

# Acceptability and feasibility of a child-feeding toolkit in Malawi

## Summary of research

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Feeding bowl and slotted spoon

Location: *Malawi*

**What we know:** Dietary quality and fortification or supplementation is the typical focus of behaviour-change communication around complementary feeding; portion size and food consistency receives less attention.

**What this article adds:** In collaboration with the Government of the Republic of Malawi and Emory University, Concern Worldwide evaluated infant and young child feeding practices and the feasibility, acceptability and cultural appropriateness of a practical feeding toolkit to improve complementary feeding practices in the Mchinji District. Key informants identified the need for cues in complementary feeding volume, frequency and consistency. The toolkit was well-received. Findings have informed operations research to evaluate and quantify the effectiveness of the toolkit in improving complementary feeding practices (the results are due in September 2016).

## Background

In the Mchinji District of Malawi, 53.7% of children under the age of five are stunted, 13.1% are underweight and 3.3% are wasted (National Statistical Office and ICF Macro, 2011); rates exceed national averages and are among the highest in the country. Efforts around child nutrition have failed to meaningfully reduce rates of stunting in Malawi (Scaling Up Nutrition, 2011). The World Bank-funded, government-led, Nutrition, HIV and AIDS Project (NHAP) aims to contribute to a reduction in child stunting and maternal and child anaemia and prevent transmission of HIV and AIDS. This project includes a 'Support to Nutrition Improvement Component (SNIC)' that aims to enhance and scale up maternal and child nutrition service delivery at community level and strengthen sector policy and programme development, management and coordination at central, district and community levels. Concern Worldwide is

## Box 1 Feeding toolkit

The toolkit comprises a demarcated feeding bowl, slotted spoon and counselling card. The bowl is designed with symbols and demarcations to denote recommended meal frequencies and quantities of food for children at 6-8 months, 9-11 months, and 12-23 months. Symbols and demarcations on the bowl also cue the extra food recommended for women during pregnancy and lactation. The slotted spoon guides caregivers in preparing complementary food of appropriate consistency. A pictorial counselling card provides pictorial instructions on how to use the toolkit to achieve recommended dietary practices, handwashing practices and dietary diversity. It is suitable for caregivers with low literacy.

the SNIC non-governmental organisation (NGO) implementing partner in the Mchinji District, one of 15 SNIC districts in Malawi.

As part of the SNIC project in Mchinji and in collaboration with Malawi's Department of Nutrition, HIV and AIDS and Emory University, Rollins School of Public Health, Concern Worldwide is conducting operations research to evaluate the effectiveness of a feeding toolkit (demarcated feeding bowl, slotted spoon and counselling card) to improve complementary feeding practices among families with children aged six to 23 months in three target traditional authorities (TAs): Zulu, Mduwa, and Mkanda. The toolkit was designed by a team of students and faculty from Rollins School of Public Health and the Georgia Institute of Technology. Previous testing in India and Kenya indicated the toolkit was acceptable and had the potential to shift dietary practices (Collison et al, 2015), (Kram et al

2015). As part of the larger research goal, formative research was conducted to evaluate current infant and young child feeding (IYCF) practices in the Mchinji District and to assess the acceptability and feasibility of the feeding toolkit to enhance complementary feeding of children aged six to 23 months, including potential barriers to use and optimal delivery platforms. Key findings are summarised here.

### Methodology

This cross-sectional, qualitative study was conducted from July-August 2015 through focus group discussions (FGDs) in two TAs, one peri-urban and one rural. Participants comprised the following target groups:

- Pregnant women and caregivers of children aged six to 23 months;
- Fathers of children aged six to 23 months;
- Care group lead mothers (community volunteers);
- Community leaders, including administrative and religious leaders, female representatives, farmers, businessmen and community health promoters; and
- Facility-based healthcare workers.

FGD guides were developed for each target group and translated into Chichewa. Topics included beliefs and current practices related to maternal nutrition, IYCF, influencers of maternal and child nutrition, perceived benefits and challenges of the feeding toolkit and potential delivery platforms. Ten FGDs were conducted, one with each target group in each TA. The number of participants in each focus group discussion ranged from four to 15. A total of 103 individuals – 63 females and 40 males – participated in the study.

### Findings

Key findings regarding IYCF practices were:

- All participants knew that foods from the six food groups should be introduced to children at six months of age; thin, watery maize porridge seasoned with groundnut flour was typically introduced at six months, with more variety and texture introduced at nine months. Gardening, fetching water and engaging in casual labour were identified as barriers to more diversified diets.
- Estimating portion size of complementary food was difficult, depending on age and size of child, amount typically consumed, food availability and seasonality. This led to under/over estimates in practice.
- While several mothers could describe recommended, age-appropriate meal frequency, in practice most indicated their infants received two meals a day, regardless of infant age, with some feeding three times a day. Mothers indicated meal frequency was influenced by food availability and food type; snacks were only provided if available.
- Facility-based healthcare workers, grandmothers, lead mothers, community health promoters and husbands all influence IYCF practices by the mother.

In terms of feedback on the toolkit:



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- The counselling card was clear and participants could identify the messages and food items. Suggestions to improve the toolkit were larger text and use of culturally-appropriate food items.
- The feeding bowl was considered appropriate and useful and was perceived to reduce food waste.
- The toolkit was considered as having benefits in promoting appropriate complementary feeding and thus preventing malnutrition. Community sensitisation and training of lead mothers and healthworkers was considered key.
- Identified barriers to uptake were inability to purchase nutritious foods, staining of the bowl and communal eating.
- Lead mothers, facility-based healthcare workers, fathers and community leaders all saw benefits of the toolkit within their areas of responsibility/concern around IYCF.
- Three distribution channels were identified for the feeding toolkit: 1) Lead mothers (identified by caregivers and fathers); 2) Community leaders (self-identified as the source for lead mothers); 3) Facility-based healthcare workers (self-identified, to act as an incentive for mothers and children to attend antenatal health/welfare clinics).
- All felt it should be provided at no cost (if necessary to charge, a subsidised cost of 50-150 Malawian Kwacha [£0.05-0.16] was suggested).

### Recommendations

Programmatic recommendations include community sensitisation prior to roll-out; develop-

ment of a feeding toolkit training guide for programme staff, community health promoters and lead mothers; and formulation of follow-up mechanisms within programmes to ensure proper use of the toolkit. The feeding toolkit should be deployed in conjunction with programmes or interventions aimed at improving household food security. Grandmothers, mothers-in-law and husbands should be targeted as part of behaviour-change programmes.

These findings have informed the ongoing operations research to evaluate and quantify the effectiveness of the feeding toolkit to improve complementary feeding practices. Results from the Mchinji District Feeding Bowl Trial will be available in September 2016.

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