

Abstract: Community Healthcare, Population Demographics and Their Relation to Bed Net Usage in Kisumu County, Kenya

The presence of both malaria as an endemic disease within Kenya's robust community health network specifically offers a unique opportunity to study and document malaria. The lakes region of Kisumu County represents the area of Kenya's highest malaria burden.¹ We undertook a prospective study within Kisumu to examine demographic factors that predict likelihood of bed net usage and malaria treatment accessibility in hospitals. Additionally, the study analyzes the efficacy of case management strategies by Community Health Volunteers (CHVs).

The study used brief surveys which were distributed with the help of Kisumu's CHV network, which represent the first level of the Kenyan Health System. Every CHV is in charge of maintaining and surveilling the health of approximately 100 individuals within their local community, and promoting strong preventative health and disease control.²

Our results indicated that level of education was the strongest predictors of bed net usage, and that Kisumu County's community healthcare approach is effective but has limitations due to lack of compensation for health volunteers and an inadequate supply of anti-malarial medications. According to a multivariate regression analysis of our survey findings, individuals who completed university or tertiary education were 30.6 percentage points more likely to use a bed net than those with no education ($p=0.00250$).

Sources

(1) “Malaria: Kenya.” Centers for Disease Control. U.S. Department of Health and Human Services, July 23, 2018. Accessed January 15, 2023.

https://www.cdc.gov/malaria/malaria_worldwide/cdc_activities/kenya.html.

(2) “Community Health Volunteers (CHVs) Basic Modules Handbook.” Division of Community Health Services. Kenya Ministry of Health, June 2013. Accessed January 15, 2023.

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