Health systems, operational, social and economic research

PO - (7167) - IMPROVING LONG-LASTING INSECTICIDAL NETS USE IN KAYANGE COMMUNITY OF NORTH-WESTERN BURUNDI: A QUALITY IMPROVEMENT STUDY

Habonimana, Desire (Burundi)¹; Ndayisaba, Gabriel (Burundi)¹; Nimako, Gideon (South Africa)²

1 - University of Burundi; 2 - University of the Witwatersrand

Background:
The use of Long-Lasting Insecticidal Net (LLIN) for malaria prevention is a cost-effective intervention. WHO recommends LLIN universal coverage and use. In LMICs, LLINs are provided for free of charge but are either not used or misused. Our study sought to improve LLIN use in Kayange community of north-western Burundi by using the Model For Improvement (MFI).

Methods:
A one group pre post-test study design was conducted. LLIN weekly use was assessed for four weeks before intervention and for another four weeks after intervention. The study was conducted in 96 households. The intervention consisted of testing four different weekly small change actions by using the MFI.

Results:
Of the 96 households, 83 (87%) households owned at least one LLIN. However, only 40 (42%) households owned at least one LLIN for every two people. After intervention, the number of LLIN used increased from 32 to 75% (134% increase) and the number of persons (general population) sleeping under LLIN from 35 to 73% (108% increase). The number of children under 5 years sleeping under LLIN increased from 31 to 76% (145% increase) and the number of pregnant women who slept under LLIN from 43 to 73% (69% increase). Also, the averages of the number of nights in each week that the general population slept under LLIN increased from 2.13 to 5.11 (140% increase), children under 5 years slept under LLIN from 1.68 to 4.78 (184% increase) and pregnant women slept under LLIN from 1.56 to 4.47 (186% increase).

Conclusion:
Our intervention led to significant increase in all outcome indicators. This increase is the result of a combination of an enabling context and an effective implementation of an evidence-based Quality Improvement intervention. Small tests of change at the community level have the potential for achieving improved outcomes.