Exploring the key anthropological drivers of and barriers to zoonotic malaria preventative behaviour in a community exposed to Plasmodium knowlesi infection in Malaysia: protocol for a qualitative study with a participatory research design

ABSTRACT

Introduction: Plasmodium knowlesi malaria is a zoonotic mosquito-borne disease with complex epidemiology. According to the WHO, the prevention and control of vector-borne diseases require community participation to increase coherence between malaria interventions and sustainable public health programmes. We describe a participatory research (PR) design for a study aimed at exploring the key anthropological drivers of and barriers to zoonotic malaria preventive behaviour among communities exposed to P. knowlesi infection in Malaysia. Participatory approaches can facilitate policymakers in designing future zoonotic malaria control programmes by investigating community perspectives and concerns about zoonotic malaria in a local context. Methods and analysis: The PR will be conducted over a period of 12 months, from March 2022 to March 2023, among adults (>18 years old) who are permanent residents in a rural village exposed to P. knowlesi malaria in Sabah, Malaysia. We will select patients who were diagnosed with P. knowlesi infection from January to December 2021 for focus group discussions (FGDs), as they can provide perspectives on the disease from the point of view of those previously diagnosed with infection. In-depth interviews (IDIs) with people of importance in the community, such as village heads, will also be conducted. Both FGDs and IDIs will be conducted from March 2022 until June 2022. Concurrently, a photovoice with adults over 18 years old who reside in the community will be conducted. The target sample sizes for FGDs, IDIs and photovoice are 6-8, 12 and 10-15 participants, respectively. We will use a study framework as a theoretical lens to guide the exploration of the beliefs, social contexts, barriers and drivers surrounding zoonotic malaria preventive behaviour. Ethics and dissemination: This study has been approved by the Medical Research and Ethics Committee Ministry of Health Malaysia (NMRR ID-21-01980-JEH) and the Research and Innovation Secretariat, Faculty of Medicine, Universiti Kebangsaan Malaysia (FF-2021-462). All participants will provide consent prior to participation. The results will be reported in international peer-reviewed journals and presented at conferences and on other platforms.