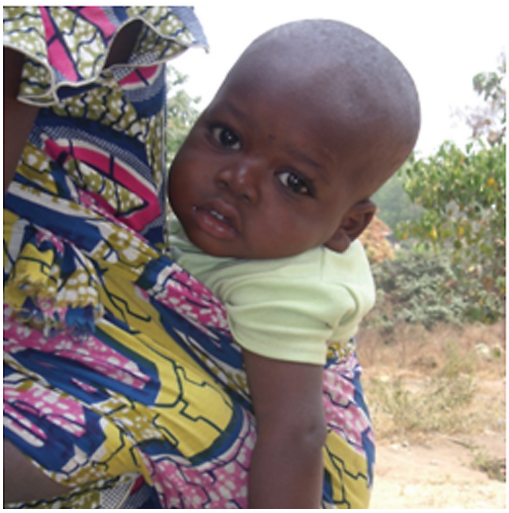
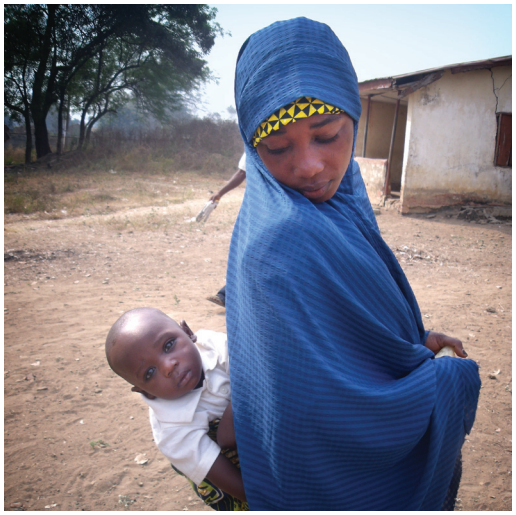
USAID'S INFANT & YOUNG CHILD NUTRITION PROJECT





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NIGERIA

# FORMATIVE ASSESSMENT OF INFANT AND YOUNG CHILD FEEDING PRACTICES

## FEDERAL CAPITAL TERRITORY, NIGERIA

JANUARY 2011

USAID FROM THE AMERICAN PEOPLE

IYCN USAID's Infant & Young Child Nutrition Project

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## Acronyms

| | |
|---|---|
| AIDS | acquired immune deficiency syndrome |
| DHS | Demographic and Health Survey |
| FCT | Federal Capital Territory |
| FGD | focus group discussion |
| HIV | human immunodeficiency virus |
| IYCN | Infant and Young Child Nutrition Project |
| IDI | in-depth interview |
| KAPP | knowledge, attitude, perceptions, and practices |
| MTCT | mother-to-child transmission |
| NACS | nutritional assessment, counseling and support |
| OVC | orphans and vulnerable children |
| PEPFAR | President's Emergency Plan for AIDS Relief |
| PMTCT | prevention of mother-to-child transmission |
| PNINS | postnatal infant nutrition support |
| USAID | United States Agency for International Development |

## Executive summary

The Infant and Young Child Nutrition (IYCN) Project conducted formative research in the Federal Capital Territory of Abuja, Nigeria, in early 2010 around infant and young child feeding behaviors, and found some positive practices and attitudes on which maternal and child health programs can build. Mothers and influencing groups such as fathers, grandmothers, and community leaders believe strongly in the benefits of breastfeeding for children. Caregivers have internalized and acted on messages about hygiene and active feeding of children, especially during and after illness.

> *A baby who is not breastfed will grow up less knowledgeable than a baby who is breastfed.* – Mother of a child less than 6 months of age, focus group discussion

> *We promise them [gifts] and play with the baby so as to convince the baby to eat.* – Mother of a child between 6 and 24 months of age, focus group discussion

Families value the limited health care services available in local facilities, and trust the advice that health care providers give them. There is a need and an opportunity for health care workers at facility and community levels to provide tailored, concrete counseling to families about when to introduce complementary foods to children, what types, how much, and with what frequency.

The positive roles that fathers and grandmothers can play in supporting mothers to optimally feed infants and young children were demonstrated again and again in focus group discussions and individual interviews.

> *We advise them to attend antenatal care health centers, and this has been routine advice during pregnancy.* – Father of a child less than 24 months of age, focus group discussion.

> *The way our own mother gave birth and took care of us to become whatever we are in life, that is how they (mothers-in-law) too take care of us, because we are very important to them.* – Mother of a child less than 6 months of age, focus group discussion.

At the same time, influencing groups can also act as barriers to change, for example in decreasing the practice of feeding herbs in water and gruels to infants less than six months of age, and in ensuring that complementary foods are enriched to meet the needs of young children. While breastfeeding is valued, exclusive breastfeeding is not widely practiced according to respondents.

Health care providers are concerned about how poverty and maternal nutrition impact the ability of mothers to optimally care for and feed infants and young children. They are seeking additional training, supervision, and support for infant and young child feeding, particularly within the context of HIV/AIDS. Health care providers would like to see community groups become more involved in educating caregivers and decision makers about protecting and promoting children's health and nutrition.

