

Controlling malaria in eastern Myanmar

Case study | October 2014

Myanmar has the highest incidence of malaria and mortality rates in Southeast Asia. There were an estimated 1.4 million cases in the country in 2012, and an estimated 2,900 deaths.



In Daw Khu Li village, Kayah state, baby boy Lehereh sleeps soundly under a mosquito net provided by a village health volunteer. These volunteers are trained to treat the signs and symptoms of malaria. They distribute nets, ensure households know how to hang and maintain them, and are also trained in using rapid diagnostic testing kits which detect if someone has malaria.

Credit: Christian Aid/Kaung Htet

In 2012, 60% of Myanmar's population was at risk of malaria (37% at high risk), but only 35% were protected by insecticide-treated nets (ITNs), according to the World Malaria Report 2014. Those most at risk live in hilly and forested areas, and men are often at greater risk due to work patterns.

With resistance to certain malaria treatments reported in Mon, Tanintharyi and Bago-East and suspected in Kayah and Kayin, effective malaria control in eastern Myanmar is particularly crucial.

The **Emergency Health Care Project (EHCP)**, funded by the **UK Government's Department for International Development (DFID)** and implemented by a consortium of partners led by **Christian Aid**, has been working to tackle malaria in eastern Myanmar since 2011. With a budget of £1.16m, the three-year project set out to reach 200,000 people in South Shan, Kayah, Kayin and Mon states, and East Bago and Tanintharyi divisions. The broader project covered maternal, neonatal and child health, and water, sanitation and hygiene, as well as malaria.

EHCP set out to ensure that communities have access to malaria prevention, testing and treatment, in order to reduce malaria mortality rates. Training and equipping community health workers has been crucial in areas where access to formal healthcare services is limited.

Backpack Health Worker Team (BPHWT), with its long-established community health program, led by health workers with between nine and 27 months training and supported by village health workers and trained traditional birth attendants, was able to provide more extensive services to communities.

By the end of 2013, BPHWT had distributed 18,500 ITNs – with 79% of target households now owning at least one net – and helped to increase the number of households who slept under an ITN the previous night from 53% to 64%.

The organisation conducted rapid diagnostic tests for suspected malaria cases, and provided artemisinin-based combination therapies (ACTs) to confirmed cases. By the end of 2013, 6,183 people diagnosed with malaria by BPHWT had been provided with ACTs. The proportion of children under five who received appropriate antimalarial treatment from BPHWT increased from 93% to 95% during the project.

In areas where our partners the **Karen Baptist Convention (KBC)** and **Knowledge and Development for Nation-Building (KDN)** operate, the project focused on prevention and diagnosis of malaria, and referring confirmed cases to the nearest treatment – government or ethnic health organisation facilities or a BPHWT working close by.

During the project, KBC and KDN distributed over 6,000 and 5,000 ITNs respectively with more than 97% of households in target areas now owning at least one net. The proportion of these households who slept under an ITN the previous night increased from 80% to 94% in KBC areas, and from 88% to 91% in KDN areas. Community Partners International (CPI) and Burma Relief Centre (BRC) were also partners on the project.

EHCP has played an important role in malaria control across the region. In BPHWT areas, fewer people are dying from malaria – the *p. falciparum* malaria mortality rate decreased from 3.5 malaria case deaths per 1,000 population in 2010 to 2.4 in the end of 2013. In KBC and KDN areas, there is no data available on malaria incidence or mortality; however, there were frequent reports of significant improvements in the malaria burden in villages.

Key lessons learned

- ❖ Through EHCP we learned that while ensuring each household has one ITN is a good starting point, it is sometimes insufficient. Some community members reported a shortage of nets, particularly due to the mobility of their families (for example, husbands working in the forest and children attending school in nearby villages or towns). Distribution lists also suggest the number of nets is inadequate – for example, one household of 11 received two single ITNs. Efforts are needed to **ensure that the ITNs distributed can provide effective coverage**.
- ❖ The **lack of treatment options at village level** in KBC and KDN areas was highlighted as a challenge by beneficiaries and health workers. Given the international evidence on the effectiveness of community health workers to control malaria, and the difficulties in access to health facilities for the target population, additional investment in capacity to allow for malaria treatment is worthwhile.
- ❖ **Procurement and distribution can be difficult**. In KBC and KDN areas, there were delays with procurement of ITNs, leading to later than planned distribution. BPHWT, on the other hand, was able to procure ITNs from elsewhere, but reported continuing difficulties in procuring ACTs.
- ❖ It is **important that appropriate treatment protocols are followed**. The quality of services provided by BPHWT has improved. In response to DFID's 2012 review of the project that the treatment protocols for malaria were not in line with Myanmar or WHO guidelines, BPHWT responded promptly, and ACT is now used across the project.