



Research Article

The Role of Community Health Workers in Universal Health Coverage

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Abstract

Community health workers (CHWs) have emerged as indispensable agents in the pursuit of universal health coverage (UHC), particularly across Africa and South Asia. This article explores the evolution, roles, and impact of CHWs in delivering primary health services, expanding access in underserved communities, and bridging workforce gaps in fragile health systems. Drawing on data from Ethiopia, Rwanda, Liberia, and Kenya, it examines the measurable improvements in maternal and child health, disease prevention, and health system resilience driven by CHW engagement. The article further analyzes structural challenges—including insufficient professionalization, gender inequities, and fragmented governance—and outlines policy imperatives for formalizing CHW programs. It concludes by emphasizing the urgent need for sustainable investment, gender-responsive strategies, and integration of CHWs into national health systems to realize the global goal of health for all.

Keywords: Community health workers (CHWs), universal health coverage (UHC), primary health care, health equity, health workforce, maternal and child health, global health, Africa, professionalization, health systems strengthening.

INTRODUCTION

Achieving universal health coverage (UHC)—the principle that all individuals and communities receive the health services they need without suffering financial hardship—is at the forefront of global health policy. In low- and middle-income countries, and particularly across Africa and South Asia, success on this front depends crucially on harnessing, professionalizing, and supporting community health workers (CHWs). CHWs are trusted community members trained to provide essential health services, act as health educators, bridge cultural divides, and facilitate connections between individuals and formal healthcare systems. This article explores the role, evidence, impact, challenges, and the future of CHWs in realizing UHC.

Background and Context

Universal health coverage has evolved as a major objective following the Alma-Ata Declaration, which first recognized the centrality of primary health care and community involvement in health service delivery. As the global health community seeks to meet Sustainable Development Goal 3 (SDG 3), which targets healthy lives and well-being for all, CHWs have emerged as essential actors in expanding service access, supporting equity, and strengthening the resilience of health systems^{[1][2]}.

Defining Community Health Workers

Community health workers are laypersons, often from the communities they serve, who receive standardized training to deliver health promotion, prevention, and basic curative services. Titles vary across regions—health extension workers, agents de santé, village health workers, etc.—but they share a grassroots orientation, close relationships with clients, and an understanding of

local contexts and challenges^{[3][4]}.

ROLES AND CONTRIBUTIONS TO UHC

1. Expanding Access to Health Services

CHWs are the backbone of healthcare delivery in many resource-limited areas. Their roles include:

- Providing maternal, newborn, and child health (RMNCH) interventions
- Supporting vaccination campaigns and routine immunizations
- Diagnosing and treating common illnesses (malaria, pneumonia, diarrhea)^{[5][4]}
- Delivering basic sexual and reproductive health services
- Health education and behavior change communication
- Referrals to higher levels of care

This proximity to households reduces geographic and economic barriers, boosts utilization of health services and helps in achieving higher coverage of essential interventions, especially among vulnerable and hard-to-reach groups^{[1][3][6]}.

2. Bridging Gaps in Human Resources for Health

With projections that Africa alone will face a shortage of over 6 million health workers by 2030, CHWs fill critical workforce gaps, addressing inequities and complementing facility-based care^{[6][7]}. Globally, deployments of large cadres have resulted in significant outcomes, such as:

Country	CHWs Employed	Notable Impact
Ethiopia	42,000+	Maternal mortality fell from 871 to 267/100,000 (2000-2020); under-five mortality dropped by 64% ^{[8][5]}
Rwanda	45,000	Drastic reductions in maternal and child mortality; strengthened community-based health insurance ^[5]
Kenya	64,000 (estimate)	Expanded coverage of primary care and improvements in immunization and MCH indicators ^[5]

3. Catalysts in Disease Prevention and Health Security

CHWs have proven indispensable in public health emergencies. They were instrumental in Ebola containment (contact tracing, education), supporting COVID-19 responses (informing, testing, supporting vaccination), and HIV epidemic control^{[3][4]}. Their local credibility and cultural competence built trust crucial to overcoming vaccine hesitancy and misinformation.

4. Addressing Social Determinants of Health

Beyond clinical care, CHWs address broader determinants by promoting sanitation, nutrition, and healthy behaviors. They often serve marginalized populations—women, children, elderly, and rural poor—thus contributing to UHC’s equity goal^{[2][3][9]}.

