



Pupils of Kakira Primary School, Alebtong District, demonstrate how to prevent malaria using treated bed nets on April 25, 2019. PHOTOS/BILL OKETCH

Study shows malaria high among poor households

The study was initiated following community work aimed at strengthening health facility capacities across 15 districts including Masindi, Hoima, Kyenjojo, Mukono, Tororo, Bukedea, Mitoma, and Butaleja.

BY BILL OKETCH

Severe malaria remains an alarmingly high threat to children under five years in Uganda's poor households, according to findings of a new report. The report says the issue is driven mainly by delayed health-care seeking and socio-economic vulnerabilities.

The report, released last Wednesday, provides details of a study that examined the high burden of severe ma-

laria among children under five in rural Uganda, focusing on the relationship between caregiver knowledge, socio-demographic factors, and health-care-seeking behaviour.

Conducted by the staff of Lira University in 2024, the research highlights critical gaps in community health education and facility readiness that contribute to alarming mortality rates.

The study was initiated following community work aimed at strengthening health facility capacities across 15 districts: Kiryandongo, Masindi, Buliisa, Kagadi, Hoima, Kyenjojo, Nakasongola, Kayunga, Mukono, Mityana, Tororo, Kumi, Bukedea, Mitoma, and Butaleja.

Researchers utilised the District Health Information System Two (DHIS2) to identify malaria cases over three months, specifically targeting children who were prescribed injections—a proxy for higher severity compared to standard oral treatments.

A community-based cross-sectional study was conducted between December 2022 and March 2023, involving household follow-ups of 1,886 caregivers identified through health centre

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and hospital registers.

Data were analysed using Stata Version 17, employing multivariate logistic regression to identify significant associations between demographic factors and disease severity.

The analysis revealed that 80.3 percent of the children in the study sample suffered from severe malaria. Several factors were significantly associated with this severity: Central region had the highest impact, and caregiver education level played a pivotal role in treatment-seeking decisions.

Higher levels of education enabled

caregivers to interpret symptoms better and navigate essential drug stock-outs at government facilities.

Furthermore, housing type was a major determinant; children living in permanent or mud-walled houses had lower odds of severe malaria compared to those in grass-thatched huts, as the former provide better protection against mosquito bites.

The study identified a dangerous trend where caregivers visited private clinics that often prioritised profit over Ministry of Health (MOH) guidelines.

In response, a community-responsive approach was designed, involving village-by-village engagements to educate families on early symptom recognition and the importance of utilising government-headed facilities.

Mr Walter Acup, the study's principal investigator (PI), said when they dug deeper into the housing composition or structure, people who were residing in permanent houses, or semi-permanent ones and had plastered them, had fewer cases of severe malaria, compared to those residing in grass-thatched houses.

"We know the dynamics of grass-

thatched houses. They have open space between the roof and the walls, so this could allow access for mosquitoes to enter and bite, compared to the permanent structures where people can lock the windows early," he said while presenting the research findings at Lira University last Wednesday.

Mr Acup, a lecturer at the Faculty of Public Health, Department of Community Health at Lira University, said respondents with a secondary education level had less likelihood of their children under five developing severe malaria cases.

"We were attributing this to the fact that once somebody has knowledge in reading information and articulating the prescription being given by the medical team, then they were likely to follow and then help in reducing cases, compared to the majority of the community who are not educated or who stop at primary level, and they cannot articulate," he said.

In order to reduce severe malaria and child mortality, the study recommends the following to be strengthened: caregiver education, community sensitisation, and health facility readiness to test and treat malaria, especially in rural areas.

Medics speak out

Dr Juliet Adongo Ocol, a paediatrician at Lira Regional Referral Hospital, also a regional coordinator for newborn health, at the weekend said malaria, which is endemic in Lango, causes a lot of morbidity in mothers and newborns.

Dr Adongo explained that expecting mothers are not doing enough in preventing malaria, like sleeping under insecticide-treated mosquito nets and taking fansidar during pregnancy.

"So, mothers end up delivering their babies as early as five months of gestation or in the event that they are delivering, they may end up with complications, which actually make these babies sick," she said.

The Apac District Health Officer (DHO), Dr Daniel James Odongo, earlier indicated there was an upsurge in malaria cases in the area, particularly among pregnant women.

"In 2020, we registered 3,801 cases, and by 2024, the cases had risen to 4,343, largely due to mothers relying on traditional birth attendants (TBAs) in areas like Apoi and Akokoro sub-counties," he said.

Ms Judith Odur, a resident of Cuk Ebange Cell in Lira City, said: "Sometimes malaria affects our children and both the mother and newborn end up being admitted to health facilities where drugs are often unavailable. We're forced to buy expensive drugs at private clinics, which pushes many parents into huge debt."