World Health Organization
Somalia

Policy brief

Community health workers: vital cog in Somalia's health system to build back better

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Community health workers: linking communities with the health system

Community health workers (CHWs) – also known as village health workers, community health promoters and lady health workers – provide basic public health services and medical care and are usually members of the communities in which they work. The World Health Organization (WHO) defines CHWs as health workers based in communities (i.e. conducting outreach beyond primary health care facilities or based at peripheral health posts not staffed by doctors or nurses), who are either paid or volunteer, who are not professionals, and who have fewer than 2 years' training, but at least some training, if only for a few hours *(1,2)*. CHWs function as an important link between their communities and the primary health care system.

In many low-, middle- and high-income countries, CHWs provide low-cost interventions for common maternal and paediatric health problems such as pneumonia, diarrhoea, undernutrition, malaria, HIV/AIDS, tuberculosis and measles. CHWs now also respond to coronavirus disease 2019 (COVID-19). In many countries, CHWs assist in immunization through organizing outreach services and identifying children or pregnant women missed in a vaccination cycle. Although their role and functions may vary from country to country, they all go door-to-door providing integrated community case management.

Advancing equitable access to health care

CHWs can be the solution

The concept of CHWs is not new; lay community-based health workers have been active for at least 60 years. However, given the shortages in the health workforce in many countries, especially in Africa, the Millennium Development Goals in 2000 prompted new discussion of how CHWs could help extend primary health care from facilities to communities. The role of CHWs has evolved in both middle- and low-income settings, and programmes for CHWs continue to change according to needs and context. Today, an estimated 7.2 million CHWs around the world serve their communities, providing varying levels of curative, promotive and preventive health services *(3)*. However, WHO estimates that the world needs another 18 million health workers, mostly in low- and middle-income countries, to advance universal health coverage (UHC) and meet the Sustainable Development Goals (SDGs) by 2030 *(4)*.

The shortage of health workers in Africa and Asia is estimated at 4.25 million workers and what health workers there are available are often inequitably distributed within countries. To accelerate progress to achieve the SDGs and reduce the disease burden from preventable and treatable conditions, more health workers are needed. Evidence from around the world on the usefulness of CHWs suggests that they offer a cost-effective solution to the problem, including in Somalia and other resource-constrained settings.

While CHWs have a role in primary health care and essential public health functions, there is no global strategy to harmonize their functions. WHO's Global strategy on human resources for health: workforce 2030 *(5)* recognizes the role of CHW in health services delivery and acknowledges that CHWs and other types of community-based health workers can successfully deliver a range of preventive, promotive and curative health services. Moreover, they can help reduce inequities in access to care. The seventy-second session of the World Health Assembly also called for optimizing CHW programmes and prioritizing investment in CHWs recognizing their role in delivering good-quality primary health care services at the doorsteps of people seeking health services as part of interdisciplinary teams (WHA 72.3).

CHWs range from volunteers working without financial compensation to paid employees of a country's public health system; in some cases, rather than a salary, CHWs may receive other material benefits such as periodic training stipends or preferential access to health care or microcredit.

A number of countries – Bangladesh, Brazil, Ethiopia, India, Liberia, Pakistan, South Africa and Uganda – have effective CHW programmes. By making wise investments in these programmes, not only have these countries been able to increase access to primary health care for their people, but their health indicators have also improved.

Evidence shows CHW programmes are effective

The COVID-19 pandemic has pushed back the health gains in many countries, including Somalia. Disruption of health care in fragile and conflict-affected countries can have devastating consequences. A WHO survey based of 105 countries found that 90% of the countries experienced disruption to their health services between March and June 2020 *(6)*. Thus, countries need effective strategies to rebuild their damaged health systems and improve access to health care.

In the past decade, evidence has emerged of the effectiveness of CHWs and their potential for improving health outcomes where: (i) health workforce resources are limited and access to basic services is low, mostly in low-income countries and (ii) large disparities in health outcomes exist between certain subpopulations and the population at large, in spite of the presence of well-developed health systems, mostly in high-income countries.

