

## Infant and Young Child Dietary Diversification Using Locally Available Foods after Nutrition Education in Rural Malawi

**Authors :** G. C. Phiri, E. A. Heil, A. A. Kalimpira, E. Muehlhoff, C. Masangano, B. M. Mtimuni, J. Herrmann, M. B. Krawinkel, I. Jordan

**Abstract :** Background and objectives: High prevalence of undernutrition in Malawi is caused by poor complementary foods. Lack of knowledge of age appropriate food within the household might affect utilization of available resources. FAO-Malawi implemented nutrition education (NE) sessions in 200 villages in Kasungu and Mzimba districts from December 2012 to April 2013 targeting 15 caregivers per village of children aged 6-18 months, grandmothers, spouses and community leaders. Two trained volunteers per village facilitated 10 NE sessions on breastfeeding, food safety and hygiene and complementary feeding using locally available resources. This study assessed the reported dietary diversification practices of infant and young child after nutrition education and the factors that influenced adoption of the practice. Methodology: Questionnaire-based interviews with caregivers were conducted in 16 randomly selected villages (n=108) before training-(t1) and seven months after training-(t2). Knowledge score (KS) was calculated on the indicators breastfeeding, hygiene and complementary feeding. Count regression was performed using SPSS 22. Eight focus group discussions (FGDs) were separately conducted among caregivers and grandmothers in 4 villages. Content analysis was used to analyze FGDs data. Results: Following NE, caregivers' KS significantly increased ( $p<0.001$ ) between t1 and t2 for breastfeeding (7.7 vs. 9.8, max=18), hygiene (3.8 vs. 5.9, max=7) and complementary feeding (10.2 vs. 16.2, max=26). Caregivers indicated that they stopped preparation of plain-refined maize meal porridge after they gained knowledge on dietary diversification of complementary foods. They learnt mashing and pounding of ingredients for enriched porridge. Whole-maize meal or potatoes were often enriched with vegetables, legumes, small fish or eggs and cooking oil. Children liked the taste of enriched porridge. Amount of enriched porridge consumed at each sitting increase among previously fussy-eater children. Meal frequency increased by including fruits as snacks in child's diet. Grandmothers observed preparation of enriched porridge among the mothers using locally available foods. Grandmothers liked the taste of enriched porridge and not the greenish color of the porridge. Both grandmothers and mothers reported that children were playing independently after consuming enriched porridge and were strong and healthy. These motivated adoption of the practice. Conclusion: Increased knowledge and skill of preparation and utilisation of locally available foods promoted children's dietary diversification. Children liking the enriched porridge motivated adoption of dietary diversification.

**Keywords :** behaviour change, complementary feeding, dietary diversification, IYCN

**Conference Title :** ICN 2015 : International Conference on Nutrition

**Conference Location :** Cape Town, South Africa

**Conference Dates :** November 05-06, 2015