The IYCN Project will use these findings in Year 5 to improve the effectiveness of training curricula and job aids, targeting them to the specific barriers to changing key infant and young child feeding and care behaviors, and building on family and community assets that support these behaviors.

# Introduction

## Background

This report describes the results of a qualitative assessment conducted in eight communities in four Area Councils of the Federal Capital Territory, Abuja, Nigeria, under the Infant and Young Child Nutrition (IYCN) Project, Nigeria. The report is organized around the core issues that guided data collection; breastfeeding, complementary feeding, responsive feeding, food hygiene, feeding of the sick child; and existing and potential channels for behavior change communication. This first section provides an overview of the study process, situating the work in the context of the project. In addition, the section also highlights the objectives of the study.

The Infant & Young Child Nutrition (IYCN) Project is the flagship project on infant and young child nutrition of the US Agency for International Development (USAID). The five-year project (2006-2011) aims to improve nutrition for mothers, infants, and young children, and promote HIV-free survival of infants and children. IYCN builds on 25 years of USAID leadership in maternal, infant, and young child nutrition.

IYCN launched activities in Nigeria on September 1, 2009, with the aim of providing technical assistance to strengthen services for postnatal infant nutrition support (PNINS). The overall goal of this IYCN President's Emergency Plan for AIDS Relief (PEPFAR)-funded PNINS activity in Nigeria is to increase the HIV-free survival of HIV-exposed infants. The major objectives originally established were to: (1) improve the policy environment for the provision of nutritional care and support in HIV services; (2) increase the knowledge of nutrition and infant feeding in the context of HIV among service providers (both facility and community); and (3) improve service providers' skills and ability to support HIV-infected pregnant and lactating women, as well as mothers and caregivers of HIV-exposed and infected infants and children under two years of age. With the growing USAID focus on nutritional assessment, counseling and support (NACS) and the commitment of additional USAID Nigeria funding for orphans and vulnerable children (OVC), IYCN has been encouraged to expand and refocus its objectives to specifically introduce NACS and to identify and respond to the needs of OVC partners and programs.

The goal of this study is to provide information that will inform program design to improve the nutrition and health status of children less than five years of age in Nigeria. Data collection focused on knowledge, attitudes, perceptions, and practices (KAPP) around key infant and young child feeding and care behaviors among mothers as well as influencing groups and health workers.

The national Demographic and Health Survey (DHS) from 2008 indicates high levels of moderate to severe stunting in children under five years of age (41%) and moderate to severe wasting (14%). Undernutrition spikes between 3 and 18 months in the DHS 2008 data. This period is a window of opportunity where optimal infant and young child feeding practices can improve lifelong health and economic outcomes. Breastfeeding is almost universal, but exclusive breastfeeding rates are very low, even at 2 or 3 months, and complementary feeding does not include enough times during the day nor enough diversity of food groups.

Maternal nutrition impacts safe motherhood and a mother's energy and ability to care for her child. Even severe malnutrition, while not good for the mother, does not affect her ability to produce sufficient breastmilk; but there is a strong perception among community members and health care providers alike that it does. The 2008 DHS results indicate that there is an urban/rural gap in maternal nutrition, particularly concerning iron-rich foods (82% of urban mothers consume iron-rich foods as opposed to 63% of rural women).

Nigerian health policymakers are keenly aware of the need to adapt infant and young child feeding recommendations in the context of HIV/AIDS. According to the Nigerian Prevention of Mother-to-Child Transmission (PMTCT) Guidelines, 2005, 270,000 infants per annum are at risk of mother-to-child transmission, assuming no multiple births. Of this number about 15%–25% become infected postnatally through poor feeding practices. The Office of the US Global AIDS Coordinator Food and Nutrition Technical Assistance assessment (2007) found that many HIV-positive mothers report concerns about breastfeeding inadequacy, which contributes to the use of breastmilk substitutes, increasing risk of mother-to-child transmission. Earlier this year, a national nutrition Task Force released a consensus statement on recommendations for optimal infant and young child feeding practices in Nigeria in light of the World Health Organization's 2009 recommendations on infant and young child feeding in the context of HIV/AIDS. Point 3 of the 11-point statement is: *HIV-infected mothers should exclusively breastfeed their infants for the first 6 months of life, introduce complementary feeds at 6 months and continue breastfeeding until 12 months.*

## Objectives

The formative research has the following objectives:

1. To conduct a cross-sectional investigation of breastfeeding habits of caregivers among target groups.

2. To investigate complementary feeding practices among target groups.

3. To document responsive feeding practices, food hygiene, and feeding the sick child practices in the study areas.

4. To identify prospects of health communication interventions through the use of relevant media for reaching the respective target groups.

5. To identify existing alternative platforms for communication interventions and information sharing and dialogue among target groups.

