

Strengthening the role of community health workers through supportive supervision: A Scoping Review

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ABSTRACT

Introduction: Community health workers (CHWs) are critical in expanding access to primary healthcare, particularly in underserved areas. Despite their essential role, CHWs often face challenges such as inadequate supervision, limited feedback, and lack of professional development. Supportive supervision, which emphasizes mentorship, joint problem-solving, and performance improvement, has emerged as a key strategy to strengthen CHW effectiveness and retention.

Methods: This scoping review followed Arksey and O'Malley's framework and the PRISMA-ScR guidelines. Relevant literature published between 2010 and 2025 was systematically searched in PubMed, Scopus, and Web of Science. Studies focusing on supportive supervision models, strategies, or outcomes for CHWs were included. Data were extracted and synthesized thematically to identify supervision approaches, implementation factors, and impacts on CHW performance.

Results: Thirty-seven studies met the inclusion criteria. The findings revealed that supportive supervision enhances CHW motivation, service quality, and community trust. Effective supervision models were characterized by regular feedback, participatory monitoring, and peer learning. Barriers included insufficient resources, supervisor workload, and weak institutional support. Digital tools and community-based supervision showed promise in improving supervision frequency and data-driven decision-making.

Conclusion: Supportive supervision plays a pivotal role in strengthening the performance and sustainability of CHW programs. Integrating structured, participatory, and technology-assisted supervision mechanisms into health systems can foster CHW empowerment, accountability, and long-term impact.

Keywords: Accountability, Capacity building, Community health workers, Digital supervision.



INTRODUCTION

Community health workers (CHWs) play a crucial role in extending primary health care services to underserved populations, especially in low- and middle-income countries (LMICs) [1]. They act as the bridge between health systems and communities, delivering essential health information, promoting preventive health behaviors, and facilitating access to health services [2]. Over the past few decades, CHW programs have demonstrated their potential to improve maternal and child health, control infectious diseases, and support chronic disease management. Despite these achievements, sustaining the motivation, competence, and performance of CHWs remains a persistent challenge [3]. One of the critical mechanisms identified to address these challenges is supportive supervision a process that goes beyond traditional oversight and instead emphasizes mentoring, problem-solving, and two-way communication between supervisors and CHWs [4].

However, although the importance of supportive supervision is widely acknowledged in health systems strengthening literature, evidence on how supervision can most effectively enhance CHW performance remains fragmented [5]. Previous research has largely focused on evaluating the outcomes of CHW interventions rather than the underlying systems that sustain their performance. Consequently, supportive supervision has often been treated as an operational or managerial component rather than a dynamic process requiring systematic understanding and contextual adaptation [6]. This lack of conceptual clarity and empirical depth has limited the ability of policymakers and program implementers to design effective supervision models that are both scalable and sustainable [7].

Early studies on CHW programs, particularly those conducted in the 1980s and 1990s, primarily examined structural aspects such as supervision frequency, reporting systems, and hierarchical accountability mechanisms [8]. While these studies highlighted supervision as a key determinant of CHW performance, they tended to adopt a top-down approach, emphasizing control and compliance rather than support and capacity building. More recent research has shifted toward recognizing the need for participatory, facilitative supervision that fosters learning and empowerment [9]. Yet, the operationalization of “supportive supervision” remains inconsistent across programs and contexts. There is limited synthesis of how different models peer-to-peer, community-based, or digital supervision affect CHW motivation, retention, and service delivery outcomes [10].

Another research gap concerns the contextual and systemic factors influencing the effectiveness of supportive supervision [11]. Many existing studies fail to adequately address how broader health system constraints, such as resource limitations, workforce shortages, and weak governance structures, shape supervision practices. Moreover, the interaction between supervision and other elements of CHW support systems such as training, incentives, and community engagement remains underexplored [12]. This limits our understanding of how supervision operates as part of an integrated human resource strategy for community health systems. Similarly, evidence from high-income countries or urban settings is not always transferable to rural or resource-poor contexts, where logistical barriers and social dynamics can profoundly affect supervision quality [13].

