International Journal of Community Medicine and Public Health
Sagtani RA et al. Int J Community Med Public Health. 2025 Dec;12(12):5816-5819
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20254065

Review Article

Suitability, scalability, and sustainability of community health worker-led task sharing for hypertension in Nepal: a rapid review

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Received: 17 August 2025
Revised: 09 November 2025
Accepted: 12 November 2025

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ABSTRACT

This review aims to explore the suitability, scalability, and sustainability of task sharing through female community health volunteers (FCHVs) in Nepal's healthcare system, focusing on hypertension (HTN) prevention and management. The published secondary literature and reports were searched for identifying national examples of task sharing and systematically identify critical factors influencing the success of task sharing in the Nepalese context. The roles of FCHVs are currently being explored for prevention and management of chronic diseases including HTN due to their community reach and trust. Evidence shows short term cost-effectiveness of task sharing through FCHVs for HTN. However, while their widespread presence supports scalability, systemic barriers like policy gaps and supply chain issues remain. Sustainability hinges on consistent training, integration into the formal health system, and financial incentives to maintain long-term impact. To ensure suitability, scalability, and sustainability of task sharing through FCHVs for HTN in Nepal, a comprehensive strategy comprising of a stable financial model, continuous capacity building, robust community engagement, and strong policy support is crucial.

Keywords: Task sharing, Female community health volunteers, Hypertension

INTRODUCTION

Hypertension (HTN) poses a substantial public health burden in Nepal, 27.3%of the population and contributing significantly to non-communicable diseases (NCDs), including deaths and disabilities from cardiovascular diseases (CVDs).[1] Effective HTN management necessitates a robust primary healthcare system with competent human resources for health (HRH) to alleviate pressure on secondary and tertiary facilities. Improving efficiency in HRH spending can lead to more efficient health systems, optimizing resources and expanding coverage.[2] Nepal faces huge burden of gap in HTN care cascade, with 20% prevalence among 15 years and older population, only 50.2% are aware of their condition, 31.7% under treatment and 18% controlled blood pressure, highlight the unmet need for HTN patient care.[3] Globally, "task sharing" has emerged as a key strategy to mitigate HRH shortages and improve healthcare access. The world health organization (WHO) defines task sharing as "a way to create a more rational distribution of tasks and responsibilities among different cadres of health workers." This approach is often used in areas such as reproductive, maternal, newborn, and child health, and is increasingly applied in NCD management, particularly in low- and middle-income countries.[4] The core objectives of task sharing extend beyond merely addressing healthcare professional shortages; it also promotes sustainable healthcare practices through the efficient utilization of local resources and active community

involvement.[5] In Nepal, FCHVs are examples of a less specialized cadre of health workers who can be mobilized for community-based awareness, screening, monitoring, referral and follow-up for HTN prevention and management.[6]

LITERATURE RESEARCH

This study employed a qualitative synthesis of published secondary literature and national reports to explore the feasibility of task sharing through FCHVs in Nepal's healthcare system, specifically for HTN prevention and management. A targeted search was conducted to identify documented examples of task sharing and to systematically examine contextual factors influencing its success. The analysis focused on identifying enablers and barriers to implementation, scalability, and sustainability of FCHV-led interventions, drawing insights from both peer-reviewed sources and grey literature relevant to Nepal's public health infrastructure.

SUITABILITY: A NATURAL FIT, BUT WITH CAVEATS

FCHVs were conceived as voluntary health educators, community mobilizers, referral agents, and service providers, with a particular focus on maternal, child, and reproductive health in 1980s, contributing primarily to maternal and child health improvements in Nepal.[7] Their evolving roles are now being explored for the prevention and management of NCDs, including HTN type 2 diabetes mellitus and chronic obstructive pulmonary disease, in terms of both feasibility and effectiveness.[8,9] Their ability to reach households, provide counselling on lifestyle modifications, and conduct initial simple CVD risk screening and blood pressure monitoring at the community level is valuable, particularly in hilly geographic areas of Nepal where access to health facilities is limited, and has been tested with success.[10] A prominent, successful demonstration of the effectiveness of task sharing for HTN using FCHVs in Nepal is the community-based intervention for blood pressure reduction in Nepal (COBIN) trial.[11] This trial demonstrated that FCHV-led HTN intervention-home visits to provide lifestyle counselling on and blood pressure monitoring-resulted in significant reduction in blood pressure in community settings. Although their suitability appears promising due to their deep community ties and trust, the effectiveness of FCHVs depends on sustained training, clear protocols, and support systems to ensure they can effectively manage the complexities of HTN care.

