

# The Significance of Social and Behaviour Change Communication in Promoting Uptake of Micronutrient Interventions in Rural District, Zimbabwe

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#### Abstract

Zimbabwe is implementing a micronutrient powder program, which was designed to improve micronutrient supplementation to children aged 6-23 months. One year after program inception, there are reports of low uptake of micronutrient powders. The study sought to understand the importance of social and behaviour change communication in promoting uptake of micronutrient powders. The study was conducted in Makoni rural district of Zimbabwe. Key informant and focus group discussions were employed to explore the significance of social and behaviour change communication in promoting uptake of micronutrient powders. Qualitative data analysis methods of transcribing, organizing, categorizing, and coding were used to sift themes and emerging issues. Out of 81 community participants in this study, we found that social and behaviour change communication approaches employed increased knowledge, positive attitude and infant feeding practices among caregivers. On the other hand, we found that lack of adequate information on side effects of micronutrient powders may hinder optimal uptake of micronutrient powders. Social mobilization and capacity building approaches were used utilized to disseminate information on micronutrient powders. We found that few community engagement platforms, limited advocacy and mass media to disseminate information on MNPs may hinder optimal uptake of micronutrient powders. We suggest that nutrition programs in Zimbabwe should consider utilizing an integrated social and behaviour change communication approach and provide adequate information to caregivers on side effects to promote uptake of Micronutrient Powders.

**Keywords:** Social and behaviour change communication, Micronutrient powders, Uptake, Nutrition, Infant and young child feeding, Zimbabwe.

## Introduction

The Ministry of Health and Child Care and UNICEF Zimbabwe initiated a micronutrient supplementation program to children aged 6-23 months for free in eighteen rural districts of Zimbabwe in October 2017. Caregivers of children aged 6-23 months collect 15 sachets of micronutrient powders (MNPs) to add to complementary feeds every other day. The project aims to improve micronutrient supplementation to children under five.

The National Nutrition Survey Report (2018) showed that 4% of children under five received a minimal acceptable diet and the Multiple Indicator Cluster Survey (MICS, 2016) showed that 37% of children under five are micronutrient deficient. Since the commencement of the micronutrient program in October 2017, only 40% of children had received MNPs by May 2018 in Makoni district. This is lower than the targeted 100% of children aged 6-23 months having received MNPs. This is despite that micronutrient powders are supplied for free to caregivers at health facilities. Hence the study seeks to establish the existence and ascertain the significance of social and behaviour change communication in promoting uptake of micronutrient powders.

## Methodology

The study used the case of Makoni district to ascertain the significance of social and behaviour communication in promoting uptake of MNPs. The research design was qualitative. Focus groups comprised of ten participants and interviews lasted between 45 to 70 minutes. Focus groups were held

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in May 2018 over a period of 5 days. Each focus group was homogenous in that it represented a certain characteristic, by societal role and responsibility.

A total of 81 participants were interviewed (25 men and 56 women). In-depth interviews were conducted with 51 key informants and 3 FGDs were conducted (one focus group discussion in each village). Data collection employed a phase-approach. In the first phase, six community leaders from three villages were interviewed to get information on the micronutrient powder program and advocacy on micronutrient powders. The community leaders purposively identified community members for in depth interviews. Six community members were identified in each village and interviewed in the second phase of data collection. In the third phase, 5 key stakeholders were interviewed in each village to provide more information on social and behaviour change communication approaches.

Data collection tools focused on key issues on social and behaviour change communication and micronutrient powders. Focus group discussions were conducted with caregivers, village heads, village health workers and health workers. Key informant interviews were conducted with community leaders, caregivers, village health worker, district nutritionist, district health promotion officer, nutrition ward coordinator, and registered nurses. Focus group discussions and KIIs were tape-recorded with permission of the participants. Anonymity of participants in the focus groups was protected. In some instances, the use of "they" or "they're" as the first-person singular pronoun was chosen to further protect the identity of participants and to illustrate how their statements are representative of many focus group participants.