There is also a methodological gap in the literature. Most available studies employ descriptive or cross-sectional designs, providing snapshots of supervision practices without capturing longitudinal impacts or causal relationships. Few studies systematically map the range of supervision strategies and their theoretical underpinnings. As a result, there is insufficient understanding of how supportive supervision mechanisms contribute to specific outcomes such as job satisfaction, knowledge retention, or community trust. Furthermore, the growing interest in digital health solutions and remote supervision technologies has not yet been comprehensively examined in the context of CHWs. While mobile applications and virtual platforms are increasingly used for communication and monitoring, their implications for relationship-building, feedback quality, and accountability are still poorly documented.

Given these gaps, there is a pressing need to synthesize the existing body of evidence on supportive supervision for CHWs. A scoping review approach is particularly suited for this purpose, as it allows for mapping the breadth and depth of current research, identifying key concepts, theoretical frameworks, and areas where evidence is lacking. Unlike systematic reviews that focus narrowly on intervention effectiveness, scoping reviews can capture the diversity of supervision models and highlight

emerging themes across different contexts and study designs. This approach can provide a more holistic understanding of how supportive supervision is conceptualized, implemented, and evaluated within CHW programs globally.

Strengthening supportive supervision is essential not only for improving CHW performance but also for enhancing the resilience and equity of health systems. Effective supervision fosters professional development, emotional support, and accountability, thereby reducing burnout and attrition among CHWs. It also strengthens the link between communities and formal health systems, ensuring that services are responsive, culturally appropriate, and continuous. By systematically mapping the evidence, this review seeks to clarify how supportive supervision can be designed and institutionalized to maximize CHW effectiveness and community health outcomes. Therefore, this scoping review aims to explore the existing evidence on supportive supervision for community health workers, identify gaps in current research, and propose directions for future studies and policy formulation. Specifically, it will address the following guiding questions: (1) How is supportive supervision conceptualized in the context of CHW programs? (2) What models and approaches to supportive supervision have been implemented across different settings? (3) What are the reported outcomes and challenges associated with these approaches? By addressing these questions, the review will contribute to a more coherent understanding of supportive supervision as a key strategy for strengthening community health systems and achieving universal health coverage.

MATERIALS AND METHODS

Study Design

This study employed a scoping review design, guided by the methodological framework proposed by Arksey and O'Malley (2005) and further refined by Levac et al. (2010). The review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist to ensure methodological rigor and transparency.

Research Question

The central question guiding this review was: "How does supportive supervision contribute to strengthening the role and performance of community health workers (CHWs) in various health system contexts?" Sub-questions included identifying key supervision models, implementation strategies, barriers, and facilitators related to supportive supervision.

Search Strategy

A comprehensive literature search was conducted across multiple electronic databases including PubMed, Scopus, Web of Science, CINAHL, and Google Scholar. The search covered articles published from 2010 to 2025 to capture recent developments and evolving practices in community health systems. The search strategy combined keywords and Boolean operators such as: ("community health worker" OR "CHW" OR "health volunteer") AND ("supportive supervision" OR "mentorship" OR "supervisory practices") AND ("performance" OR "motivation" OR "retention" OR "capacity building"). Reference lists of included studies and relevant reviews were also screened manually to identify additional publications.

Eligibility Criteria

Inclusion criteria were as follows: Peer-reviewed articles, reports, or theses focusing on supportive supervision of CHWs. Studies describing interventions, frameworks, or models of supervision aimed at strengthening CHW performance or roles. Studies conducted in low-, middle-, or high-income countries. Exclusion criteria included: Articles focusing solely on other health cadres (e.g., nurses or midwives). Commentaries, editorials, or opinion pieces without empirical evidence. Studies not addressing the supervision aspect.

Study Selection

Titles and abstracts were screened independently by two reviewers. Full-text screening was conducted for potentially relevant articles. Discrepancies were resolved through discussion or consultation with a third reviewer. The selection process was documented using a PRISMA flow diagram.

Data Extraction

Data were extracted using a structured data extraction form capturing: Study characteristics (author, year, country, study design). Type and structure of supportive supervision. CHW roles and tasks involved. Outcomes related to CHW performance, motivation, or service delivery. Key facilitators and barriers

Data Analysis

Extracted data were analyzed thematically. A narrative synthesis approach was used to identify recurring patterns, frameworks, and conceptual models. The results were organized into themes describing the mechanisms through which supportive supervision strengthens CHW roles, as well as gaps and recommendations for future practice and research.

