

Abstract

The effectiveness of a homemade supplementary food in improving weight gain of children between 02 to 05 years age with moderate acute malnutrition in Kopay Western Province

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Key words: HMSF, MAM, child under five years age

Introduction

Reducing wasting among children less than 5 years has been a challenge in Sri Lanka even with several targeted food supplementation and cash transfer programmes for economically marginalized populations

Objective

This study assesses the feasibility, acceptability and effectiveness of a homemade supplementary food (HMSF) to improve the weight gain of children between 02 to 05 years age with moderate acute malnutrition(MAM).

Methods

An intervention study with HMSF given to MAM children (>-3SD to <-2SD for Weight for Height) between 2-5 years, in Kopay MOH (n=275) compared with the weight gain observed in a simple randomly selected control group of MAM children of similar age in Uduvil, Nallur MOHs (n=285). Ethical clearance was obtained from faculty of Medicine, Colombo. Amount of HMSF to be given was decided after a test study (mean 90 gm). Fifty grams HMSF was given to the children daily as a snack with added sugar and scraped coconut (total=90gm= 500 kcal) to the intervention group for 3 months and monitored with weight and height measurements. Socio economic characteristics, mothers' knowledge on child nutrition and child care practices were assessed through an interviewer administered questionnaire. Statistical analysis was performed using chi squared test.

Results

Mean age of the test group was 42.6 months and control was 43.1 months. Proportions of males in test group and control group were 54.2% and 46.3% respectively. There was a significant difference in the average weight gain throughout all 3 months in the intervention children (95%CI 0.095-0.578: p = 0.006: 95%CI 0.046-0.530: p = 0.02: 95%CI 0.040-0.526: p = 0.022) with no difference before the intervention (95%CI -0.059-0.416: p=0.14). More than 90% of the mothers in both groups practiced dietary diversification recommended by the World Health Organization. Stunting not improved (95%CI -0.30-0.74: p=0.234)

Conclusion

This HMSF is easy to prepare at home by mothers, relatively cheap, tasty and could be recommended for MAM children under five years.

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