

## Community health professionals and stand: Alone or integrated malaria case management

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### Abstract

The CHWs can execute operations, including fast diagnostic tests, and offer high-quality malaria care. Proper training, precise rules, and regular monitoring are crucial. For CHW initiatives to be successful in the long run, the health system must support the supply of goods, oversight, and the proper treatment of referred cases. Since there isn't much information about how communities send people to medical facilities, it seems like this problem needs to be fixed immediately. Studies on integrated CCM show that adding tasks doesn't change the quality of malaria CCM as long as there is enough training and oversight.

**Keywords:** Case; Community; Health; Malaria; Management

### 1. Overview

Despite notable advancements in control over the past few years made possible by increasing financing, malaria remains among the top causes of preventable mortality worldwide. One of the main tactics used by national malaria control efforts is a prompt and efficient treatment. The Roll Back Malaria Partnership defined the aim of achieving and maintaining universal coverage: "80% of malaria patients are diagnosed and treated with effective antimalarial drugs, e.g., artemisinin-based combination treatments (ACT), within one day of the onset of sickness." The World Health Organization has advised parasitologic diagnosis since 2010 rather than assuming all fevers are caused by malaria [1].

According to household surveys on the advancement of the goal of universal care, the median proportion of children under five who sought treatment in sub-Saharan Africa during 2010-2011 was 59% (interquartile range [IQR] = 48–76%). Depending on the nation, 5% to > 90% of children who take any antimalarial medicine also receive ACTs. The limited coverage of quick and efficient malaria treatment is primarily due to the absence of national health services in most low-income nations. One approach to improving access is to train local community health workers (CHWs) to provide diagnostics and treatments, bringing services closer to communities [2].

A systematic review on the health effects of home-based malaria management (HMM), published in 2007, provides a thorough analysis of studies conducted and published in the pre-ACT era. Recently, funding has been provided for a shift in the international focus from community case management (CCM) or HMM of individual diseases to integrated community case management (iCCM). The intricacy of the responsibilities placed on CHWs has grown as a result of the widespread use of ACT and rapid diagnostic tests (RDTs), and this work supplements Hopkins and colleagues' 2007 review [3].

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Most of the studies reviewed in this review demonstrated excellent quality malaria case care at the community level. The studies that reported this outcome, in particular, showed very high compliance by CHWs to the proper dose; this finding held regardless of diagnosis, antimalarial drug policy, or the robustness of the study design. All studies reporting this signal, except one, used prepackaged antimalarial medications (co-blistered or co-formulated). Four studies looked at the polymerase chain reaction-adjusted cure rates of a sub-sample of patients treated with ACT by a CHW, all of which were > 90%. Direct data on user adherence to the proper dose was not frequently published. This result lends credence to the idea that prepackaged ACTs can be delivered successfully [4].

According to RDT results, community-level treatment was more appropriate than in several studies of RDT use by formal health providers, when 30–80% of RDT-negative patients received antimalarial medication. Several complicated factors contribute to this lack of adherence, including patient expectations management, clinical reputation maintenance, faith in RDTs, and accessibility to alternative treatments. As Kalyango and others noted, it's probable that in many locations with a well-established malaria CCM program, CHWs are knowledgeable about the symptoms, signs, and treatment of malaria, while having the legal authority to treat pneumonia in the community is a relatively recent addition to their duties. With ongoing assistance, such as supervision and refresher training with opportunities for problem-solving, the quality of CCM for pneumonia may increase. Less than one-third of the research in this analysis covered referrals between the community and health facility levels. Even though indicators can be challenging to track, this is a modest level of reporting given the importance of effectively referring cases that a CHW cannot handle for safe implementation. The included studies suggest that patients and CHWs make judgment calls regarding the referral process. The criteria for referral were relatively straightforward when CHWs were trained to treat all cases of fever as malaria. Typically, these patients were referred to a health institution after receiving antimalarial medication and training on recognizing dangerous symptoms. However, the difficulty of what to do for patients with a negative RDT result emerges with using RDTs by CHWs. Longer term, it is likely to be beneficial to develop additional point-of-care diagnostic tests to support malaria RDTs and aid in the differential diagnosis [5].

Even though this and other recent evaluations show that CHWs can do their jobs well with the right amount of supervision and support from the health system, there is still not much evidence that CHWs can affect mortality or morbidity. Rarely do health impact studies include process or result indicators that could clarify health outcomes and link them to the quality of implementation. In the same way, most program evaluations put process and outcome indicators first, but they didn't look at health outcomes (because they weren't meant to). This finding shows that more research needs to be done in this area. Specifically, studies that are strong enough to measure the effect of malaria CCM on morbidity or death should include process evaluation in their design so that conclusions can be made about how much malaria CCM needs to be used to have a health effect. It is essential to know if there are any possible problems with the data accuracy from the studies used. Numerous research used analyses of the CHW registrations, which may have inadequate or erroneous reporting, to present information on antimalarial drug use and dose. Other sources, which can have problems with memory and understanding, give the correct number of children with fever who get the right amount of an excellent antimalarial medicine. Although direct observation of CHW performance is regarded as the gold standard, this observation is time. It resource-costly has implications for influencing behavior and is therefore unsuitable for routine monitoring [6].

Nevertheless, despite these restrictions, the few research that used data from CHW registrations and household surveys to triangulate data typically discovered encouragingly similar results. Validation of data from other sources is preferred wherever practical. In conclusion, despite the complexity of their tasks and responsibilities, the findings from this analysis indicate that CHWs can administer high-quality malaria care at the community level. More information about integrating malaria CCM with other health services is becoming available, especially from initiatives that use the iCCM method. Although there is space for improvement, particularly in correct diagnosis, CHWs can manage simple pneumonia. Clear guidelines, frequent supportive supervision, and interactive, hands-on training are all crucial success enablers. However, more research is urgently required to determine the best course of action for RDT-negative patients, the best way to refer instances that CHWs cannot treat and supervision in the context of scaled programs. Given how vital referral is for making sure patients are safe when case management is given to low-level community practitioners, it is worrying that there is so little research in this area [7].

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## 2. Conclusion

The results of this study show that, even though their jobs and responsibilities are complex, CHWs can give good care for malaria in the community. More information is available about combining malaria CCM with other health services. This is especially true for projects that use the iCCM method. Even though there is room for improvement, especially in making sure that the correct diagnosis is made, CHWs can take care of simple pneumonia. Clear guidelines, frequent supportive supervision, and interactive, hands-on training are all crucial success enablers. But there is an urgent need

for more information about monitoring in scaled programs, the best way to help patients who test negative for RDTs, and how to send cases CHWs can't handle to the right place. Given how vital referral is for making sure patients are safe when case management is given to low-level community practitioners, it is worrying that there is so little research in this area.

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## Compliance with ethical standards

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### *Article Information*

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