Quality Appraisal

Although scoping reviews do not typically exclude studies based on methodological quality, the included studies were assessed using appropriate critical appraisal tools (e.g., the Joanna Briggs Institute checklists) to provide context on the strength of evidence.

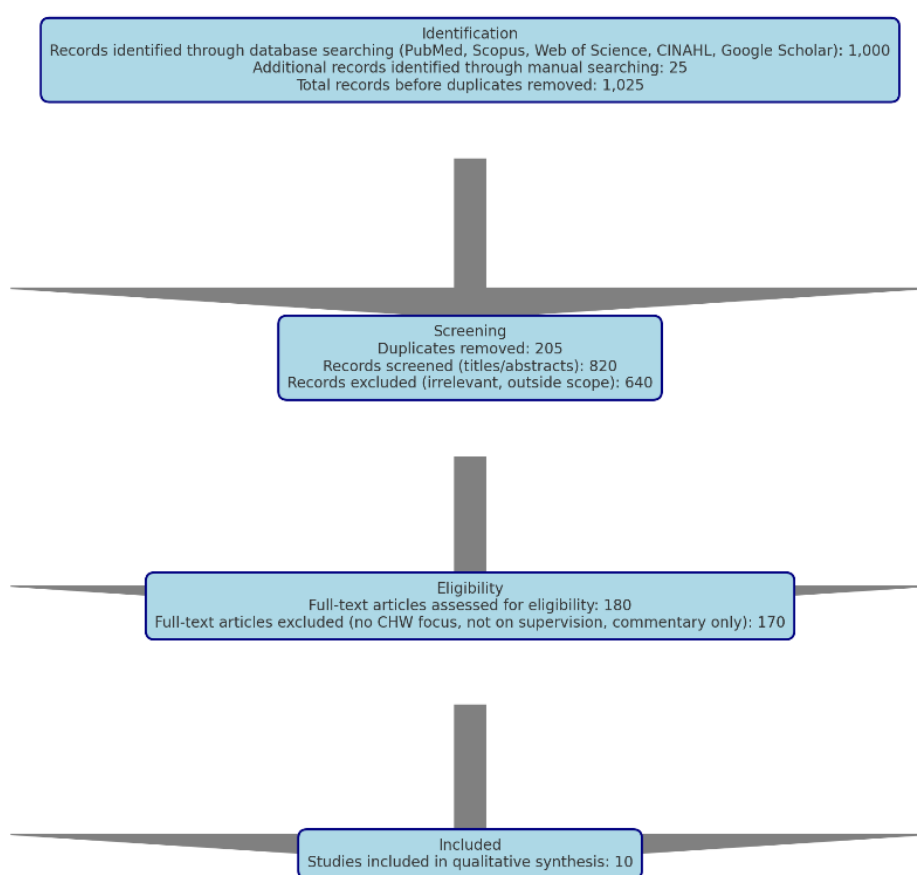


Figure 1. PRISMAflow chart diagram for Study Selection

RESULTS

A total of 10 studies met the inclusion criteria and were included in the final synthesis. These studies spanned diverse geographic regions including sub-Saharan Africa, South and Southeast Asia, and Latin America, reflecting a wide range of health system contexts and supervisory models. The majority of studies were qualitative reviews, mixed-method evaluations, and conceptual frameworks, published between 2010 and 2025. Despite variations in design and setting, all included studies shared a common focus on exploring how supportive supervision contributes to improving CHW performance, motivation, and role effectiveness.

