



# Health-seeking behaviours and beliefs surrounding malaria in three East and southern African geographies introducing seasonal malaria chemoprevention: A secondary qualitative analysis

Maria Suau Sans,<sup>1</sup> Erica Viganò,<sup>1</sup> Ivan Alejandro Pulido Tarquino,<sup>2</sup> Mercia Siteo,<sup>2</sup> Francis Okot,<sup>3</sup> Jennifer Ainsworth,<sup>1</sup> Jamshed Khan,<sup>3</sup> Anthony Nuwa,<sup>4</sup> Sonia Maria Enosse,<sup>2</sup> Maureen Nakirunda,<sup>4</sup> Kevin Baker<sup>1,5</sup>

<sup>1</sup> Malaria Consortium, United Kingdom  
<sup>2</sup> Malaria Consortium, Mozambique  
<sup>3</sup> Malaria Consortium, South Sudan  
<sup>4</sup> Malaria Consortium, Uganda

Context-specific data on health-seeking behaviours and beliefs surrounding malaria should be used to strengthen community engagement and health messaging.

## Introduction

Seasonal malaria chemoprevention (SMC) consists of the intermittent administration of antimalarials to children 3–59 months in areas where transmission is seasonal. Between 2021 and 2022, Malaria Consortium conducted several multi-component SMC implementation studies to build the evidence base around SMC’s suitability in new geographies in East and southern Africa.<sup>[1,2]</sup> The qualitative component centred on the acceptability and feasibility of SMC implementation, providing insightful information about the health-seeking behaviours and beliefs surrounding malaria in those contexts.

## Methods

- Data were collected between April and December 2022 in the Karamoja region (Uganda), Nampula province (Mozambique) and Northern Bahr el Ghazal state (South Sudan).
- The transcript dataset consisted of 40 focus group discussions held with caregivers and community health workers, and 55 semi-structured key informant interviews held with stakeholders at various levels of the health system.
- Secondary analysis was conducted by:
  - familiarisation or re-familiarisation with inductively coded datasets
  - employment of an iterative approach to re-code the data
  - mapping emerging themes
  - merging common themes based on similarities and noting context-specific differences.

## Results

Three themes and 10 subthemes were identified, including the following:

- Malaria conceptualisation:** Malaria is a mosquito-transmitted disease that disproportionately affects young children and pregnant women. High transmission periods are associated with rain and stagnant water.
- Malaria prevention practices:** Communities use a range of malaria prevention methods according to their availability. Insecticide-treated nets are the most widely used.
- Health-seeking behaviours:** Communities pursue healthcare through diverse avenues, often favouring biomedical treatments that may not always be accessible.

## Conclusion

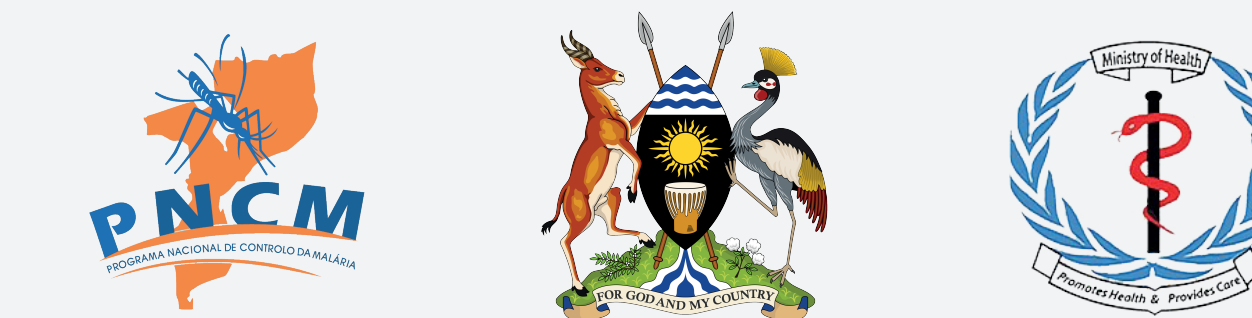
This study identified several themes that could improve the uptake of SMC. Themes included strengthening community engagement and promoting behaviour change through context- and audience-specific health messaging. For example, tailored messaging about the benefits of SMC in areas with high hesitancy could increase uptake and adherence. Findings could also be used to generate hypotheses for strengthening community-centered and- led interventions and implementation strategies beyond SMC.

