



Training malaria volunteers to deliver integrated community case management

Lessons learnt from rural Myanmar

Key learning

- With regular training and quality supervision, Myanmar's malaria volunteers are able to diagnose and treat common childhood illnesses, detect malnutrition, refer severe cases to the health facility and report case management data.
- Expanding malaria volunteers' role to include integrated community case management can help motivate them to continue working towards malaria elimination in the context of a declining malaria caseload.
- Malaria volunteers can safely administer antibiotics for uncomplicated respiratory infections in children under five years with effective supervision and feedback, diverting community members from unqualified providers and reducing the risk of drug resistance arising.
- Community dialogues are a more effective tool for changing rural communities' health-seeking behaviours than traditional health education.

Background

Many rural communities in Myanmar lack easy access to the public health system. They also have a limited understanding of danger signs of childhood illnesses, the importance of referrals and adherence to disease-appropriate treatment. As a result, the mortality rate among children under five in such settings is as high as 80 deaths per 1,000 live births, with common childhood illnesses such as acute respiratory infection and diarrhoea acting as leading causes of death.^[1]

Malaria also remains a major public health issue in Myanmar despite its plan of being malaria free by 2030, with 76,518 reported cases in 2018.^[2] Sagaing region accounted for the country's second highest caseload that year; 61 percent of all malaria cases were concentrated in 10 high burden townships.^[2]

To eliminate malaria by 2030 and improve the overall health status of rural communities in Sagaing, an effective community-based healthcare model is urgently needed.

Project activities

In 2016–2017, Malaria Consortium piloted an integrated community case management (iCCM) approach in three townships in Sagaing, in partnership with the Ministry of Health and Sports (MoHS), the National Malaria Control Programme (NMCP) and township health departments.

Existing malaria volunteers (MVs) — already trained by the NMCP to diagnose and treat malaria in their communities — were given further training to diagnose and treat pneumonia and diarrhoea, and detect malnutrition in children under five. Expanding their role allowed the MoHS to strategically address broader health issues, while motivating MVs to continue providing malaria services in a low burden context.

Building on the pilot's success, and with funding from Comic Relief, we expanded the approach to six townships in the region in 2017 and further developed MVs' skills, improved supervision by basic health staff (BHS), and enhanced supply chain management of rapid diagnostic tests and medicines. MVs and BHS were also trained to increase demand for health services through community dialogues — participatory sessions that allow communities to explore health issues and identify potential solutions most appropriate to them.

In addition, we trialled the use of a mobile health application for real-time reporting of malaria data by private sector general practitioners (GPs) to the national Malaria Information System. Twenty GPs volunteered and were trained to report case management data through an open-source data collection tool and mRegister.

Results

The project successfully improved the management of common childhood illnesses in Sagaing region. BHS noted that there were fewer complicated cases visiting the clinics, as MVs provided services to 8,520 under-fives at the community level between 2017 and 2019.

During focus group discussions, most MVs mentioned they were highly motivated by their enhanced role and that they had earned their communities' trust, who were widely accepting of iCCM.

“Before the start of iCCM, when children were ill, they rarely received treatment. I attended iCCM training, shadowed a BHS member and learnt how to take care of children under five. Now, the community knows me well and if their children get ill, they come and seek me.”

(Female MV, Kale, Myanmar)



MV assessing a child's nutritional status using a mid-upper arm circumference tape, Myanmar