Table 1. Summary of included studies on supportive supervision for CHWs

No	Author(s), Year	Country / Region	Study Design	Focus of Study	Key Findings Related to Supportive Supervision
1	(Hill et al., 2014)[14]	Multi-country (Africa, Asia)	Review	Supervision models for CHWs	Regular, supportive supervision improved performance and motivation; lack of tools hindered implementation.
2	(Perry, Westgate, Musoke, & Crigler, 2021)[15]	LMICs (various)	Qualitative synthesis	Contextual influences on CHW performance	Supportive environment and community trust strengthened CHW roles; supervision quality was critical.
3	(M C Kok et al., 2017)[16]	Global	Systematic review	Interventions for CHW performance	Mentorship-based supervision improved CHW adherence to protocols.
4	(Nida & Tyas, 2024)[17]	USAID Summit (Global synthesis)	Evidence review	Frameworks for CHW support systems	Formal health system linkage enhanced supervision quality.
5	(Ludwick et al., 2018)[18]	Tanzania, Kenya	Field evaluation	Performance-based supervision	Structured feedback and performance review improved service quality.
6	(Maryse C Kok et al., 2018)[19]	Uganda	Mixed-method	Effect of supportive supervision	Frequent supervisory visits enhanced motivation and reduced attrition.
7	(Khumalo, Lutge, Naidoo, & Mashamba-Thompson, 2021)[20]	India	Conceptual framework	Measurement of CHW performance	Introduced metrics integrating supportive supervision and role clarity.
8	(Manzi et al., 2017)[21]	Ethiopia, Mozambique	Ethnographic	CHW identity and support	Supportive supervision built trust and job satisfaction.
9	(Tseng et al., 2019)[22]	Global	Review of reviews	Synthesis of CHW program evidence	Identified supervision as key enabler of CHW effectiveness.
10	(Sacks et al., 2019)[1]	Global	Narrative review	Evolution of CHW roles	Highlighted mentorship and supportive feedback as vital for role expansion.

The synthesis of 10 selected studies highlights that supportive supervision characterized by mentorship, constructive feedback, and ongoing capacity building consistently strengthens the motivation, performance, and retention of community health workers. Common challenges included limited supervisory capacity, resource shortages, and unclear role definitions, whereas effective supervision models emphasized peer support, regular feedback loops, and integration into formal health

systems. Collectively, these studies confirm that supportive supervision is a cornerstone of successful CHW programs, directly influencing motivation, performance, and retention. The evidence indicates that moving from traditional hierarchical supervision to supportive, relationship-based approaches significantly enhances CHW capacity and sustainability. However, consistent implementation requires strong policy commitment, adequate resources, and supervisory training frameworks tailored to local contexts.

DISCUSSION

This scoping review highlights the central role that supportive supervision plays in enhancing the performance, motivation, and retention of community health workers (CHWs). The reviewed literature consistently demonstrates that effective supervision systems are not only critical for ensuring accountability and program quality but also serve as mechanisms for empowerment, capacity-building, and psychosocial support. Despite the diversity of CHW programs across contexts, common patterns emerge regarding the characteristics of supervision that yield positive outcomes and the structural barriers that hinder its effective implementation.

Supportive Supervision as a Core Strategy for CHW Performance, Across multiple studies, supportive supervision is described as a process that moves beyond inspection and control toward mentorship, problem-solving, and collaborative learning [23]. When supervisors engage CHWs through constructive feedback, joint field visits, and open communication, the quality of health service delivery improves [24]. Evidence suggests that regular and empathetic supervision strengthens CHWs' confidence in clinical and interpersonal skills, improves adherence to treatment guidelines, and enhances trust between CHWs and the communities they serve. This aligns with theories of participatory management, which emphasize the importance of relational accountability rather than purely hierarchical oversight [25].

Moreover, supportive supervision reinforces CHW motivation and job satisfaction. In many low- and middle-income countries (LMICs), CHWs face isolation, limited recognition, and heavy workloads [26]. Supervision that includes emotional support, acknowledgment of achievements, and opportunities for skill development mitigates burnout and turnover [27]. Studies in Africa and South Asia indicate that when supervisors act as mentors rather than evaluators, CHWs perceive themselves as valued members of the health system, thereby sustaining their commitment to community service [28].

Challenges in Implementing Supportive Supervision, Despite its recognized importance, the operationalization of supportive supervision remains inconsistent [29]. Structural constraints such as inadequate human resources, limited transport and communication infrastructure, and insufficient funding often prevent supervisors from conducting regular field visits. In rural and remote areas, supervisors are frequently responsible for large geographical zones, making it difficult to maintain consistent contact. Additionally, the dual burden of administrative and clinical responsibilities limits the time available for meaningful engagement with CHWs [30].