## Scope

In order to strengthen community and facility level programs for improving nutrition among children under five, there was a need to explore current knowledge, attitudes, perceptions, and practices among target groups and health workers. This report is the outcome of an assessment conducted in Federal Capital Territory of Abuja, Nigeria. The results of this formative research will be used to design effective messages, training materials, job aids, and other program interventions to promote optimal practices and ultimately improve health and nutrition among children less than five years of age.

## Study area

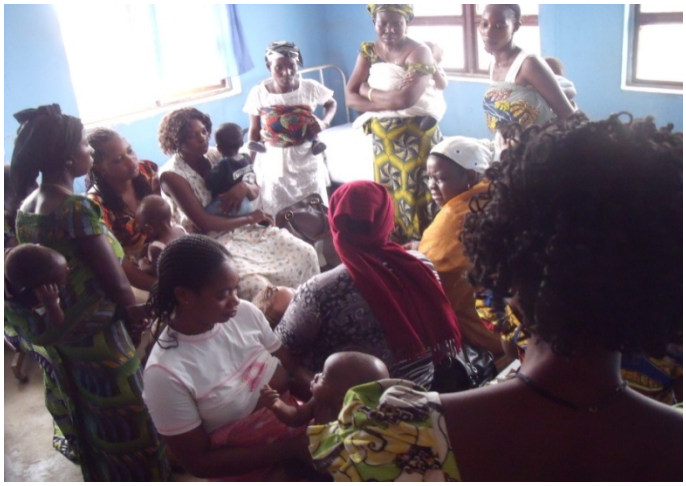
The Federal Capital Territory (FCT), Abuja, Nigeria is located just north of the confluence of the Niger and Benue rivers. It is bordered by the states of Niger to the West and North, Kaduna to the Northeast, Nasarawa to the East and South, and Kogi to the Southwest. Abuja is located in the centre of the country. The FCT has a landmass of approximately 8000 km², of which the actual city occupies 250 sq km. It is situated within the Savannah region, with moderate climatic conditions.

Four Area Councils were selected in the FCT: Abuja Municipal, Bwari, Kwali, and Kuje. Two communities each were sampled in each Area Council. The eight communities included:

Abuja Municipal Area Council: Jikwoyi and Kurudu
Bwari: Mkpape and Dei-Dei
Kwali: Yangoji and Dafa
Kuje: Kuje and Kiyi

## Cultural brief on study area

The culture of the Abuja region is a complex mixture of traditional and recent forms of art, dance, drama, language, literature, folklore, film, and music. Its roots are spiritual and traditional, and it is a vibrant and regenerative force. The culture in and around Abuja is traditionally African, with strains of Islam and Christianity. The Federal Capital status of the region has attracted many cultural groups and nationalities to the territory, making it a cultural melting pot, which is visible in all aspects of the social life of the territory. There are several indigenous groups in Abuja; the largest among them are the Gbabgi (also known as the Gwari), followed closely by the Koro. There are several smaller indigenous groups as well, including the Gade, Egbura, Gwandara, Bassa, and the Ganagana.



Focus group discussion with mothers of children 6–24 months of age in Jikwoyi Community. Photo: Oluseyi Akintola

## Methodology

This section focuses on the methodology used in the study. It discusses the study design, study population, study area, instruments, quality assurance and methods of data analysis.

### Study design

The study consisted of an assessment using qualitative methodology. Within the focal area of FCT, four Area Councils were selected. First, the Area Councils were divided into urban/rural groups. Within each group, the "lucky dip" technique was used to pick two Area Councils. Within each selected Area Council, two urban and two rural communities were selected. Data collection was done at the health facility level. Health workers at the health facilities served as contact persons and mobilizers for respondents. In-depth interviews (IDIs) were conducted with key individuals in each of the communities, including traditional leaders, opinion leaders, community health workers, and community health volunteers. Focus group discussions (FGDs) were held amongst primary caregivers (mothers) of children under six months of age, primary caregivers of children between 6 and 24 months, grandmothers of under-24-month-olds, and fathers with children under 24 months of age. A summary of participants is shown in Table 1. Structured observations were made among the selected communities.

**Table 1: Summary table of participants for the focus group discussion sessions**

| Sampled Area Councils | Abuja Municipal Area Council | | Bwari Area Council | | Kuje Area Council | | Kwali Area Council | |
|---|---|---|---|---|---|---|---|---|
| Communities | Jikwoyi | Kurudu | Mkpape | Dei-Dei | Kuje | Kiyi | Yangoji | Dafa |
| Mothers of children < 6 months old | 8 | 9 | 10 | 8 | 11 | 10 | 11 | 12 |
| Mothers of children 6 to 24 months old | 12 | 12 | 8 | 8 | 10 | 9 | 10 | 12 |
| Grandmothers of under-24-month-olds | 10 | 10 | 7 | 7 | 11 | 11 | 8 | 11 |
| Fathers of under-24-month-olds | 8 | 12 | 8 | 8 | 12 | 12 | 12 | 10 |