# Data analysis

Focus group and key informant interview data went through several phases of analysis. A preliminary analysis was conducted with three data collectors immediately after the focus group discussion to get a general sense of the data and reflect on its meaning. Next, transcription of the digitally recorded interviews was done. Transcripts from in-depth interviews were entered in Coding Analysis Toolkit and key thematic areas which emerged from discussions and in-depth interviews with participants on MNPs were identified. A list of topics was generated, and the topics were compiled into categories that were labelled as key findings. Analysis of the findings showed significant consistency in how the issues were raised by participants from both FGDs and KIIs. Where an issue was addressed by key informants but talked about differently, differences in talk are identified and explained.

## **Results**

## **Summary of results**

Participants mentioned that social and behaviour change communication activities increased knowledge, promoted positive attitude, and improved feeding practices among caregivers of children receiving MNPs. Social mobilization and capacity building were used to promote uptake of MNPs to a lager extent, whilst community engagement and advocacy were used to a lesser extent.

## **Knowledge on MNPs**

Most participants mentioned that community engagement activities increased their knowledge on significance of MNPs, usage and how to store MNPs. Participants mentioned that MNPs were a nutritional add on which they gave children to prevent diseases. According to one participant:

"I add the nutrition powder on a small portion of food and give my child. I skip one day and add the nutrition powder to his food."

Participants knew the benefits of MNPs and pointed out that MNPs improved children's appetite, provide micronutrient supplementation to children which help in preventing against diseases such as anaemia and poor eye sight. They mentioned that MNPs improved the child's health. They reiterated that children played more and were more energetic.

On the other hand, most participants showed inadequate knowledge on potential side effects of MNPs and what to do should their child be affected. They mentioned that some caregivers stopped giving children MNPs after their children suffered from diarrhoea, vomiting and constipation.

Participants pointed out that the message that was given by health workers was conflicting with the message on the MNP sachet which stated that:

"One sachet per child per day" versus "one sachet every other day message disseminated by health workers.

On micronutrients available in MNPs, most participants mentioned Iron and Vitamin A. The other micronutrients available were not mentioned by participants. Participants mentioned two out of the 15 available micronutrients in MNP sachets.

#### **Attitudes towards MNPs**

They reiterated that since MNPs are a nutritional add on, religious objectors had no problem using the MNPs. Hence there was little resistance towards acceptance of MNPs. Participants viewed MNPs as positive contribution to community child health outcomes e.g. healthy and strong children. Most participants mentioned that they had positive perception towards MNPs. According to one participant:

"MNPs were well received in in our community, even some community members who do not visit health facilities are using them since these are not medicines but nutritional add-on."

Majority of participants mentioned that no changes were noted in food colour after adding MNPs. They saw no harm in adding MNPs to a child's food. In some few cases, participants noted the darkening of a child's stool. The darkening of the stool was attributed to micronutrients in the powder they gave to children.

#### **Practices**

Most of the caregivers added MNPs to small portion of porridge in the morning while others added MNPs to pumpkins, mashed potatoes, avocados and other foods. Few caregivers added MNPs to full portion of semi solid food while a few also added to MNPs to Sadza, which in most cases would have been yesterday's left overs.

Key informants reiterated that some caregivers were adding MNPs to food which was consumed by the whole family. According to one participant:

"How does a parent add the nutrition powder to one child's portion when there are two children under five, one who is in the age range for micronutrient powder and the other who is four years old? It is better to the nutrition powder for both children to avoid crying of children during feeding times."

Participants mentioned that some caregivers were not adding MNPs to food because MNPs were not food. They mentioned that because of food scarcity, caregivers sometimes did not add MNPs. They explained that MNPs should be distributed in food form.

On storage of MNPs, caregivers mentioned that they stored MNPs in a cool dry place in the kitchen. Storing MNPs in the kitchen would act as reminder for caregivers to add MNPs after meal preparation. Other caregivers stored MNPs inside the child's feeding basket, that is where the child's food was kept.