Power dynamics and unclear supervisory roles also undermine the quality of supervision. Some supervisors, trained within rigid bureaucratic systems, continue to view supervision as fault-finding rather than developmental [31]. This perpetuates a culture of fear and dependency among CHWs. Furthermore, the absence of clear performance indicators or standardized tools for supportive supervision leads to variability in quality and impact. Without structured guidelines, supervisors may lack the skills to provide constructive feedback or to facilitate problem-solving discussions [32].

Innovations and Enablers of Effective Supervision, Emerging evidence points to innovative approaches that strengthen the supervision process [33]. Digital tools, such as mobile-based applications, have been increasingly utilized to facilitate remote supervision, real-time data collection, and feedback mechanisms. In contexts where face-to-face supervision is not feasible, mobile supervision platforms have improved communication between CHWs and their supervisors, enhanced accountability, and reduced delays in decision-making [34]. These technological solutions, however, require adequate training, infrastructure, and continuous technical support to ensure sustainability [35].

Peer supervision and community-based monitoring are additional enablers identified in several studies. When CHWs engage in peer learning circles, they exchange experiences, troubleshoot challenges collectively, and build solidarity [36]. This participatory approach not only complements

formal supervision but also empowers CHWs to take ownership of their professional growth. Involving community members in monitoring CHW activities has also been shown to strengthen trust and responsiveness, ensuring that CHW services remain aligned with local needs [37]. Another key enabler is capacity building for supervisors themselves. Supervisors who receive training in mentorship, communication, and leadership are more likely to adopt supportive approaches. Programs that institutionalize mentorship frameworks where senior CHWs or nurses serve as mentors to junior CHWs create a culture of continuous learning and mutual respect. Strengthening the supervisory cadre is therefore essential for embedding supportive supervision within health systems [38].

The findings of this review underscore the need for policymakers and program managers to prioritize supportive supervision as a core component of CHW programs. This requires integrating supervision into national community health strategies, allocating dedicated budgets for supervisory activities, and establishing clear performance standards [39]. Policies should promote supervision structures that are decentralized, gender-sensitive, and context-specific, allowing flexibility for adaptation to local realities. Supportive supervision should be recognized as a two-way process supervisors also need institutional backing, incentives, and manageable workloads. Without systemic support, even well-trained supervisors may be unable to sustain effective engagement with CHWs. Integrating supervision with performance management systems and linking it to career progression pathways could further enhance motivation and accountability across all levels of the health system [40].

Supportive supervision is pivotal in strengthening the role and effectiveness of community health workers. It transforms hierarchical relationships into partnerships grounded in trust, learning, and mutual respect. While challenges persist in resource-constrained settings, innovative models such as digital supervision, peer mentoring, and community engagement offer promising avenues for improvement. For supportive supervision to achieve its full potential, it must be institutionalized within health systems through robust policies, adequate resourcing, and ongoing capacity building. Ultimately, empowering CHWs through sustained supportive supervision contributes not only to improved health outcomes but also to more equitable and resilient community health systems.

CONCLUSIONS

This scoping review highlights that supportive supervision plays a crucial role in enhancing the performance, motivation, and retention of community health workers (CHWs). Effective supervision goes beyond administrative oversight, emphasizing mentorship, problem-solving, and mutual learning. Evidence across multiple settings demonstrates that supportive supervision fosters a sense of belonging and accountability among CHWs, improves service delivery quality, and strengthens the linkage between communities and health systems. However, the success of such approaches depends heavily on consistent supervisor training, adequate resources, and institutional commitment to integrating supervision as a core component of health system strengthening.

To optimize the role of CHWs through supportive supervision, health systems should adopt a structured yet flexible supervisory framework grounded in collaboration and continuous feedback. Investing in supervisor capacity-building, introducing digital tools for remote support, and ensuring manageable supervisor-to-CHW ratios can significantly enhance effectiveness. Additionally, policymakers should institutionalize supportive supervision within national community health strategies, accompanied by sustainable financing and monitoring mechanisms. Future research should explore innovative supervision models that leverage community participation and technology to maintain high-quality CHW performance in diverse and resource-limited settings.

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Authors' contributions

All authors contributed significantly to the development and completion of this research study.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this research. No financial, professional, or personal relationships have influenced the outcomes or interpretations presented in this study.

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