### Data collection

Data collection instruments were developed for the target groups of the study. The instruments were pre-tested, on the basis of which some moderations were made. A methodology workshop was held to train the field officers and assistants a day before field work began. The training took place in the IYCN office in Asokoro, Abuja. During the training sessions, field assistants were taken through each instrument, and possible interpretations debated and agreed upon. Role-play sessions were also conducted. The workshop was facilitated by Dr Afolabi in conjunction with the principal investigator, Dr R. A. Okunola. Data were later collected at the different sites in FCT, coordinated by the principal consultant. Health officials of Area Councils to be visited were informed some days before the arrival of the study team, and necessary mobilizations were done. On arrival, courtesy calls were made to the traditional head and permission formally obtained for entrance into the community. Afterwards, the team proceeded to the health facility, where the various interviews and discussion sessions took place. Each FGD session was facilitated by a moderator and a note-taker while the sessions were tape-recorded. The collected data were transcribed and translated into English for the purpose of analysis.

### Data analysis

The research team coded, developed categories, and explored themes and relationships in the collected data. The write-up includes quotations where appropriate. Four domains were eventually created for data analysis within the broad rubric of Knowledge, Attitudes, Perceptions, and Practices (KAPP):

1. Breastfeeding
2. Complementary feeding
3. Responsive feeding, food hygiene, and feeding of the sick child
4. Sources of information on infant and young child feeding and care

## Results

### Breastfeeding practices

Respondents reported near universal breastfeeding among women in their communities. They expressed strong beliefs about the importance of breastmilk for the nutrition and health of children. The following statements from mothers were typical:

> *Mother 1: A baby who is not breastfed will be less strong than a baby who is breastfed.*
>
> *Mother 2: A baby who is not breastfed will grow up less knowledgeable than a baby who is breastfed.*
>
> (Mothers of children <6 months old, FGD location not noted)

The Nigeria DHS (2008) showed that breastfeeding is widely practiced among women in Nigeria. Across all communities, there is a deficit in caregivers' knowledge about ideal breastfeeding practices, as well as a gap between knowledge and practice. Pre-lacteal feeds were reported across communities, while breastfeeding was generally initiated in the first day after birth. Water, sometimes with traditional herbs added, was reported to be the most common pre-lacteal feed.

Some respondents said that colostrum is still discarded and not fed to babies out of the belief that it is not good for the child. Beliefs and practices about pre-lacteal feeds were fairly consistent among all respondents, while beliefs and practices about colostrum varied from respondent to respondent even within communities. For example:

> *Mother 1: I started breastfeeding the baby one hour after delivery because I was in pain.*
>
> *Mother 2: Immediately I left the labor room I started breastfeeding the baby.*
> *FGD Moderator: What was the first food you started giving your baby after delivery?*
>
> *Response(s): The first food I gave my baby after delivery was breastmilk.*
>
> *FGD Moderator: What do you do with the first yellowish secretion that comes out from the breast after delivery?*

*Mother 3: I throw the yellowish secretion away.*
*Mother 4: I gave my baby the yellowish secretion from the breast.*
(Mothers of children 6–24 months, FGD Mkpape)

*The first thing I give my baby after birth is water, but after two days, I gave him breastmilk.* (Mother of child <6 months, FGD Kuje)

The advice of mothers-in-law influences these decisions:

*The first thing I gave my baby after birth was water and breastmilk and I did not breastfed the baby until the next day after birth because my mother-in-law prevented me from breastfeeding my baby; when I asked why, she said it is not good.* (Mother of child 6–24 months, Kuje)

The delay in the introduction of breastmilk to babies results from a belief that the first yellowish secretion (colostrum) from the breast is "not good" and dangerous for the baby. For example:

*Before now, the first yellowish secretion from the breast is seen as being dirty, so we throw it away, but now we are educated on the importance of feeding the baby with the yellowish secretion.* (Mother of child 6–24 months, Kuje)

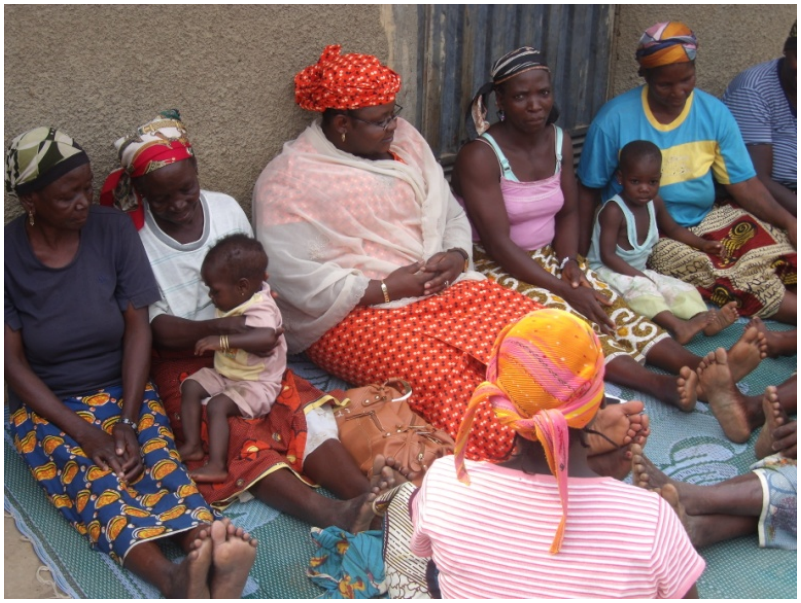


Photo: Oluseyi Akintola

Respondents in all communities reported giving water to babies along with breastmilk. Some reported introducing thin gruels or other liquids from 3 months forward. Respondents gave various reasons for giving water and introducing other liquids and foods. It is clear that grandmothers and fathers also influence the decision of when to