# Social and behaviour change communication approaches utilized

## **Community engagement**

Participants mentioned that community dialogues and focus group discussions at various levels in the community were conducted for information sharing to improve understanding on MNPs. A total of 9 community dialogue with caregivers, community leaders and men were conducted at the beginning of the MNP program. Fifteen FGDs with caregivers were conducted with caregivers.

However, they pointed out that dialoguing and focus group discussions were conducted only once, when the MNP program was being introduced. Key informants mentioned that few community dialogues were documented, and this limited information sharing and sustainable solutions thereafter.

Participants mentioned that there were few community groups which were available in the community for discussion on issues which affect caregivers. Participants mentioned that most mother to support groups were not functional as they lacked sustainable projects to continue functioning. Caregivers reiterated the need to initiate resuscitation of support groups while at the same time initiating other activities for sustainability of the projects. They also mentioned that support groups must integrate all the infant and young child feeding activities to ensure optimal use of the time since caregivers have competing priorities.

Participants reiterated that they needed to share information with other caregivers on the side effects they are experiencing and get moral support from peer mothers. Key informants mentioned that the lack

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of fathers in community support groups hampers their efforts to improve child feeding practices. Fathers were cited as the sole providers of food at home, hence the need to make sure that fathers must also have the same information on child feeding as mothers.

They pointed out that they hadn't heard radio and TV programs and messages about micronutrient powders. Participants mentioned that they listened to radio and watch television during meal preparation times and the 20:00 news hour.

# Advocacy

Key informants mentioned that community leaders such as village heads were informed about micronutrient powders. However, other community leaders such as church leaders who may support uptake of MNPs were informed at a later stage. In the rural district, six meetings were conducted with community leaders in the rural district.

Twelve church leaders from hard to reach religious communities were engaged by community health workers to encourage church members with eligible children to use MNPs. Various meetings were also held by health workers at district level with district health teams (DHTs), district health executives and, district food and nutrition committees (DFNSC) to ensure optimum coordination and monitoring of social and behaviour change activities at district level.

## **Social mobilization**

Participants mentioned that different stakeholders were reached to promote uptake of MNPs. They mentioned that local organizations (for example the apostolic church), formal institutions and structures (Ministry of Health and Child Care (MoHCC), Implementing partner organizations, and local government ministry) participated to promote uptake of MNPs. Key informants pointed out that:

- Social mobilization teams were formed at district level to coordinate social mobilization activities within districts. The district administrator, field officers from implementing partner organizations, District Health Promotion Officers (DHPOs) and district nutritionists were part of the district social mobilization team members.
- Social mobilization plan was developed by the social mobilization team in consultation with team members and communities. The social mobilization plan covered information on improving knowledge, attitudes, and practices on MNPs, child feeding. Communication channels were also identified in the social mobilization plans.
- Target audiences were religious objectors, key secondary and tertiary population influencing sub optimal adoption of MNPs.
- However, key informants mentioned that few social mobilization activities were conducted due to lack of adequate funds. One key informant mentioned that:

"Even though we have a social mobilization plan at our district, we have not implemented most activities because we lack financial resources to go and provide health education to communities."

# **Capacity building**

Key informants mentioned that seven capacity building trainings on social behavior change communication (SBCC) and MNPs were done at various levels in the community. Key informants mentioned that capacity building trainings aimed at enhancing key stakeholder's capacities on information, education and communication (IEC)-behavior change communication (BCC) on MNPs, their importance and how to use MNPs. Also, they reiterated that interactive discussion, experience sharing, and question-answer were followed throughout capacity building sessions. They mentioned that community health workers were capacitated on interpersonal communication skills and used drama to educate communities on MNPs.

