Using qualitative methods to evaluate mobile phone technology based nutrition and agriculture advisory services in Tanzania and Ghana

This brief focuses on the qualitative component of the mNutrition evaluation which is being led by the Institute of Development Studies. Changing human behaviours is complex and influenced by individual, societal, political, economic and environmental factors. The qualitative component helps to explore the complexity of these factors and how they may interact, facilitate or hinder behaviour change in response to the mNutrition intervention.

Objectives

1. Provide an in-depth understanding of the contexts within which the mNutrition interventions are embedded and that may influence the uptake of the interventions.
2. Explore the mechanisms and processes that facilitate or impede impact of the mNutrition interventions on child nutrition, infant and young child feeding practices (IYCFP), household’s diets and agriculture practices.
3. Provide insights into the implementation processes of the mNutrition interventions in the different contexts.

Evaluation design

The qualitative evaluation component is closely integrated with the quantitative evaluation component at all stages of the evaluation to inform, enhance and triangulate the design, data collection and analysis. The qualitative component consists of three qualitative data collection events.

1. Initial exploratory qualitative study

In the initial qualitative study a comprehensive contextual analysis of social, institutional, political and environmental factors is carried out. The analysis specifically focuses on:

- The acceptability, familiarity and use of mobile phone technology
- Factors that may affect the operation and/or access to a mobile phone and mobile phone based behaviour change messages by the target group
- Current information-seeking behaviours related to nutrition and agriculture
- Social, economic and environmental factors that may influence the uptake of behaviour change messages provided by mNutrition.

A purposive sample of six communities per country was chosen. The selected sites were a sub-sample of the quantitative sites to provide insights into different geographic contexts. Within each site participants were purposive selected to illustrate characteristics of different sub-groups.
Data collection consists of audio-recorded in-depth interviews (IDI) with pregnant women, mothers or farmers who have access to a mobile phone and local key stakeholders including health workers, community leaders and agriculture extension workers. This is accompanied by detailed fieldnote observations and focus group discussions (FGD) with pregnant women, mothers or farmers and other relevant community members (e.g. elderly, men). To triangulate the qualitative findings, three IDIs with national level experts for child nutrition or agriculture are also conducted per country. All IDIs and FGDs are guided by semi-structured topic guides organised around the main aims of the initial qualitative study.

2. In-depth case studies at midline
The midline case studies use a realist evaluation approach\(^1\) to explore the underlying mechanisms and processes that influence whether the mNutrition behaviour change messages are translated into actual behaviour change, for who and under what circumstances. The midline also includes an in-depth analysis of the mNutrition intervention implementation process which assess how the intervention is implemented in the communities.

For the qualitative midline, three communities per country are purposive selected using both typical case and extreme case sampling. Within these communities active mNutrition users are selected from the quantitative baseline using additional snowball sampling. The purpose of this is to ensure a diverse sample of users including young and old, rich and poor and male and female users.

Data collection consists of audio recorded IDIs of active mNutrition users complemented by FGDs which include participatory matrix ranking to explore the different components of m-Nutrition in more depth. To identify potential spill over within the communities, FGDs with various community members and IDIs with key informants are also conducted. To investigate implementation processes IDIs with project implementation staff and other key informants in the community are carried out. All IDIs and FGDs are guided by semi-structured topic guides organised around the main aims of the midline case studies.

3. Qualitative follow up, mini case studies
To further elaborate, validate and follow up on the findings from the integration of the three evaluation components quantitative endline, mini case studies are carried out. mNutrition users who still actively use the mNutrition product, as well as users who discontinued use, are interviewed to explore barriers and motivators of use (in particular, long-term use).

The mini case studies are conducted in the same sites as the qualitative midline. Participants are purposive selected using the quantitative endline and snowball sampling. This includes active mNutrition users and users who have discontinued use since the qualitative midline.

Data collection consists of audio-recorded IDIs and FGDs with users and discontinued users. All IDIs and FGDs are guided by semi-structured topic guides organised around the main aims of the mini case studies.