introduce other liquids or foods to babies. Respondents in each community mentioned having heard the message to breastfeed exclusively for six months. The following quotes represent the variety of current practices and some of the reasoning behind them:

> *I give my baby breastmilk towards the evening after delivery and after that evening I gave the baby cowbell milk often and the baby enjoys taking it.* (Mother of baby <6 months, FGD Kuje)

> *It is good to exclusively breastfeed for 6 months, but at times we do not do that because you know we are farmers and so after one or two months of delivery we go to the farm with the baby because we are not government workers and we give water and* akamu *(thin gruel of corn flour) to the baby.* (Father, FGD Kurudu)

> *FGD Moderator: At what age do you think mothers should start giving the baby water?*
>
> *Responses: Immediately after birth, water is first given before breastmilk.*

> *FGD Moderator: How many days after delivery does the mother start breastfeeding the baby?*
>
> *Responses: Water is given first, then followed by breastmilk in that same day; but subsequently water and breastmilk is given to the baby.* (Grandmothers, FGD Kiyi)

> *Yes we also advise them …you know we were fed with breastmilk and not with tin milk as the case may be; so we advise our wives to do that, which they do even up to a year or more, and that has been their responsibility, and if any problems occur, we tell them to go to the hospital.* (Father, FGD Dafa)

Some health workers interviewed expressed frustration with slowly changing beliefs and practices. A typical statement was:

> *The area of exclusive breastfeeding needs to be improved upon. At times when I counsel them on exclusive breastfeeding, they would tell you they are farmers, and as such they cannot practice exclusive breastfeeding because they would go to the farm.* (Health volunteer, IDI Kurudu)

Others were more optimistic:

> *Interviewer: Having been in this community for 3 years, do you in any of your health talks discuss the issue of exclusive breastfeeding?*
>
> *Response: Yes, we do that during house-to-house visitation sets for every Thursday and during antenatal sets for Tuesday. We do carry out programming that encourages women on exclusive breastfeeding. In fact, they are highly [competent] in it and we are very happy.* (Clinician, Yangoji)

Breastmilk was said to be given on demand by primary caregivers across communities.

> *We breastfeed the child any time the baby cries.* (Mother of child < 6 months, FGD Dafa)

> *FGD Moderator: For example, you are not around and your baby needed to be fed, what do you do?*
> *Response: Any time I come back, I would breastfeed the baby, though we do not leave our babies at home before going out.*
> *FGD Moderator: How many times do you breastfeed the baby daily?*
> *Response: Any time the baby cries, we breastfeed the baby*
> (Mothers of babies < 6 months, FGD Dafa)

Respondents did not report how long each feeding lasted and whether at least one breast was emptied at each feeding.

Mothers believe that eating certain foods will increase breastmilk production. There is a widespread perception among respondents, including health workers, that inadequate maternal diet results in insufficient milk production by some mothers.

> *FGD Moderator: Why did you feed the baby with water?*
> *Responses: Because, at times we do not eat food that could assist in milk production, so that is why we give the baby water to complement the breastmilk.*
> (Mothers of children <6 months, FGD Kiyi)
> *FGD Moderator: During the lactating period, what kind of food do you eat to enhance milk production?*
> *Response(s): Cereal gruel, Akamu mixed with milk, hot corn food, pounded yam, and so on.*
> *FGD Moderator: Do you think all these foods you have mentioned improve your health?*
> *Response(s): Yes, they do.*
> (Mothers of children 6-24 months, FGD Kiyi)

A common practice reported across communities was giving herbal infusions in water, both to prevent and to treat illness, from birth on. Grandmothers in particular have an important role in using herbs, both for bathing babies daily and for feeding to babies, but mothers also reported feeding them.

