

**MALARIA OUTBREAK INVESTIGATION AMONG CHILDREN <5 YEARS AT A
HOSPITAL IN A NON-ENDEMIC REGION IN WESTERN KENYA BETWEEN
MARCH AND MAY 2017**

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Background: During the first quarter of 2017, there was an unusual increase in the number of laboratory confirmed malaria cases seen at Moi Teaching and Referral Hospital (MTRH), Eldoret – Kenya located in a non-endemic region. This coincided with the onset of the long term rains in Western Kenya that was preceded by a prolonged drought.

Methods: We carried out a retrospective record review of confirmed malaria cases from January 2012 to September 2017. Cases were defined as children <5 years who had been seen at MTRH between March and May 2017 and malaria diagnosis confirmed by blood slide microscopy. Cases were line listed then descriptive statistics and measures of association analyzed.

Results: There was an increase in the cases between March and May 2017. We obtained clinical information on 64% (96/149) of the confirmed cases. The median age was 2 years (IQR 1, 4) with males accounting for 58% (56/96). Most of them, 66% (63/96), resided in Uasin Gishu County. Majority, 79% (76/96), were admitted with a median length of stay of 3 days (IQR 2, 4) and a case fatality rate of 3% (3/96). Hotness of the body was the commonest symptom accounting for 92% (88/96). At presentation, 46% (44/96) had fever (>37.2⁰C). Anaemia was the commonest complication affecting 55% (53/96) of the cases. Children <2 years had higher odds of mortality (OR 6.1; 95% CI 0.5 – 70.3; p = 0.34).

Conclusion: There was a confirmed malaria outbreak between March and May 2017. Majority of the cases had severe forms of Malaria. Anaemia was the commonest complication.