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Cultural Beliefs and Practices that Influence Infant and Young Child Feeding in Mozambique

Results of Trials of Improved Practices Assessment, September 2017

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The Maternal and Child Survival Program (MCSP) is a global, United States Agency for International Development (USAID) Cooperative Agreement to introduce and support high-impact health interventions with a focus on 24 high-priority countries with the ultimate goal of ending preventable child and maternal deaths within a generation. The program is focused on ensuring that all women, newborns, and children—especially those most in need—have equitable access to quality health care services. MCSP supports programming in maternal, newborn and child health, immunization, family planning and reproductive health, nutrition, health systems strengthening, water/sanitation/hygiene, malaria, prevention of mother-to-child transmission of HIV, and pediatric HIV care and treatment. Visit www.mcsprogram.org to learn more. This report is made possible by the generous support of the American people through USAID under the terms of the Cooperative Agreement AID-OAA-A-14-00028. The contents are the responsibility of the MCSP and do not necessarily reflect the views of USAID or the United States Government.

Executive Summary

Introduction

There is a lack of understanding of how cultural beliefs, behaviors, and perceptions influence maternal, infant, and young child nutrition (MIYCN) in culturally heterogeneous Mozambique. The Social and Behavior Change Communication (SBCC) Strategy for the Prevention of Undernutrition in Mozambique (Ministry of Health, 2016) recommends that partners implementing nutrition projects carry out formative research in order to gain an understanding of such factors in the local cultural context where implementation will take place. To do so, the strategy recommends a number of research tools, including the consultative methodology of Trials of Improved Practices (TIPs) (1).

In line with the SBCC Strategy, the Maternal and Child Survival Program (MCSP) carried out a formative assessment in Nampula Province using the TIPs methodology to 1) understand cultural beliefs, perceptions, behaviors, and motivating factors that may facilitate or act as a barrier to optimal infant and young child feeding (IYCF) practices; 2) identify the influence and role of other family members, particularly grandmothers and fathers, in IYCF; and 3) understand maternal nutrition practices, with a focus on diet and workload during pregnancy. During the assessment, mothers relayed their common MIYCN practices, were asked to try new practices, and then shared their experiences, likes, and dislikes after a one-week trial period.

Methods

The assessment was conducted in two sites: Malema District, in the interior of Nampula Province, and Angoche District, on the coastline of Nampula. This allowed for the comparison of IYCF practices between two geographically and culturally different areas where MCSP is implementing nutrition SBCC interventions.

TIPs consists of three household visits to mothers of children under 2 years of age to identify barriers and facilitating factors to optimal IYCF practices and to work with the mother to identify and agree on feasible solutions to existing barriers.

During the first visit, qualitative data on cultural beliefs, perceptions, and behaviors related to IYCF practices were collected through in-depth interviews with mothers of children 0 to 23 months of age (N=34). The second visit, conducted one day after the first visit, was dedicated to discussing with the mothers improved or new practices that were not being used and negotiating one or two new practices the mothers agreed to try for a one-week trial period. During the third visit, conducted one week after the second TIPs visit, a follow-up interview was conducted with mothers to ask about their likes/dislikes concerning the new practices, their experiences, and whether they had modified the practices and/or were willing to continue the practice(s). Dietary intake data were also collected through food frequency questionnaires and 24-hour dietary recall during both the first and third TIPs visits with mothers of children 6 to 23 months of age (N=26).

In-depth interviews were conducted with fathers of children 0 to 23 months of age (N=6) and grandmothers with grandchildren 0 to 23 months of age (N=6), who were selected using purposeful sampling from the same communities as the mothers who were engaged in TIPs. In addition, to examine perceptions, cultural beliefs and behaviors related to maternal dietary practices, and weight gain and activity pattern during pregnancy, qualitative data were collected through in-depth interviews with pregnant women (N=11).

All questionnaires were translated into Portuguese and administered in the local language of Macua. Preliminary analysis of in-depth interviews was conducted to identify dominant themes on IYCF and to develop an “a priori” coding framework, which served as the basis of the qualitative analysis for this assessment.

Key findings

This assessment revealed that mothers have a strong aspiration for their children to be healthy and grow and develop well and that they recognize the importance of feeding a child “well” to achieve this. However, there is a large gap between mothers’ current IYCF practices and optimal practices due to cultural beliefs and habits, mothers’ lack of knowledge, and lack of financial means to provide appropriate and sufficient foods. Most mothers are unaware of the importance of regularly monitoring their child’s growth and development, and some feel helpless when facing malnutrition.

