

The effects of malaria control on nutritional status in infancy

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Abstract:

Both malaria and undernutrition are major causes of paediatric mortality and morbidity in sub-Saharan Africa. The introduction of insecticide-treated bed nets (ITBN) during a randomized controlled trial on the Kenyan coast significantly reduced severe, life-threatening malaria and all-cause childhood mortality. This paper describes the effects of the intervention upon the nutritional status of infants aged between 1 and 11 months of age. Seven hundred and eighty seven infants who slept under ITBN and 692 contemporaneous control infants, were seen during one of three cross-sectional surveys conducted during a one year period. Standardized weight-for-age and mid-upper arm circumference measures were significantly higher among infants who used ITBN compared with control infants. Whether these improvements in markers of nutritional status were a direct result of concomitant reductions in clinical malaria episodes remains uncertain. Never-the-less evidence suggests that even moderate increases in weight-for-age scores can significantly reduce the probability of mortality in childhood and ITBN may provide additional gains to child survival beyond their impressive effects upon malaria-specific events