> *FGD Moderator: Apart from water, is there any native liquid that is given to the baby in this community?*
> *Responses: Yes, we boil herbs for feeding and bathing the baby.*
> *FGD Moderator: Why?*
> *Response: Because it makes the baby stronger.*
> *Response 2: The herbs protect the baby from diseases.*

*FGD Moderator: Is it much or a small quantity?*
*Response(s): Small quantity.*
(Mothers of children < 6 months, Kiyi)

*FGD Moderator: What other things do you do?*
*Response: We cuddle the children at the back and play with them as grandmother.*
*FGD Moderator: Do you give them traditional herbal medicine?*
*Response: If they have a minor ailment, we administer herbal medicine.*
*FGD Moderator: What type of herbs do you give them?*
*Response: We prepare different kinds of leaves, like orange leaves, nym leaves, etc.*
(Grandmothers, FGD Dafa)

While there was awareness of the practice of expressing breastmilk when mothers are away from their babies, it was not widely practiced according to respondents. Mothers stated that rather than express milk, if they had to leave their babies for a long time, they would instruct the caregiver to give the baby "hot water" (boiled water which has cooled a bit), and mothers would breastfeed immediately before leaving and immediately on returning.

One respondent in Mkpape (FGD with mothers of children 6–24 months) reported expressing milk:

*FGD Moderator: How do you make arrangements for what the baby eats in your absence before leaving home?*
*Response: I express my breastmilk in a cup, then cover the cup and drop it in the refrigerator so that anytime the baby demands, they feed the baby, although I add a little quantity of water in the expressed breastmilk.*

Breastfeeding cessation seems to be at the discretion of mothers and families, as no general pattern emerged across communities. Both the timing and the management of the process varied. Practices included gradual and abrupt weaning, with no consistency within communities. Reasons given for ceasing breastfeeding included: work, causing separation between mother and baby (both farm work and other work); the mother wishing to become pregnant; the mother becoming ill; the mother wanting to stop; and the child reaching the appropriate age to stop. Following is a sample of reported current practices and some of the reasoning behind them.

*If I want to stop breastfeeding my baby, I would take my baby away from me to my mother-in-law and whenever the baby cries my mother-in-law gives the baby milk in place of breastmilk.* (Mother of child <6 months, FGD Mkpape)

*When I want to stop breastfeeding my baby, I buy something to keep so that if the baby cries, I give that to him/her, but I stop abruptly because the day I want to stop, I would just stop breastfeeding the baby.* (Mother of child <6 months, FGD Jikwoyi)

*FGD Moderator: For how many months do mothers breastfeed their babies generally in this community?*

*Mother 1: From birth to when the baby reaches two years.*

*Mother 2: From birth to one year and six months.*

*Other mothers: One year and 6 months or one year and 3 months.*

*FGD Moderator: Are there mothers who stop breastfeeding their babies before one year in this community?*

*Response(s): Yes, there are.*

*FGD Moderator: Do you know why they stop?*

*Response(s): It depends on the nature of the work they do.*

*FGD Moderator: How do you stop breastfeeding your baby?*

*Mother 3: I stop breastfeeding my baby abruptly.*

*Mother 4: I stop breastfeeding my baby gradually, such that if I am breastfeeding three times before, I would be reducing to 2 to 1, until I finally stop breastfeeding the baby.*

*Mother 5: If I want to stop breastfeeding my baby I would buy provision to complement the breastmilk until I finally stop breastfeeding the baby.*

*FGD Moderator: Do you encounter any difficulty in stopping the baby from breastfeeding?*
*Response: Yes, the baby cries but that does not stop me from stopping the baby from breastfeeding.*
(Mothers of children 6–24 months, FGD Mkpape)

*FGD Moderator: Why do mothers here stop breastfeeding before 2 years old?*

*Response: If the mother is ill, she finds it difficult to breastfeed the baby until the age of two, and sometimes when the mother wants to become pregnant.* (Mother of child <6 months, FGD Kuje)

## Complementary feeding

There is a generally held belief that breastmilk has neither sufficient water nor sustenance for babies, especially from three months and above. While there was variation among responses even within communities, several respondents reported starting complementary foods from three months on. Complementary feeding often begins with the introduction of locally available thin gruels, such as *akamu* and *kunu* (thin gruel made from millet).

Typical responses to the question of when to introduce other liquids and foods to babies were:

*At 8 months, the baby is ripe enough to eat food and then the food is gradually given to the baby.* (Mother of child 6–24 months, FGD Kiyi)

*From 5 months, the mother starts feeding the baby with solid food alongside breastmilk and* akamu. (Grandmother, FGD Kiyi)

*Once the baby reaches the level to eat, the baby demonstrates willingness and demands food as the elderly person is eating.* (Grandmother, FGD Kuje)

An important finding is that liquids and gruels are not considered "food" by respondents but are considered to be in another category. "Food" refers to more solid foods that infants and toddlers find harder to chew and swallow. This finding is important for developing effective messages about when to introduce *any* liquids and foods besides breastmilk to babies.