5. Enhancing Health System Resilience

CHWs ensure continuity during health system shocks by maintaining essential services, mobilizing communities, providing psychosocial support, and feeding back grassroots information to guide system responses^{[2][4]}.

IMPACT AND EVIDENCE: CASE EXAMPLES

Ethiopia’s Health Extension Program

Through task shifting to CHWs, Ethiopia saw UHC service coverage rise from 13 (in 2000) to 35 (in 2021), and maternal and child deaths sharply declined. Modern contraceptive use surged by 34 percentage points, DPT3 vaccine coverage increased 33 points, and facility deliveries rose nearly 50 points over two decades^[8].

Liberia

CHWled interventions raised confirmed malaria diagnoses from 71% to 95%, exemplifying their direct effect on essential health outcomes^[4].

Broader Impact Metrics

- Mothers served by CHWs are nearly six times more likely to exclusively breastfeed^[5].
- Immunization rates and nutrition outcomes improve with CHW involvement^{[5][4]}.

(Ethiopia, 2000–2020)

Indicator	2000	2020/2021	Improvement
Maternal Mortality Ratio	871	267	Sharp decline
Under-5 Mortality Rate	166	59	Marked decrease
Modern Contraception (%)	6.3	40.5	Major uptake
DPT3 Immunization (%)	20.8	53.9	Expanded access
Facility Deliveries (%)	4.9	53.9	Drastic increase

Challenges to Maximizing CHW Impact

- **Insufficient Professionalization:** Many CHWs remain unpaid or under-remunerated, facing poor career prospects and inadequate training^{[7][9]}.
- **Fragmented Programs:** Disease-specific projects, variable training standards, and lack of integration into national health plans undermine efficiency and scale^{[1][5][7]}.
- **Resource Constraints:** Inadequate supply of essential drugs/equipment, limited supervision, and poor data systems hamper effectiveness^{[3][7]}.
- **Sociopolitical Barriers:** Weak governance, lack of stable funding, inconsistent policy frameworks.
- **Gender Disparities:** CHWs are mostly women (about 70%), yet face inequity in pay, security, and advancement opportunities^[4].
- **Variation in Coverage:** Density of CHWs ranges from 11.2 to 59.5 per 10,000 people across African countries; shortages persist, especially with part-time arrangements^[7].

Enablers and Policy Imperatives

- **Professionalization and Integration:** Formal employment, clear career pathways, regular pay, competency-based training, and strong supervision are vital^{[7][9]}.
- **Sustained Investment:** National budgets and external aid must fund recurrent costs (salaries, supplies, supervision, infrastructure)^[7].
- **Data-Driven Planning:** Use evidence to determine optimal numbers, distribution, and competencies of CHWs per national context^[7].
- **Supportive Policies:** Embed CHW programs within primary health care and UHC strategies; ensure alignment with broader labor, education, and social protection policies^[1].
- **Gender Equity and Protection:** Address the needs and rights of women CHWs in policy and practice^{[4][7]}.

Table: Key Health Improvements Driven by CHWs

VISUALIZING THE CHW IMPACT
CHWs and Maternal/Child Health Outcomes in Sub-Saharan Africa

Health Indicator	With Robust CHW Programs	Without Robust CHW Programs
Child Immunization	↑ Coverage	↓ Coverage
Facility Deliveries	↑ Rate	↓ Rate
Maternal Mortality	↓ Deaths	↑ Deaths
Malaria Diagnosis	↑ Confirmed Cases	↓ Confirmed Cases

Estimated CHW Need and Workforce Gaps (Africa, 2025)

Worker Status	Estimated Number
CHWs Needed (2030)	2 million ^{[6][7]}
Current Shortage	580,000–954,500 ^[7]
Full-time Shortage	210,000 ^[7]

CONCLUSION

Community health workers are pivotal to advancing universal health coverage—especially in underserved, rural, and marginalized communities. They extend primary health care, address equity gaps, build resilience, and respond to global health crises. However, their contributions can only be fully realized through deliberate professionalization, integration into national health systems, gender-responsive practices, and sustainable financing. Investing in and empowering CHWs is indispensable to the vision of health for all.

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