The Impact of Integrated Health and Nutrition Interventions on the Prevalence of Vitamin A Deficiency among Pre-school and School Children in Ethiopia

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ABSTRACT

Objectives: The purpose of this article is to inform participants on the impact of integrated health and nutrition interventions (micronutrient supplementation, de-worming, immunization, hygiene and sanitation, IYCF and dietary diversification and modification) on prevalence of Vitamin A deficiency among pre-school and school children. World Vision Ethiopia implemented micronutrient and health project for eight years in partnership with ministry of health.

Methods: A quasi-experimental design was used to conduct a baseline, mid-term and final evaluations. The study covered 8 intervention woredas/districts and two comparison sites. A total of 1197 children under five and 2997 students were examined clinically.

Results: The prevalence of Bitot’s spots among under-five children decreased from 6.4% at baseline survey (BLS) to 1.4% at midterm (MT) and nil at the end of program (EOP). The prevalence of Bitot’s spots in school children dropped from 7.5% at BL to 1.8% at EOP. Similarly, the prevalence of night blindness decreased from 4.9% to 0.1% in pre-school children and from 11.4% to 3.2% in school children. However, the situation remained higher in the comparison sites. Vitamin A supplementation coverage was significantly higher in intervention area compared with the comparison sites (P=0000). The mean consumption of vitamin A rich animal products and fruits is higher among the intervention than the comparison sites (p<0.05). Significant improvements...
were also noted in the prevention and control of diseases that contribute to the loss of vitamin A. **Conclusions:** The project achieved a significant reduction in vitamin A deficiency in the targeted community through undertaking integrated health and nutrition interventions.