

Supporting surveillance, outbreak detection and response

Background

Malaria is a major problem in Ethiopia, with an estimated 60 percent of the population living at risk of malaria infection, with the highest malaria prevalence recorded in the Southern Nations, Nationalities and Peoples' Region (SNNPR). Malaria surveillance systems in the country are weak and the use of data for planning and decision-making is historically poor. This impacts the ability of the health system to anticipate and respond to malaria outbreaks in a timely way, with potential impacts on the health outcomes of the population.

Ethiopia's health service is made up of primary, secondary and tertiary levels of care. A Primary Health Care Unit (PCHU) is an overarching unit that is typically made up of five health posts and a health centre that work in collaboration to serve a population of around 25,000 people. A health post is supervised by a district health office and a kebele (village) administration and receives monitoring and response support from a nearby health centre. A health post will have two health extension workers (HEW) assigned to it that serve a population of approximately 5,000 people in a kebele.

Improving malaria surveillance

Previous interventions in the SNNPR have looked to strengthen the quality of malaria surveillance data. But gaps still exist, particularly at lower levels of the health service. Gaps identified include weak documentation of data, lack of a comprehensive malaria database, and limited HEW capacity for using tools such as epidemic monitoring charts.

A three-year project, led by Malaria Consortium with funding from the James Percy Foundation - [Strengthening Community-based Malaria Prevention and Surveillance Interventions](#) - has focused on strengthening the current capacity of Ethiopia's health system to detect and respond to malaria outbreaks through improved malaria surveillance and use of data for decision-making. The project has been running in the Boloso Sore and Damot Sore districts of Wolayita zone of the SNNPR since March 2019.

Malaria Consortium has developed and set up a malaria surveillance dashboard at district health offices to facilitate outbreak detection and response at PHCUs and the community level, including the provision of computers and skills-based training for PHCU directors and district malaria officers to use the District Health Information System (DHIS2) malaria dashboard.



Yacob Bandishe is a Health Centre Head at Achura Health Centre in Boloso Sore district and has used the DHIS2 malaria dashboard for the last two years to document routine malaria data collected in his health facility. He regularly conducts supervision to support HEWs, and reports on activities undertaken at the health post to the District Health Office and Zonal Health Department. He reflects on the benefits of using the malaria dashboard for regular malaria prevention and control activities:

“There have been a lot of benefits from using the malaria dashboard. Previously, we lost data due to the fact it was paper-based, and it was difficult for newly appointed health centre heads to find the data they needed. However, now that we are using the digital dashboard in our facility, anyone can access that data for decision-making. The other benefit we have realised is that previously, our reporting to higher levels of the health system (district, zonal and regional levels) was not timely. Now, we are enjoying direct and fast reporting, even to Federal Ministry of Health level.”

Gedion Tefera, another Health Centre Head in Boloso Sore district, reflected on how the malaria dashboard has helped his facility with monitoring malaria case trends and using data for decision-making:

“With the DHIS2 dashboard, we monitor malaria case trends through data visualisation features that help us to easily compare malaria status on a weekly and monthly basis. We are also able to compare this year’s status in any given month with the same month last year. In doing so, we are able to continuously monitor malaria case trends in our cluster kebeles and, if we find any differences, we can take immediate action and go to communities to work on preventive and curative activities accordingly.”

Data-driven community engagement

The project has also conducted a feasibility study for piloting a social and behaviour change approach to improve malaria care-seeking behaviours and the practice of malaria preventive behaviours in households.

Matusal Berhanu is Head of Garagodo Health Centre in Boloso Soro District and has used the DHIS2 malaria dashboard for the last two years.

He reflects on using data from the malaria dashboard to work directly with communities at risk and promote sustained behaviour change to reduce malaria rates:

“The dashboard shows us which kebeles are at risk and helps us to monitor and act accordingly. We discuss the situation with community members and reach community-based decisions, for example environmental management at mosquito breeding sites. We also provide awareness raising activities and undertake Indoor Residual Spraying (IRS) in kebeles most at risk and prioritise the distribution of LLINs to those kebeles. All of these actions we are able to take as a result of the information from the dashboard.”

Sustaining progress in surveillance data use

The project has achieved good levels of engagement and increased capacity of health workers to switch to using a digitised malaria dashboard and interpret the resulting data to take action.

Essayas Kabba, is a District Malaria Focal Person at Boloso Sore District Health Office. He has worked at this office since the start of the project.

“In our district, there is a high turnover of health workers, especially heads of health centres and this can result in difficulties with working with DHIS2 and accessing the malaria dashboard for the first time. It will be important to continue training for all staff in using the dashboard to sustain its use and the benefits we have seen from it when heads of health centres move on to new positions.”

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