The two somewhat confusing exchanges below from focus groups in two different communities highlight the need for clear definitions of "food" versus other items considered to be in a different category by respondents:

*Response: If they deliver, they should be giving the baby traditional and orthodox medicine, then after 3 months they should give them cereal gruel (kunu).*

*FGM Moderator: No breastfeeding?*

*Response: Yes, they should also breastfeed, then after getting used to all these, the baby should be fed with solid food (tuwo).*

*FGM Moderator: I understand everybody breastfeeds for 3 months and then introduces solid food (tuwo)?*

*Response: No, we introduce cereal gruel (kunu) or pap (akamu) after three months, though we would still be breastfeeding for 6 months.*

*FGM Moderator: So, you breastfeed for 6 months before giving any other food?*

*Response: Yes!* (Mothers of children 6–24 months, FGD location not noted)

*Response: Yes, after six months the babies do not depend solely on breastfeeding again as they eat other things, so all these other things they eat we give them; but before the period of 6 months we cannot feed them.*

*Moderator: Do you decide what young children eat?*

*Response: Yes, there are foods that children, unlike adults, do not eat, like pounded yam, rice and beans as well as other solid food, and so we tend to give them liquid food that sustains them, like milk, water, soya beans and so on.*

*Moderator: How do you know such food is good for the children?*

*Response: Sometimes, if they are crying and you give it to them, they easily take it.*

*Moderator: What about 2-to 6-month-old babies? Do you think they can take such food like milk, soya beans, etc.?*

*Response: Yes, they can take such food.*

*Moderator: What time do you think babies can start eating food?*

*Response: From 6 to 8, 9 months.* (Fathers, FGD Dafa)

Aside from *akamu*, which is mentioned in each community as an early introduction to babies' diets in addition to breastmilk, personal preference and economic constraints are reported as determinants of what a person "should" eat, rather than the idea of needing a balanced diet, or specific food taboos. People are aware of different food categories, such as "body building" and

"energy giving," but there is no consensus about which foods belong in which category. Accordingly there is much variation in responses about first complementary foods for babies:

> *Mother 1: The first food I gave my baby after delivery was breastmilk, up to three 3 months before I started giving the baby pap* (akamu) *to drink.*
>
> *Mother 2: I start with breastmilk until 4months before I introduced pap* (akamu)*, and I also boil traditional herbs for the baby to drink.*
>
> *Mother 3: I exclusively breastfed the baby till 6 months, but after six months, I started giving the baby* akamu *mixed with milk, or NAN (powdered milk) or crayfish.*
>
> (Mothers of children 6–24 months, FGD Kurudu)

> *FGD Moderator: How do you know the kind of food that is good for the baby?*
>
> *Response(s): If you give the baby food and the baby accepts, it becomes the baby's kind of food.* (Mothers of children 6–24 months, Kiyu)

> *FGD Moderator: How many times daily do you feed the baby?*
>
> *Mother 1: I give the baby food three times daily, but breastfeeding is any time the baby cries.*
>
> *FGD Moderator: What kind of food do you start giving the baby after 6 months?*
>
> *Mother 2: Beans, fish, rice are what I gave my baby.*
>
> *Mother 3: Meat, milk and vegetables.*
>
> *Mother 4: Corn food, pounded yam, beans among others.*
>
> (Mothers of children <6 months, FGD Dei-Dei)

> *FGD Moderator: What was the first solid food you start giving your baby?*
>
> *Response: Pap (akamu).*
>
> *FGD Moderator: What are the ingredients you add to the Pap (akamu)?*
>
> *Response(s): At times I put milk, ground crayfish, and ripe banana.* (Mother of child 6–24 months, FGD Mkpape)

> *No, they do not eat the same food as every family member, but at times, conditions push us to feed them with our own type of food like corn food, rice and beans.* (Father of child < 24 months, FGD, Kuje)

Generally there was little consensus, as well, on whether children eat with the family, or just with other children, and in what order family members eat. For example:

> *FGD Moderator: Who eats first? Is it the husband, the children, or women?*
>
> *Mother 1: No, when we finish cooking, sometimes it could be prayer time; hence, the husband and the children would go for prayer before coming to eat but when it is before or after prayers, we all eat at the same time.*
>
> *FGD Moderator: Is it that different food is prepared, or how?*

*Mother 2: No, whatever we cook is what everybody in the house eats.*

*Mother 3: Our stomachs are not the same and so there are some foods some persons do not like to eat and so they tend to reject such. For instance, rice—some persons do not like eating rice, thus, alternative food is prepared for such persons.*

*Other participants, when asked to comment, unanimously agreed with what this participant had said.* (Mothers and grandmothers, FGD Dafa)

*Responses: No matter how small food is, we eat together.*

*FGD Moderator: What group eats food first?*

*Responses: The children eat food first, followed by women, and the men eat last.*

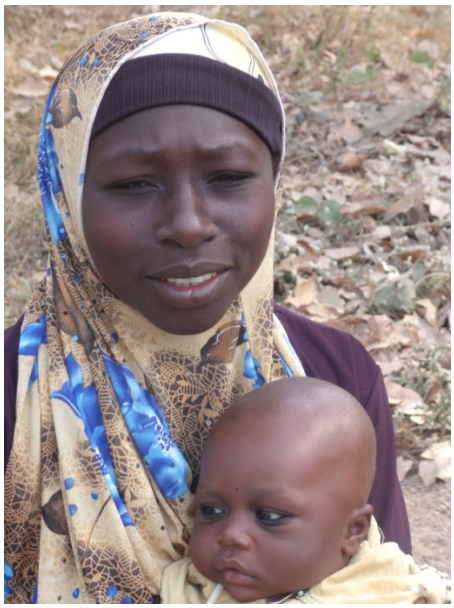
*FGD Moderator: Who eats last?*

*Responses: The men eat last.*

*FGD Moderator: Why do men eat last?*

*Responses: Men eat last because children and women are more vulnerable to hunger than men, and so we men want to make sure everybody in the household eats and is satisfied before we eat.* (FGD Fathers, Kiyu)