Globally, the positive effect of CHWs on disease prevention, adoption of healthy behaviour and access to health care has been documented in different settings (Table 1). Community-based intervention packages have been shown to reduce morbidity in women, mortality and morbidity in babies, and improve care-related outcomes, particularly in low- and middle-income countries *(3,7)*.The evidence further highlights the value of combining and packaging different life-saving interventions, particularly for maternal and newborn care, for delivery in the community through CHWs and health promotion groups.

Table 1: Evidence on the effectiveness of community health worker (CHW) programmes relevant to Somalia

Area of work	Evidence of effectiveness of CHW programme
Malaria, tuberculosis and HIV/AIDS control	CHWs participation in national malaria control programmes in sub-Saharan Africa led to large reductions in mortality through their delivery of insecticide-treated nets (63% reduction) and antimalarial chemoprophylaxis (36% reduction), in addition to curative interventions *(8)*. Involvement of CHWs in HIV care in sub-Saharan Africa enhanced the reach, uptake and quality of HIV services, including improved adherence to antiretroviral therapy, retention in care, and quality of life and retention in care of people living with HIV *(9)*. In a study in the 33 counties in Kenya where the Global Fund tuberculosis project was implemented, the involvement of CHWs led to an increase in tuberculosis cases identified through contact tracing from 6% to 10%, while notified tuberculosis cases identified through community referral increased from 4% to 8%. *(10)*. The use of health extension workers (trained CHWs) improved smear-positive case detection and treatment success rates in southern Ethiopia. Mean case detection rate for tuberculosis was 122.2% in intervention areas and 69.4% in control areas ($P < 0.001$). Mean treatment success rate was 89.3% in intervention areas and 83.1% in control areas ($P < 0.001$) *(11)*. The involvement of community extension workers in the tuberculosis control programme in Ethiopia led to the doubling of tuberculosis notifications in the supported districts, from 64 to 127 per 100 000 people. In addition, tuberculosis treatment success rates in the same sites increased from 76% to 96% over 4.5 years. Similarly in the Ivory Coast, the tuberculosis detection rate among key affected populations identified by CHWs increased substantially from 37.0% of the total cases to 63.4% *(12)*.
Family planning	Community-based distribution of family planning supplies in Afghanistan and 50 other low- and middle-income countries have increased the use of family planning methods three- or fourfold (from 5–10% to 20–40%) in areas where the initial coverage was very low *(13–15)*.
Child nutrition	In Mozambique, a large-scale CHW programme serving 1.1 million people in seven districts from 2005 to 2010 resulted in a one third reduction in the prevalence of childhood undernutrition *(16)*.
Breastfeeding	In low- and middle-income countries, rates of exclusive breastfeeding were significantly higher in groups exposed to CHW breastfeeding interventions than groups that were not – pooled odds ratio 5.6 (findings from a meta-analysis) *(17)*.
Child health (under 5 years)	Various trials have shown substantial reductions in child mortality, particularly with case management of ill children by CHWs. A meta-analysis of community-based trials of the effect of case management of pneumonia on mortality in neonates, infants and preschool children in low- and middle-income countries suggested an overall reduction of 24% in mortality *(18)*. In Somalia, CHWs used for supplemental polio and measles immunization and other interventions (deworming, provision of vitamin A supplements, oral rehydration salts and water purification tablets, and measurement of mid-upper arm circumference) possibly averted about 10 000 deaths and resulted in 500 000 life years saved *(19)*.
Maternal and newborn health	Findings from systematic review on effectiveness of CHWs delivering preventive interventions for maternal and child health in low- and middle-income countries showed that home-based newborn care delivered by CHWs reduced newborn mortality by 24%. Introduction of packages of community-based interventions increased the uptake of tetanus immunization by 5%, use of clean delivery kits by 82%, rates of institutional deliveries by 20%, rates of early breastfeeding by 93% and health care seeking for neonatal illness by 42% *(20–22)*.

