

Abstract

Effectiveness of a mass distribution of long-lasting insecticidal nets, Uganda, 2016-2017

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Introduction: Malaria is the leading cause of morbidity and mortality in Uganda with 70,000 to 100,000 deaths each year, and 50% of deaths among children <5. To decrease malaria transmission, the Ugandan Ministry of Health widely distributed long-lasting insecticidal nets (LLINs) beginning in February 2017. This study determined the success of the distribution at increasing LLIN use among all individuals and among children <5. **Methods:** Pre- and post-distribution cross-sectional surveys were conducted in the summers of 2016 and 2017 in the Jinja district. **Results:** In 2016, 1815 households were surveyed representing 7372 individuals, including 1425 children <5. In 2017, 1634 households were surveyed representing 6308 individuals, including 1143 children <5. Net use significantly increased from 2016 to 2017 among all individuals (28% to 81%, $P<0.001$) and children <5 (34% to 86%, $P<0.001$). In 2017 after the distribution, compared to individuals who used nets, individuals who did not use nets were more likely to be younger ($P<0.001$), and live in a home with more sleeping spaces ($P<0.001$) and fewer nets ($P<0.001$). In 2017, compared to children <5 who did use nets, children <5 who did not use nets were more likely to be older ($P<0.001$), and live in a home with more people ($P=0.02$), more sleeping spaces ($P=0.05$), and fewer nets ($P=0.01$). **Discussion & Conclusion:** The distribution was effective at increasing LLIN use. Additional LLIN distribution should focus on supplying one net per household sleeping space. The large increase in LLIN use among children <5 will likely decrease malaria mortality rates.

Assessment of individual and community needs for health education Conduct evaluation related to programs, research, and other areas of practice Protection of the public in relation to communicable diseases including prevention or control

