



Village malaria workers attend a focus group discussion in containment zones

PROJECT BRIEF

Malaria Eradication Scientific Alliance: Active Detection and Treatment (Pailin)

The aim of this project is to understand the feasibility and potential impact of screening for asymptomatic malaria in households where a febrile case of malaria has been reported

Project Outline

Cambodia is one of the countries where malaria transmission has dramatically dropped to the point of making elimination an attainable target. A national survey in 2010 showed that overall asymptomatic parasitaemia is as low as one percent, and a statistically significant eight-fold reduction in the malaria mortality rate from 5.2 per 100,000 population in the year 2000 to 0.65 per 100,000 population in 2011 has been reported.

Currently, in the pre-elimination phase, it is imperative that screening for malaria becomes more focused, foci of transmission are actively identified and a prompt response is taken. From existing survey data, approximately one out of six households where an asymptomatic case of malaria exists, other members of the household also harbour malaria parasites (Cambodia Malaria Survey unpublished data). This means that, a surveillance system that could alert the health authorities of the appearance of a symptomatic febrile case, could also trigger

a response to screen and treat malaria infection in other household members.

In order to anticipate the potential impact of such intervention, the key piece of information currently missing is the amount of asymptomatic infection that exists in households where a febrile case of malaria occurs.

Fortunately, in Pailin province, a state-of-the-art surveillance system is already in place for the detection of febrile malaria cases. This consists of a network of the so-called village malaria workers (VMWs) and health facilities that report, via SMS, to a central information unit each case of malaria that is confirmed either by microscopy or rapid diagnostic test. Such a surveillance system offers a unique and inexpensive opportunity to evaluate the potential impact of Active Detection and Treatment (ADAT) at the household level.

Malaria Consortium has traditionally worked in various transmission settings and has developed a high level of expertise in malaria control and pre-elimination. This

Country

Pailin province, Cambodia

Donors

The Malaria Eradication Scientific Alliance (MESA)

Barcelona Institute of Global Health

Length of project

February 2013 to June 2014

Partners

National Centre for Parasitology

*Entomology and Malaria Control /
Ministry of Health Cambodia (CNM)*

*London School of Hygiene and Tropical
Medicine*

Institute Pasteur

University of California San Francisco

has been supported by a strong technical team and a great deal of experience in the implementation of large-scale programmes in sub-Saharan Africa and Southeast Asia. The organisation is well positioned to contribute to efforts towards malaria elimination in areas with high and moderate transmission and has been monitoring key variables in Pailin province in Cambodia over the past decade. Based on the information gathered so far and working in close collaboration with the National Malaria Control Programme (CNM), it is planned that these activities will be expanded both in scope and geographic coverage.

The long-term overarching goal of this project is to generate the necessary information to develop an intervention consisting of screening households with a malaria case and eliminating the asymptomatic reservoir. The project in Cambodia will also develop recommendations on an appropriate response system in pre-elimination settings by strengthening the existing health surveillance system and tailor appropriate responses specific to elimination strategies for both *P. falciparum* and *P. vivax* malaria.

This project is funded by the Malaria Eradication Scientific Alliance (MESA) -



In-depth interview with village malaria worker

Institute of Global Health, an institution dedicated to advancing the science of malaria eradication.

Project Aims

This project aims to evaluate the potential impact of Active Detection and Treatment at the household level in Pailin Province. By conducting this study, a better understanding will be gained of the feasibility of interventions where members of households with a reported case of malaria ('index household') are screened

for asymptomatic malaria and treated accordingly. This information will be a very valuable addition to the strategy to eliminate *P. falciparum* and *P. vivax* infections by 2015 and 2020, respectively.

This project has a direct impact upon efforts to:

- ✓ *Combat and eliminate malaria*
- ✓ *Strengthen national health systems*
- ✓ *Provide operational research outputs*



Taking blood samples to test for malaria parasites, Pailin

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