CHW programme in Somalia

Need for reform

In Somalia, the CHW programme is not well coordinated and remains fragmented. Many agencies run different programme for CHWs in the country without having any centralized information on: number of CHWs; their geographic distribution; their functions and remuneration; and their effectiveness. The government, with World Bank funding, is managing a female health worker programme in the country. UNICEF has a team of social mobilizers who work mostly at the grassroots level. WHO's polio eradication programme has over 1500 village volunteers who work mostly for polio eradication.

During the COVID-19 pandemic, WHO deployed over 3000 CHWs, mostly women, in 51 high-risk districts in Somalia. They were at the forefront of the response, conducting case findings and contact tracing in rural and remote communities. By 31 December 2020, this network had visited nearly 4 million households, reached out to 8 million people with health education messages and detected 41% of the 4726 COVID-19 cases officially reported in the country *(23)*. As Somalia recovers and rebuilds its health systems, it is time to further the work done by these workers in the COVID-19 response, as well as by other CHWs deployed by other agencies, and institute a formal policy and structure for the work of CHWs, coordinated and spearheaded by the government. The government is planning to roll out its Essential Package of Health Services (EPHS). Therefore, now is the time to bring all CHW programmes under a centralized and integrated structure as part of the country's long-term strategy for development, recruitment and retention of health workers for delivery of EPHS and to tackle the acute shortage of health workers in the country.

Scaling up and sustaining the CHW programme in Somalia

The programme for CHWs in Somalia may need to start with "quick wins" (fast, noticeable and immediate improvements) and visible life-saving interventions. First though, it is important that the work of the CHWs and their contribution to improving health in Somalia is formally recognized by bringing them under an official policy. Some key evidence-based actions *(3,7)* for Somalia to consider are outlined below.

- Create a database of CHWs (number, roles and functions, geographic distribution and remuneration) who are currently used by different programmes within the ministries of health and different agencies including nongovernmental organizations.
- Develop a policy on recruitment and retention of CHWs (including their remuneration structure and package) as part of the overall strategy for an integrated health workforce in the country, and align the roles and functions of CHWs with the national goal of achieving UHC by 2030.
- Develop and standardize the training of CHWs to build competence as well as socially oriented skills, such as communication and counselling, and give a formal certification of training.
- Regularly provide supplies, such as medicines, communication tools and teaching aids, as well as transportation support as needed.
- Provide strong support to embed the CHW programme within the community, as this is associated with CHW retention, motivation, performance, accountability and support, and ultimately affects the acceptability and uptake of the services offered by CHWs. The evidence suggests that CHW programmes are successful if they are strongly connected to the community, have a clearly defined role and relationship with the formal health system and are supported by government and other health service providers.
- Link CHWs to a supportive and functioning referral facility as such linkage is often vital to the effectiveness of CHW programmes.
- Determine the size of the catchment population of a CHW in line with the local reality, including population density, travel required and workload.
- Develop a mechanism to assess the impact of the work of CHWs and effectiveness of CHW programmes.

As well as a policy, it is important to consider funding mechanisms to sustain CHW programmes to which multiple parties (e.g. community, local government and central government) may contribute to reduce reliance on a single funding source.

It has been shown that CHWs often lack of recognition, remuneration and involvement in decision-making. Therefore, ways to keep up the morale and motivation of CHWs need to be built into the CHW programme, including material and social incentives. Providing voluntary CHWs with some nonmonetary motivation, typically social recognition, such as preferential access to microcredit and health care services, in-kind gifts such as foodstuffs, and special forms of identification such as badges or T-shirts, may help maintain CHW morale and motivation. In addition, the success of CHWs needs to be recorded by documenting improvements in service delivery and population health attributed to the CHW programme.

Table 2 gives examples where CHWs can effectively serve the population in Somalia.

