

Exploring of *Plasmodium vivax* malaria complete treatment interventions in Cambodia: the impact of trust

Some countries in Southeast Asia, specifically the Greater-Mekong Subregion, are seeking to eliminate malaria by 2030. A specific type of malaria, vivax malaria, is a main challenge. Vivax malaria is difficult to treat. It requires a treatment combination that is long and potentially risky for certain individuals in some locations. In Cambodia, where malaria is common, the risk level warrants caution. We explore routine and alternative methods for providing access to vivax treatment in Cambodia by conducting interviews, making observations, and analysing data in the context of malaria elimination. We focus our results on the qualitative findings—specifically, how trust affects the alternative and routine ways of ensuring access to treatment.

Abstract

Plasmodium vivax (*P.v.*) malaria is the second most common cause of malaria globally, with approximately 2.5 billion people at risk of *P.v.* infection and an estimated 14.3 million cases in 2017. *P.v.* has a dormant liver stage, termed hypnozoites, which allows for relapse if not treated appropriately. Complete treatment for *P.v.* is long and can cause haemolytic anaemia in individuals with an enzyme deficiency called Glucose-6Phosphate Dehydrogenase (G6PD). A combination of hesitancy to administer complete treatment due to risk, unavailability of point-of-care G6PD testing, and lack of adherence to long treatment courses has resulted in a significant proportion of the vivax cases resulting from relapses. Such challenges with access and effectiveness of treatment cause a heavy burden to individuals and health systems alike. Alternative interventions to increase the use and effectiveness of *P.v.* treatment are being assessed. In Cambodia, we are exploring the effectiveness and feasibility of novel interventions and the implementation of routine interventions aimed at increasing access to vivax treatment. These interventions include use of the SD Biosensor quantitative G6PD test recommended for treatment, village malaria worker follow-up, and a health facility-based day 3 visit for novel shorter and stronger treatment regimens. Aiming to inform vivax policies in Cambodia and offer insights to other Greater Mekong Subregion countries and vivax endemic countries facing similar challenges, this study uses a mixed methods approach (interviews, observation, surveillance data analysis). We will present results focused on the qualitative findings—narrowing in on how trust affects the implementation of these interventions.