#### **Discussion**

Participants in the study mentioned that poor mixing contributed to side effects which emanated from giving children food added with MNP. Key informants in Makoni district mentioned the need to share information on potential side effects of MNPs. In other studies, positive changes and negative side effects observed by caregivers are linked to consuming MNPs. Caregivers who perceive positive change

in their child after MNP use were found to be more likely to obtain more sachets of MNPs (Jefferd *et al.*, 2015) and to report greater adherence (Mirkovic *et al.*, 2016)

In the study, participants had positive perception towards MNP's due to the perceived beneficial effects of MNPs. Caregivers' perception that the child has improved health were found to be most influential positive change associated with MNP intake (Osei *et al.*, 2016) and perceived positive changes in appetite after the children started receiving MNPs (Halati *et al.*, 2013). However, caregivers mentioned that unavailability of food made it difficult to give MNPs to children.

Focus group participants mentioned that messages on MNP usage were not clear. In social and behavior change communication activities, messages are part of SBCC program design features which influence caregiver knowledge and adherence (Kodish *et al.*, 2011). These messages should have the correct content, clarity, and cultural appropriateness of the information.

Health workers in this study provided information on MNPs to community members during social mobilization activities. The use of community health workers to promote uptake of MNPs has been found to be useful in the study. According to Brodmann & Mouhamed (2016), in Djibouti, children were more likely to eat more vitamin rich and diversified diets when community nutrition education sessions were delivered by active older women and facilitators.

In this study, social mobilization and capacity building were the most utilized social and behaviour change communication approaches to promote uptake of MNPs. In the view of Naugle & Hornik, 2014, integrated, community-based behaviour change communication activities using a variety of approaches have also reported increased positive behavioural results on child health. Also, on other programs such as family planning (Mwaikambo et al., 2011), using various social and behaviour change communication approaches resulted in increase in uptake of family planning methods. A Kenyan campaign to promote uptake of intrauterine device, a family planning method, social and behaviour change communication activities consisting of media, public relations and community outreach increased intrauterine device use by 43 percent (The ACQUIRE Project, 2006).

Advocacy activities to engage community leaders were cited as key by participants in the study to promote community sensitization and awareness. In a study in Benin, community leaders in Benin had a positive role in the quality of reproductive health services at health facilities (URC, 2017). Also, Alvesson & Mulder-Sibana, 2013 found out that when community leaders were used with community health workers in counselling methods, uptake of essential maternal and new-born care services improved in Niger and northern Ghana (Saaka et al., 2017). Hence the need to inform community leaders on programs in the community.

In this study, there was limited use of mass media in disseminating information on MNPs. The use of mass media to promote uptake of MNPs was mentioned as important in raising awareness and promoting use of MNPs. In the view of Hornik et al, 2015, social and behaviour change communication activities involving mass media has been shown to be valuable in reaching large numbers of people with powerful messages, mostly leading to changes in critical behaviours. Naugle & Hornik, 2014 opines that mass media is very important in promoting child health survival.

Participants mentioned that the lack of information, education and communication material (IEC) for use in interpersonal communication may affect knowledge on MNPs. According to Jolly *et al.*, 2016, even though IEC material were useful for illiterate women, there were limitations found using printed materials in 'Improving Maternal, Neonatal and Child Survival' programme intervention in rural Bangladesh.

#### Conclusion

The results from the study show that social and behaviour change communication activities are significant in increasing knowledge, positive attitude, and practices on infant feeding. Few caregivers had poor feeding practices. Side effects experienced by caregivers may result in low uptake of MNPs. The results from the study show that social mobilization and capacity building approaches were used to provide information on MNPs.

There was limited use of community engagement, advocacy, and mass media activities to disseminate information on MNPs. Limited used of community engagement, advocacy and mass media may result in low uptake of MNPs. Findings from the study show that efforts should be made towards

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addressing an integrated approach to social and behaviour change communication activities in promoting uptake of MNPs. Adequate information on potential side effects on MNPs should be provided to caregivers in vernacular language.

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