

## **The One Health Approach to Addressing Zoonotic Malaria in Rural Northern Borneo: Challenges and Solutions**

### **ABSTRACT**

Plasmodium knowlesi malaria is a vector-borne disease transmitted by the Anopheles mosquito. The incidence of this zoonotic malaria in South-east Asian rural communities continues to increase annually, despite efforts and guidelines for malaria control. To address this gap, a One Health project, supported by various stakeholders, was conducted from January to August 2022 to integrate community perspectives and address challenges to malaria prevention. The project implemented a photovoice initiative in collaboration with Universiti Kebangsaan Malaysia, Universiti Malaysia Sabah, international malaria experts, the Sabah State Health Department, and primary healthcare workers in four rural villages in Sabah, Malaysia. The study recruited 26 adult participants of both genders to explore their perceptions of malaria, prevention challenges, and the significance of innovative community engagement methods. Cultural and social norms, environmental factors, social disparity, and socio-economic status influenced the identified challenges. The project findings were shared with stakeholders and policy makers through photo exhibitions, newspaper articles, academic manuscripts, reports, and conferences and helped initiate further dialogues with policy makers and stakeholders. The transdisciplinary photovoice approach showcased the impact of collaborative efforts with rural communities in shedding light on critical issues related to malaria prevention. Future recommendations propose co-designing interventions for the target population and bridging the gap through a One Health initiative that integrates community perspectives and is supported by multiple stakeholders in addressing the challenges of malaria prevention.