MV checking a child for pneumonia, Myanmar

Lessons learnt

- With effective supervision and regular refresher trainings, MVs were able to deliver iCCM services correctly in line with national guidelines and to safely prescribe antibiotics for pneumonia cases. The latter helped mitigate antibiotics misuse as the number of treatments prescribed to non-pneumonia cases fell. MVs, BHS and communities were accepting of MVs administering antibiotics. Interestingly, MVs who were not allowed to prescribe antibiotics felt that community members were less likely to use their services.
- Quality supervision of MVs — regularly assessing their knowledge, skills and performance — was critical to successfully expanding and upholding the quality of their services. Supervisors' feedback improved thanks to checklists we developed to guide BHS through assessments, which enhanced the coordination between MVs and BHS.
- The expansion of MVs' role not only alleviated BHS' workload, but also motivated MVs to continue providing malaria services in the context of a declining malaria caseload, thereby providing crucial support for malaria elimination efforts. The continuous interaction between MVs and BHS further increased communities' trust in and acceptance of MVs, which was another a key motivator.
- MVs understood the importance of reporting data, yet the reporting forms' complexity and lack of standardised training compromised data accuracy. Training and supervision by BHS helped MVs overcome issues with filling out the forms and improved the data quality. Regular refresher trainings were necessary to refine the data reporting skills of both MVs and BHS.
- While iCCM strengthened the referral system between communities and health centres, transportation costs remained a major constraint to uptake of further treatment. This resulted in a number of poorer families continuing to visit informal, untrained healthcare providers in their villages. In addition, a lack of adequate support from formal healthcare staff on arrival at referral health facilities also acted as a barrier to obtaining proper treatment.
- A lack of coordination between national and township levels led to an overlap of volunteer health workers with different remits and skills providing services in the same villages. This caused confusion and negatively affected MVs' motivation and performance.
- Community dialogues successfully increased communities' knowledge of health-seeking behaviours, trust in MVs and demand for services. The sessions were most effective when there was a strong relationship between the MVs and communities. This participatory approach required far less resources and was preferred by communities over traditional one-way health education as it allowed them to ask questions and share concerns.
- GPs were inconsistent in their use of the mobile health app to report malaria data. This was partly due to a lack of technological literacy and incentives, while some did not recognise the importance of real-time data reporting or struggled to combine it with their clinical workload.

Recommendations

Based on our experience implementing iCCM in Sagaing and working in partnership with the MoHS, we recommend implementing the measures below.

- 1. The MoHS, through the NMCP and Child Health Department, should scale up the iCCM model tested in this project to reduce service delivery gaps.** The adoption of iCCM as an approach that uses volunteers already trained in the management of malaria will not only increase individual volunteer motivation, but also help to ensure sustainability of a role that is critical to the strategies for malaria elimination.
- 2. The MoHS should enable MVs to prescribe antibiotics when appropriate with effective supervision and regular refresher trainings.** An iCCM model including the prescription of antibiotics has been shown to increase the community's acceptance of services provided by MVs. Well trained and supervised volunteers providing pneumonia diagnostic and treatment services at community level will also contribute to rational use of the drugs to avoid antibiotic resistance — a key threat to global health.
- 3. The MoHS should standardise and roll out supportive supervision of MVs,** including a review of iCCM supervision forms and key performance indicators for MVs. Supervision should be based on the results of a needs assessment. Township health departments and local malaria authorities should continue to strengthen the supportive supervision training curriculum, including sessions on communication and problem-solving skills.
- 4. Township health departments should encourage communities to develop context-appropriate strategies to improve the uptake of referrals,** including provision of transport and resources to cover costs incurred. They should also facilitate training of BHS in interpersonal communication skills to increase patients' satisfaction with the services they receive in the referral health facility.
- 5. The NMCP should include the community dialogues curriculum in MVs' training guidelines across the country.** MVs' communication and facilitation skills should be enhanced accordingly and a list of frequently asked questions and answers should be provided to increase their confidence when responding to community members' queries.
- 6. The NMCP should simplify data collection forms for use at the community level** and use large fonts to mitigate issues such as limited literacy skills, lack of good lighting and volunteers' vision acuity. The types of data requested from the community level should also be as simple as possible.
- 7. The NMCP should map out the existing volunteer structure and clarify volunteers' roles and responsibilities.** Any overlapping areas should be identified and resolved through coordination with township health departments and implementing partners to avoid duplication of services at the community level.
- 8. The NMCP and township health departments should enhance mobile reporting of malaria data in the private sector to allow regions to better target their malaria elimination efforts.** GPs' motivation to use the mobile health app needs to be increased through a training programme on the need for proper diagnosis and real-time reporting of malaria cases in order to achieve malaria elimination. The data captured needs to be shared directly with the NMCP to allow for data-informed decision making.

References

1. MoHS. Study on Cause of Under-five Mortality. Nay Pyi Taw: MoHS, 2014.
2. RAI RSC meeting. Myanmar NMCP Updates. Nay Pyi Taw: Department of Disease Control, MoHS; 2019. (Unpublished).

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Cover image: MV carrying out a finger-prick to test a child for malaria, Myanmar

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