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Topic: The first 1000 days, infant feeding, and early childhood development

Title: Food-based daily “Grand Nutrition” supplement and nutrition education reduce malnutrition in the 1000 days critical window of opportunity in rural Uganda

Presentation Type: Oral

Introduction

Uganda is currently experiencing the nutrition transition, a double burden of disease and persistently high acute and chronic malnutrition levels with 33% of U5 children stunted, 14% underweight and 5% wasted. It results into 4% loss of Gross Domestic Product. We aimed to develop and test the feasibility of an integrated model consisting of a daily food supplement made from local foods and nutrition education to prevent malnutrition during the 1000 days critical window of opportunity.

Methods

We conducted a prospective quasi-experimental study with a separate pre-test/post-test control group. A total of 356 mother-baby pairs and 120 expectant mothers participated in the study for six months. The intervention arm received the daily Grand Nutrition supplement eaten as a porridge and nutrition education; the control arm received nutrition education only. Nutrition education was implemented using behaviour change communication approaches to improve maternal nutrition knowledge, attitudes and practices.

Results

The Grand Nutrition supplement is culturally acceptable; households receiving the food supplement and nutrition education were less likely to have a stunted (p-value 0.039) or wasted (p-value 0.035) child, had statistically significant improved exclusive breastfeeding from 47 to 88% (p-value 0.000); reductions in proportion of mothers
giving babies pre-lacteal feeds (p-value 0.004) and Global Acute Malnutrition reduced from 13% to 7%.

**Conclusion**

The highly acceptable Grand Nutrition supplement coupled with nutrition education, implemented by the affected community showed great scalability potential and reduced malnutrition. Validation of findings in a large sample is recommended to further prove the potential in local foods.