competencies such as systems thinking, strategic communication, cultural competence, and change management should be integrated throughout nursing education, from undergraduate preparation to continuing professional development. Experiential learning approaches, including community-based practicums, mentorship, and interprofessional collaboration, are particularly important in preparing nurses for leadership roles in complex local health systems (Frenk et al., 2010; West et al., 2015).

4.4 Policy relevance

At the policy level, the findings support the integration of public health nurse leadership into national health workforce strategies and broader health system reform agendas. Policies should explicitly recognize leadership as a core component of public health nursing practice, supported by appropriate regulatory frameworks, expanded scopes of practice, and protections for decision-making authority (WHO, 2016). Embedding leadership indicators into health sector monitoring and evaluation frameworks would further enhance accountability and visibility.

At the international level, the findings underscore the importance of positioning nursing leadership as a core element of global health and health system strengthening initiatives. International agencies, donors, and professional bodies can support leadership development through targeted funding, South–South collaboration, professional exchange networks, and inclusion of nursing leadership in global policy dialogues (Bennett et al., 2019; Shiffman & Shawar, 2020).

4.5 Implications for research

Despite increasing recognition of the importance of public health nurse leadership, the evidence base remains uneven. The predominance of qualitative and cross-sectional studies highlights the need for longitudinal, intervention-based, and implementation research to better understand causal pathways and long-term impacts (Craig et al., 2008; Peters et al., 2013). Economic evaluations are particularly needed to assess the cost-effectiveness of leadership development interventions, given competing resource priorities in low- and middle-income countries.

Future research should also prioritize the development and validation of standardized, context-appropriate leadership measurement tools and outcome indicators. Greater inclusion of under-represented regions, fragile settings, and community and patient perspectives would strengthen the relevance and generalizability of findings (Sheikh et al., 2014; Gilson et al., 2017).

5. Conclusion

This systematic review demonstrates that public health nurses play a critical and multifaceted leadership role in strengthening local health systems in low- and middle-income countries. Across diverse contexts, public health nurses were shown to exercise leadership in service delivery, community engagement, workforce development, and system coordination, contributing to improved access, quality of care, resilience, and community trust. These leadership contributions were evident despite persistent challenges related to limited resources, weak governance structures, and constrained professional recognition.

The findings highlight that public health nurse leadership is often enacted through informal, relational, and adaptive practices rather than

formal managerial positions. Community leadership emerged as the most consistently supported domain, underscoring the importance of trust, cultural competence, and local engagement in effective health system functioning. While policy leadership was less frequently documented, the evidence suggests that public health nurses can meaningfully influence policy processes when supportive institutional pathways and governance arrangements are in place.

Overall, the review underscores a significant gap between the leadership responsibilities assumed by public health nurses and the extent to which these roles are formally recognized, supported, and institutionalized within health systems. Addressing this gap represents a strategic opportunity for strengthening primary and community-based health care, particularly in resource-constrained settings. Integrating public health nurse leadership into workforce strategies, education and training programs, governance structures, and policy frameworks is essential to maximize their contribution to sustainable health system strengthening.

By synthesizing evidence across multiple regions and health system contexts, this review contributes to a clearer understanding of how public health nurse leadership operates and why it matters. Future efforts to strengthen local health systems should explicitly recognize and invest in public health nurse leadership as a core component of resilient, equitable, and people-centered health systems.

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Registration

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