A strong positive element in breastfeeding practices found in this assessment was the lack of prelacteal feeds offered to the baby after birth. Early initiation of breastfeeding was practiced by the majority of mothers, however, there was a lack of knowledge on its benefits. A couple of mothers were advised by health care personnel to wait to offer the breast to the child, showing a lack of knowledge on the importance of early initiation of breastfeeding among health care providers as well. Although the majority of mothers fed the colostrum to the baby, more than 25% had either discarded it or gave the baby colostrum but had either received no advice on colostrum or breastfeeding or were unsure about the advice given.

Most children in the assessment were breastfed on demand and frequently, and mothers understood the benefits of breastfeeding. However, for almost a third of the children, the duration of breastfeeding was short (1 to 5 minutes) as reported by mothers and observed by direct observation, and some mothers did not practice frequent breastfeeding during the night. Additionally, more than a quarter of respondents had started to introduce foods early, either due to a lack of knowledge about the appropriate time to introduce foods or because of perceived insufficient breast milk. Almost all mothers in the assessment were still breastfeeding and most mothers were committed to continue until the child’s second birthday or longer. However, a quarter of respondents described breastfeeding during a new pregnancy as “*harmful*,” making the child “*get diseases through breast milk*” or “*become depressed, look thin and apathetic*,” which impeded continued breastfeeding up to 2 years of age or more.

Mothers reported learning about the appropriate time to introduce different types of foods from health care professionals or from health care volunteers or neighbors in the community. Nearly half of the mothers of children 6 to 23 months (12/26) had introduced first foods at the appropriate time (i.e., at 6 months of age). Nevertheless, foods were still often introduced at the wrong time: as mentioned above, many mothers introduced foods early, while 22% of the respondents introduced foods late. Family foods, such as *xima* accompanied with stew, were introduced at various ages, with 40% of mothers introducing *xima* before the child reached 9 months, and sometimes as early as 6 months old.

The most important problem identified during the assessment was an insufficient diversity of children’s diet, affecting 88% of children above 6 months old. There is an overreliance on starches, such as *xima*, made from corn, cassava, or sorghum flour or plain porridge, insufficiently accompanied by vegetables, legumes, eggs, meat, or fish. Children have a moderate intake of vitamin A-rich foods (leafy greens, spinach, cassava, pumpkin, or sweet potato leaves) prepared as part of family meals; however, the consumption of animal-source proteins such as meat, fish, or dairy products was low, and there was little fruit intake. Almost a fourth of the mothers buy non-nutritious foods, such as artificial juices in powder form, cookies, cakes, and crackers once in a while or enrich porridge with added sugar. It is likely that respondents would buy more processed foods if they had the financial means for it, as some described these foods as essential daily foods for children.

Sixty percent of children 6 to 23 months old do not receive the recommended number of meals per day to meet their required daily calorie intake. Most children (N= 17) eat two meals per day, which is the minimum amount recommended for breastfed children 6 to 8 months old. Insufficient frequency of meals becomes a problem when children reach the age of 9 months, as requirements increase to at least three meals per day. Only three respondents with children 9 months or older fed their child enough meals per day. Some respondents indicated that on some days their child only ate once or didn’t receive foods besides breast milk at all, or relayed: “*she eats*

when we have food.” This feeding problem is possibly the hardest to address, as it depends on a family’s financial condition. Both mothers and key influencers participating in the assessment expressed their wish to feed their children more often and regretted that they had no means to do so.

Shared cultural beliefs on prohibited foods for consumption by children are rare. *Caracata* (*xima* made from cassava) was the only food that was generally considered “bad” (causing stomachache), for consumption by children and pregnant women alike. However, mothers fed it to their children anyway, as they had no alternative available. Concerning maternal diet, several beliefs existed on foods that would aid or inhibit breast milk production in breastfeeding women. Most mothers mentioned fresh peanuts, fresh cassava, vegetables, leafy greens, and banana as good for breast milk production. In both assessment sites, eggs were a common, traditionally prohibited food for breastfeeding women to eat, as they would inhibit breast milk production. There are no widely held beliefs on appropriate or inappropriate foods for pregnant women. Almost half of the women could not say which foods should or shouldn’t be eaten during pregnancy. Foods mentioned as “bad” for pregnant women were usually mentioned by one respondent only and cannot be considered a general belief. An important barrier to pregnant women seeking or adhering to pre-natal care to ensure their intake of iron-folic acid supplements was the perception that they would be turned away at the health facility if they were not accompanied by their husbands.

The results of the assessment show that mothers were able to implement simple recommendations, such as increasing the length of breastfeeding or feeding the child from a separate plate, with success. With other recommendations, such as increasing the frequency and dietary variety of meals, mothers reported facing challenges and were only able to carry out the practice during part of the week. When counseled on the benefits of diversifying the diet of the child, mothers made efforts to collect different types of leaves; to acquire oil, eggs, meat, or fish; and to prepare dried moringa and were very satisfied with their children’s responses. Moringa proved to be a promising alternative to use as a local complementary food that is an accessible, affordable, and sustainable way to improve children’s dietary intake. Mothers also understood the importance of not feeding their child with non-nutritious foods and of substituting artificial juices with clean, treated water.