Table 2: Areas of work for community health workers in Somalia and interventions they can deliver

Area of work	Key interventions
Antenatal and postnatal care	• Distribute micronutrients, iron tablets, vitamin A capsules • Promote exclusive breastfeeding • Promote family planning services • Organize outreach services for antenatal and postnatal care for pregnant and lactating women • Trace pregnant women missing antenatal and postnatal care, including tetanus toxoid vaccine • Maintain links with skilled birth attendants for safe delivery at home • Act as watch guard against stigma and other harmful practices associated with female genital mutilation
Surveillance and response	• Conduct rumour investigation • Participate in community-based surveillance for epidemic diseases • Trace and track diseases with epidemic potential
COVID-19 response	• Conduct health education sessions • Identify suspected cases, trace close contacts and assist in collecting samples • Refer people suspected of having COVID-19 to isolation centres • Follow up on the cases for isolation and quarantine measures
Child health	• Distribute micronutrients, iron tablets, vitamin A capsules • Organize outreach sessions for immunization • Trace and track children missing routine immunization services
Management of childhood illness	• Manage sick children, especially those with pneumonia, diarrhoea and neonatal sepsis, using integrated case management/community-based treatment of common childhood diseases • Refer children with low oxygen saturation to higher health centres for care
Malaria, tuberculosis and HIV/AIDS care	• Participate in distribution of insecticide-treated bed nets • Manage sick children with malaria • Participate in DOTS, trace defaulters and identify suspected tuberculosis cases in the community • Promote prevention of mother-to-child transmission of HIV • Follow up on retention of people on antiretroviral therapy
Mental health	• Provide community-based psychosocial counselling, health education, and screen for mental health conditions requiring referral to higher level of care • Follow up on patients returning to communities after treatment

Cost versus economic value of CHW programmes in low-resource settings

The existing evidence suggests that, compared with standard care, using CHWs in health programmes can be a cost-effective intervention in low- and middle-income countries. The cost of managing CHW programmes may vary in countries depending on the nature of the job and payment offered. A study on the cost of deploying CHWs among rural populations of countries in sub-Saharan African estimated that to train, equip and support each CHW in those countries would cost on average US$ 3750 a year *(24)*.

Another study in 23 African countries with a GDP per capita of under US$ 1200 estimated that the cost of a CHW programme would not exceed 12% of the actual health care spending if CHWs were paid US$ 80 a month *(25)*. If the CHWs are brought under a formal payment mechanism, which will motivate them to work hard, the evidence also shows that they can deliver a substantial return on investment.

Building on the SDG health price tag *(26)*, the WHO investment case 2019–2023 *(27)* also highlights that investment in UHC, including a substantial portion towards developing the workforce including CHWs will generate up to a 40% return over a 5-year period. Given the cost–effectiveness, best practices and evidence across many countries, it is clear that sustainable investment in and support of CHWs pay off.

Globally, women hold seven in 10 jobs in the health and social sectors. Accelerating investment in job creation and adequately paid work in primary health care will positively affect women and young people, drive economic growth and support progress toward the SDGs. WHO considers that investment in any health worker programme pays a dividend for health, economic growth and gender equality, and calls on its partners to improve the education and employment of all the health workforce.

Conclusion: CHWs in Somalia – not a cost, an investment

In Somalia, the health workforce density is among the lowest in the world. The SDG index threshold is 4.45 physicians, nurses and midwives per 1000 population *(28,29)*; Somalia has 0.11 such health workers per 1000 population *(30)*. Health and nutrition indicators in Somalia are not satisfactory; at the current level, the country is not on track to meet the SDGs by 2030. Given the health workforce shortage in Somalia, which is characterized by uneven distribution of health workers, inappropriate skill mixes and gaps in service coverage, CHWs offer a solution to achieve UHC. Evidence shows that CHWs can effectively deliver preventive, promotive and curative services. Investing in them will bring health and economic dividends.

A new policy and programme needs to be built through a coordinated, government-led process of informed decision-making and integration of the work of various agencies supporting the CHWs in the country. Everyone stands to gain when large-scale CHW programmes work effectively.

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