SCALABILITY: PROMISING POTENTIAL, SYSTEMIC HURDLES

The scalability of the FCHV-led HTN programs in Nepal is supported by the existence of a well-established network of over 52,000 FCHVs, working in each ward (the smallest administrative unit) of Nepal.[12] The existing FCHV training and supervision infrastructure can facilitate the rapid deployment of standardized training programs; and their community acceptance and trust can facilitate the active uptake of health HTN interventions.[13] However, scaling up requires an enabling policy and regulatory framework that explicitly supports task sharing for HTN prevention and management.[14] Health facility readiness at the primary care level in terms of supply chains to ensure adequate stock levels of anti-hypertensive medications needs to be ascertained.[15] Frequent and involvement of all the relevant stakeholders especially community leaders, local people, patients, care givers etc., to provide culturally sensitive care is paramount for community acceptance.[6]

SUSTAINABILITY: A DELICATE BALANCING ACT

Task sharing through FCHVs for HTN prevention and control is poised for sustainability in Nepal due to their deep community integration, proven cost-effectiveness, and alignment with national health priorities. Moreover, leveraging the existing FCHV network can minimize or strengthen long-term viability. However, while short-term interventions have successfully demonstrated their effectiveness and cost-effectiveness, long-term follow-up revealed that the benefits of the intervention were not maintained after cessation of active intervention and without incentives provided to FCHVs.[15,16] Financial sustainability remains a critical concern, as FCHVs receive limited compensation and significant costs are associated with training of new workforce, establishing referral mechanisms, blood pressure screening and monitoring, inventory and supply chain maintenance for anti-hypertensive medications.[8] Embedding FCHV roles within the formal system and securing reliable funding streams are critical to preserve the gains achieved through community-based task sharing interventions for HTN prevention and management.

DISCUSSION

This review underscores the expanding role of FCHVs in Nepal as a strategic response to the rising burden of HTN. The findings are consistent with global literature that supports task sharing as an effective solution to address shortages in HRH.[4-5] FCHVs in Nepal are well-positioned to support HTN care due to their trusted community presence and prior success in maternal and child health programs.[7] Evidence from the COBIN trial [11] confirms that FCHV-led interventions can effectively reduce blood pressure. However, their success depends on consistent training and support systems.[8,10] Nepal's large FCHV network and existing training infrastructure provide a strong foundation for scaling HTN interventions. Yet, challenges such as the lack of a formal policy framework, limited primary care readiness, and the need for culturally sensitive stakeholder engagement must be addressed. While short-term interventions have shown cost-effectiveness and community acceptance, long-term

sustainability is uncertain due to limited financial incentives, weak integration into the formal health system, and the cessation of support post-intervention.[6,14-16] These findings align with broader evidence emphasizing the need for institutional support and dedicated funding for community health worker programs.[8,14]

This rapid review is limited by its targeted search strategy, which may have excluded relevant studies, especially unpublished or non-English sources. The absence of formal quality appraisal and reliance on descriptive synthesis may affect the depth and reliability of findings. Additionally, the context-specific focus on Nepal limits generalizability to other settings.

CONCLUSION

Task sharing through FCHVs can be a feasible, scalable, and sustainable strategy for HTN management in Nepal. However, realizing this potential requires a concerted effort to address systemic barriers, secure long-term funding, and embed FCHVs within the formal health system. To ensure suitability, scalability, and sustainability, a comprehensive strategy is essential-one that includes a stable financial model, continuous capacity building, robust community engagement, and strong policy support. Without these foundational elements, task sharing will be short lived and struggle to deliver its intended impact.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

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Cite this article as: Sagtani RA, Shrestha A. Suitability, scalability, and sustainability of community health worker-led task sharing for hypertension in Nepal: a rapid review. Int J Community Med Public Health 2025;12:5816-9.