Recommendations

The TIPs methodology proved to be a powerful tool, as mothers were able to try out recommendations that were new to them but tailored to their specific situations and which they agreed were feasible to carry out. Despite poor IYCF practices, targeted counseling messages given to women through TIPs demonstrate women’s ability to make changes in feeding habits. Women are motivated to continue with the recommended practices when see that their child cries less, is joyful, and plays more, which in turn permits mothers to carry out their household duties undisturbed.

Assessing mothers’ experiences with TIPs recommendations resulted in the development of a counseling guide to inform health care providers of culturally-specific counseling messages targeting specific barriers encountered in the Nampula context. We identified a large gap between current IYCF practices and optimal practices, which can be improved when using these messages, as the results of the TIPs visits demonstrate. The TIPs counseling guide developed from this assessment should be used by MCSP and any other partners working in Nampula or similar cultural contexts to help caregivers in reaching optimal feeding practices. General education on preventing poor growth and the need to regularly check the development of children is needed in communities, and health care providers need to be trained to correctly monitor children’s growth, and to use this information to advise mothers on how best to feed and care for their children during the first 2 years of life.

A comprehensive communication strategy aimed at health care providers and community health workers, as well as tailored messages for mothers, grandmothers, fathers, and other caregivers, should strengthen and reinforce optimal breastfeeding and complementary feeding practices.

Key Recommendations for Improving Breastfeeding Practices through MCSP

- Train health care providers (doctors, nurses, midwives), traditional birth attendants and community health workers on the benefits of early initiation of breastfeeding and feeding the baby the “first milk”, and disseminate this information through various channels to mothers, grandmothers, and fathers alike.
- Continue education about the importance of exclusive breastfeeding until 6 months and counsel mothers on perceptions of insufficient breast milk and other breastfeeding problems that may impede this practice.
- Develop communication materials, based on messages described in the TIPs Counseling Guide, addressing the need to breastfeed regularly, during the day and night, and to feed for longer periods of time at each feed so that breasts are emptied.
- Counsel mothers on family planning methods as well as ways to continue breastfeeding during pregnancy, explaining that this is not harmful for the breastfed child or the fetus.
- Counsel mothers on beliefs regarding diet of breastfeeding women so that women don't restrict their diet when breastfeeding.
- Strengthen knowledge on the benefits of exclusive breastfeeding until 6 months and frequent and longer feeding through mothers' support groups, which can also include grandmothers.
- Identify mothers who breastfeed exclusively and on demand with a sufficient duration, to act as positive influencers and champions, to lead mothers' support groups and share their personal experiences and how mothers can address barriers they face.

Key Recommendations for Improving Complementary Feeding Practices through MCSP

- Develop communication materials, based on messages described in the TIPs Counseling Guide, addressing the need to strengthen dietary diversity and frequency of meals as well as the correct time to introduce complementary foods.
- Train community health workers, doctors, other health care providers as well as a network of peer-to-peer educators to counsel mothers on optimal feeding practices, negotiate a few new doable practices they are willing to try for a short period, and reassess the adequacy of those practices for the mothers after the trial period to decide whether to continue or which other practices to try. The messages should be reinforced through cooking demonstrations where mothers can learn specific recipes, ask questions and share their experiences in the community.
- Encourage female family members and fathers who also have a role in children's care to join in educational sessions, cooking demonstrations and visits to see health care providers, as key influencers pass their knowledge on to mothers.
- Moringa is a promising and nutritious local complementary food, widely available, that can help in improving dietary intake. Mothers should be taught different ways to prepare moringa, considering their concerns regarding lack of additional ingredients, the smell of moringa, or the time needed to prepare dried moringa.
- Educate mothers and key influencers on the adverse health effects of feeding children with processed foods or foods that contain added sugar, such as powdered juices, cookies, crackers or cakes, and counsel them to offer healthier alternatives.
- Address local beliefs on cassava meal as harmful for children as well as other, less frequent beliefs, such as egg, crab, bread and other foods harming children's health, and strengthen the knowledge on healthy foods.

Key Recommendations for Improving Nutrition for Pregnant Women through MCSP

- Create a strategy to reach pregnant women early and encourage them to visit regular check-ups while pregnant. Educate community leaders as well as community health care workers to support women to go for pre-natal checks even if their husbands are not available.
- Train health care providers to educate women on the benefits of iron folic acid supplements and deworming pills as well as appropriate weight gain and diet during pregnancy, addressing women's beliefs on prohibited foods for pregnant women.
- Encourage family members to support pregnant women in heavy tasks such as working in the field, carrying water, and cut up wood, especially during the last months of the pregnancy.