

The role of community health workers in COVID-19 home-based care:

Lessons learnt from Rwanda

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Key messages

Investment in the health system is essential for effective pandemic response: Despite Rwanda's rapid implementation of control measures to manage the COVID-19 pandemic, the country faced several challenges in the early stages, due to inadequate infrastructure and a shortage of trained staff.

A home-based care approach alleviated the facility-based care burden during the pandemic: Implemented in September 2020, this key strategy engaged community health workers (CHWs) to provide health education and monitor patients with mild COVID-19 symptoms.

The integration of medical doctors (MDs) into home-based care teams strengthened the COVID-19 response in Rwanda: Operation Save the Neighbour, launched in 2021, integrated MDs into home-based care teams. This improved the quality of care provided to COVID-19 patients, enhanced patient monitoring, and offered additional support to CHWs at household level.

The provision of continuous support to CHWs contributed to overcoming challenges in implementing home-based care models: CHWs played a critical role in community mobilization and surveillance. However, they faced significant challenges, including fear, anxiety, and overwhelming workloads. To support these frontline workers, ongoing training and an adequate supply of resources, including personal protective equipment (PPE), are required.

Executive summary

The issue

The first case of COVID-19 in Rwanda was reported in March 2020 and, despite implementation of rapid measures, cases continued to increase. The pandemic posed significant challenges to Rwanda's health care system, including stretching health worker capacity, inadequate infrastructure such as hospital beds and ventilated rooms, limited availability of (PPE), and disruption to the delivery of routine services.

The home-based care model for management of COVID-19 patients

To address challenges, Rwanda introduced a home-based care model for COVID-19 in September 2020. The model required training of CHWs in the management of mild COVID-19 cases to support the existing pandemic response measures. CHWs played a key role in COVID-19 screening, patient monitoring, community mobilization and education, and supporting the social reintegration of recovered COVID-19 patients into the community. In 2021, Operation Save the Neighbour, which involved collaboration among medical doctors, CHWs, and other stakeholders, was introduced to support home-based care.

Impact

The policy was successful in reducing pressure on Rwanda's health system. Engaging CHWs in the fight against COVID-19 improved education and information channels, surveillance, contact identification and tracing, and facilitated the home-based care strategy. Together, these activities significantly reduced the spread of the COVID-19 virus and the health workforce and infrastructure burden. This approach contributed to health system resilience by leveraging existing health services close to the community and community involvement in the fight against the pandemic.

Conclusions

The community-focused approach involved the rapid adaptation of CHW roles and responsibilities to include pandemic-related tasks. The inclusion of medical doctors (MD) in home-based care teams effectively supported CHWs. However, the sustainability of these approaches, particularly involving MDs in home-based care, warrants further analysis, given the country's low health workforce density. Addressing challenges such as inadequate training, psychological impact, limited provision of protective equipment, and excessive workloads for CHWs is crucial. It is also essential to invest in long-term capacity building for CHWs to address broader health system challenges.

Policy implications

The role of CHWs in the COVID-19 response highlights the importance of community-level health systems in responding to outbreaks and maintaining existing services. Ongoing and sufficient investment in the community system is necessary to ensure health system resilience and pandemic preparedness. The following are suggested as critical areas of emphasis for policymakers: (i) plan and prepare for regular training of CHWs on general pandemic preparedness, prevention, treatment, and management; (ii) support CHWs in the safe execution of their work, for example, by equipping them with necessary materials such as PPE; and (iii) encourage stakeholder collaboration in addressing health problems such as pandemics. Finally, the evidence suggests that a working framework should be established to enable the use of the Operation Save the Neighbour initiative for future pandemics. This framework should involve other health professionals such as nurses, midwives, psychologists, and nutritionists.

Table 1: Community health workers in home-based care for COVID-19

Roles & responsibilities	Facilitators	Challenges	Impact
Specific responsibilities of CHWs under the home-based care model	Training on additional responsibilities such as identifying COVID-19 symptoms, measuring vital signs, and educating affected households	Increased workload due to pandemic-related responsibilities	Within 2 weeks of introduction:
Case referral for deteriorating cases	Support of MD (linked to a specific CHW)	Fear of COVID-19 infection	<ul style="list-style-type: none"> • Home visits increased from 30% to 92%
Through the model and Operation Save the Neighbour, CHWs conducted daily monitoring of COVID-19 patients' vital signs, including SpO2 (at patients homes)	Digital tools accessible through a smartphone to support wider and faster detection of cases	Difficulties in accessing PPE and sanitation facilities	<ul style="list-style-type: none"> • 82% in home-based care have regular SpO2 monitoring
Education on infection control given to all household members	Daily report via national WhatsApp number	Difficulty maintaining routine activities	By March 2022:
Community awareness and education	Equipping CHWs with a kit of supplies and communication materials	COVID-19-related stigma	<ul style="list-style-type: none"> • 98% of cumulative COVID-19 confirmed cases were treated from home
Daily reporting			<ul style="list-style-type: none"> • Community knowledge and awareness on COVID-19 transmission was improved
			<ul style="list-style-type: none"> • Enhanced collaboration among MDs, community health workers, and other stakeholders.
			<ul style="list-style-type: none"> • Improved equity in response, reaching rural areas

Policy implications

This policy brief highlights key areas that could be strengthened to promote the resilience of Rwanda's CHW programme in responding to current and future public health crises:

Invest in education, training, and supervision for CHWs

Policy makers should plan for ongoing training of CHWs on pandemic and infectious disease prevention, treatment, and management. The training should include screening, triage, isolation, treatment, and reporting. Such pandemic preparedness training will equip CHWs with skills to mitigate future pandemics and public health emergencies. Education and training programmes could build on the roles CHWs played during COVID-19, including social mobilization and the distribution of health information, contributing to disease surveillance, and filling health service gaps during outbreaks.

Institutionalize home-based care and Operation Save the Neighbour

The Save the Neighbour initiative was crucial in the fight against COVID-19 under the home-based care model. There is a need to establish a working framework that involves additional health professionals such as nurses, midwives, and nutritionists in such initiatives for public health purposes and future pandemics.

Build on a community-focused approach

Rwanda's joint task force and community-level coordination led to rapid penetration of information and raised community awareness of COVID-19. To sustainably address any future pandemic challenges, policy makers should involve community members and other sectoral stakeholders in the fight against pandemics and epidemics.

Mitigating the risk of infection for CHWs

Policy makers should make effort to provide CHWs with PPE such as gloves, gowns, and masks since their work involves serious risks of infection, particularly in the home management of conditions such as COVID-19 cases. Protective materials for CHWs should be included in the procurement plans of public health facilities.

About AHOP

The African Health Observatory - Platform on Health Systems and Policies (AHOP) is a regional partnership that promotes evidence-informed policy-making. AHOP is hosted by the WHO Regional Office for Africa (WHO AFRO) through the integrated African Health Observatory. National Centres include Addis Ababa University, Ethiopia; KEMRI Wellcome Trust, Kenya; the Health Policy Research Group, University of Nigeria; the University of Rwanda; and Institut Pasteur de Dakar, Senegal. AHOP draws on support from the European Observatory on Health Systems and Policies (EURO-OBS), the London School of Economics and Political Science (LSE), and the Bill & Melinda Gates Foundation (BMGF).

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