**Table 1: Summary of themes and subthemes from the secondary qualitative analysis and illustrative quotes and subtheme context-specific particularities from each study location**

	Northern Bahr el Ghazal (South Sudan)	Karamoja (Uganda)	Nampula (Mozambique)
<b>Theme 1: Malaria conceptualisation</b>	Very strong seasonal malaria transmission was perceived.	Vomiting was perceived as an important symptom indicating malaria infection.	Litter accumulation was perceived as an important risk factor.
Malaria is perceived to be an important health problem associated with the rainy season, disproportionately affecting children and pregnant women.	<i>“There are houses that are affected by malaria because the owners have no hygiene in the house. They don’t want to sweep the yard, they don’t want to burn the garbage [...], everyone in that house is bound to catch malaria. You get malaria because of poor hygiene and many people receive mosquito nets but don’t want to use them. When they don’t use them, they get malaria because their bodies are defenceless.”</i> Female caregiver, Mozambique		
The most common symptom that raises suspicion of malaria is a fever. Untreated, it can lead to complications and even death.			
Malaria is commonly perceived to be transmitted by mosquito bites and specific activities or conditions are associated with increased risk of exposure.			
<b>Theme 2: Malaria prevention practices</b>	Strong discrepancy between officials and community members on mosquito net usage.	Usage of smoke by burning vegetation widely practised to kill mosquitos.	Usage of indoor smoke and specific plants widely practised to kill mosquitos.
Mosquito nets are the most widely used prevention method.	<i>“[The] ways we can protect our children from malaria are to wash your child and when you see the sun goes down, then you should [...] put the child inside the mosquito net [...]. Sweep the compound and clean everything at home and wash the children. What attracts malaria is when the [child] is fed inadequately, and their hands are very dirty, and that thing can bring the vomiting and can bring fever.”</i> Female caregiver, South Sudan		
Deterioration and misuse of mosquito nets pose challenges to prevention efforts.			
Gender conditions the roles involved in malaria prevention activities.			
<b>Theme 3: Health-seeking behaviours</b>	Flooding posed a challenge to communities accessing healthcare.	Men reported a preference for traditional treatment methods, followed by care-seeking in the formal sector if unsuccessful.	Care-seeking in the formal sector was seen as the immediate first option, followed by traditional methods if biomedical treatments did not resolve the episode.
Preference for treatment and care provided at the formal health sector, but traditional medicine is employed in some contexts.			
Transport, treatment costs and distance to health facilities are the main hinderances to healthcare seeking, with medicine stock-outs and lack of staff also presenting barriers.	<i>“It’s always common when in the household the child becomes sick it brings bad relations with the husband. You will find the husband start fighting the wife [saying] why is it the child is sick and why are you giving the child medicine from the hospital? Why don’t you give the local herbs?”</i> Female caregiver, Uganda		
Females are responsible for proposing and conducting health-seeking activities.			
Sensitisation activities delivered by existing institutions are suggested as principal enablers of appropriate health-seeking practices and behaviour change.			

## Results

**Figure 1: Map with highlighted geographies introducing SMC in East and southern Africa that are included in the analysis of this study**



## Acknowledgements

The SMC programme is funded through philanthropic donations received as a result of being awarded Top Charity status by GiveWell, a non-profit organisation dedicated to finding outstanding giving opportunities.

## References

- Baker K et al. Feasibility, acceptability, and protective efficacy of seasonal malaria chemoprevention implementation in Nampula province, Mozambique: Protocol for a hybrid effectiveness-implementation study. *JMIR Research Protocols*, 2022.
- Nuwa A et al. A non-randomized controlled trial to assess the protective effect of SMC in the context of high parasite resistance in Uganda. *Malaria Journal*, 2023.