

Determinants of Long-Lasting Insecticidal Nets Utilization in the Prevention of Malaria in a Rural Community in Cameroon

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Abstract

Malaria remains a major cause of mortality in low-resource settings due to weak health systems and limited access to preventive tools. Long-lasting insecticidal nets (LLINs) are proven to reduce malaria transmission, but their effectiveness is compromised when not consistently used. Although ownership of LLINs is high in many areas, actual use remains low and varies by context. This study examined the factors influencing mosquito net use in households in a rural area of Cameroon. A cross-sectional survey involving 580 households across 30 sites was conducted using a questionnaire modeled on the Malaria Indicator Survey. Findings showed that while net possession was high (92.6%), usage lagged behind at 41.2%. Utilization was notably lower among children aged 5–15, among educated respondents, and in homes with fewer than one net for every two people. White-colored nets were also used less frequently. The study highlights a significant gap between ownership and use in this malaria-prone region. To improve usage rates, interventions should target school-aged children and educated populations, possibly through educational programs in schools to raise awareness and promote correct use of mosquito nets.