The previous quote also highlights the role of fathers as providers for their families, particularly giving money to mothers to buy, or buying food and medicines for the family. Fathers were found to be supportive and ready, where the means exist, to pay for any special food requirements of the child. Respondents stated that such willingness is often inhibited by level of wealth of the father.



Photos: Oluseyi Akintola

### Responsive feeding, food hygiene, and feeding of the sick child

Mothers generally stated that they give breastmilk to the child on demand, especially as soon as the child cries. Feeding of the child, as soon as solid food begins, varies. Some respondents said that children are fed five to six times a day at first, but that this is gradually reduced to the "normal" feeding schedule of three times per day. Some mothers reported playing with the child in order to encourage feeding, and said that gifts are often promised to encourage the child to eat.

Babies are generally fed "normally" during and after illness across communities, unless caregivers are otherwise directed by health workers or influencers in the household. A small number of respondents said that they would stop giving food if a child vomits. For example:

> *FGD Moderator: If a baby is sick, what do you give the baby?*
>
> *Response: I give the baby breastmilk only, but if the baby vomits I stop giving the breastmilk.* (Mother of child under 6 months, Kiyu FGD)

Mothers and health workers frequently mentioned "forced feeding," by which they mean holding a child who does not have an appetite, usually when ill, and inserting food into the child's mouth with a spoon or the mother's fingers.

> *FGD Moderator: How do you feed your baby when the baby is sick?*
>
> *Response: Since the baby does not eat when sick, I force the baby to eat, laying the baby on my lap using a cup or spoon and supported with hand to their mouth.* (Mothers of child 6–24 months, Mkpape)
>
> *Sometimes children don't want to eat, yet they must eat in order not to fall sick.* (Mother of child 6–24 months, FGD Dei-Dei)

Several health volunteers and health facility workers expressed concern about this practice, perhaps for fear that a child might choke, or because of the discomfort to the child. For example:

> *There are behaviors which we observe during home visitations, which I personally do not like such as forceful feeding. They engage in forceful feeding of babies.* (Clinician, IDI Yangoji)

Respondents indicated a general awareness of the importance of good hygiene in the preparation of food and before feeding children to prevent illness. For example:

> *We were taught at the clinic by the health workers to clean our hands when feeding our babies.* (Mother of child 6–24 months, FGD Mkpape)

> *I wash the plates and even my hands before feeding the baby and even myself to protect the baby from disease like diarrhea, vomiting and so on.* (Mother of child 6–24 months, Kiyi).

## Sources of information on infant and young child feeding and care in the community

The formative research explored the sources of information and communication in the communities. Mothers, fathers, and grandmothers often referred to clinic and medical personnel as sources of information on a wide range of topics, from maternal nutrition and antenatal care, to prevention and treatment of childhood illnesses, and infant and young child feeding practices.

Community members and health volunteers and clinic workers expressed frustration over challenges faced by the primary health care system. For example:

> *Sincerely, pregnant women face serious and many challenges; for instance, once it is 4 o' clock, pregnant women find it difficult to access healthcare because nobody is there to attend to them.* (Father, FGD, Yangoji)

> *I need more course training in the area of child nutrition. That would help me in addressing these challenges.* (Clinician, IDI Yangoji)

> *We need more posters that have all nutrition issues discussed, so that the educated ones among them can read. We also need flyers. I need training on nutrition, so that I would be able to do well in my job.* (Clinician, IDI Kurudu)

Health worker responses indicate that they feel traditional beliefs and the ability to reach women with effective messages are as significant as economic barriers to improving infant and young child feeding:

> *Interviewer: What do you think are the biggest nutritional challenges facing breastfeeding and pregnant women?*
>
> *Response: The biggest nutrition challenge is belief. Most, if not the majority of the people in this community are Muslims, and you know Muslims do not allow their women to come out, so it would be difficult for them to attend antenatal care and immunization during pregnancy and breastfeeding period. So if they don't come, how will you educate them?* (Health volunteer, IDI Dei-Dei)

Health workers reported that parents, especially mothers, disseminate information to other parents in their communities about health and nutrition. Mothers-in-law hold an important place in household structure, and are influential enforcers of infant and young child feeding and care practices, some of them retaining traditional beliefs. For example:

> *Our mothers are more experienced with traditional ideas, and so whatever advice they give is very important.* (Mother of child 6–24 months, FGD Kiyi)

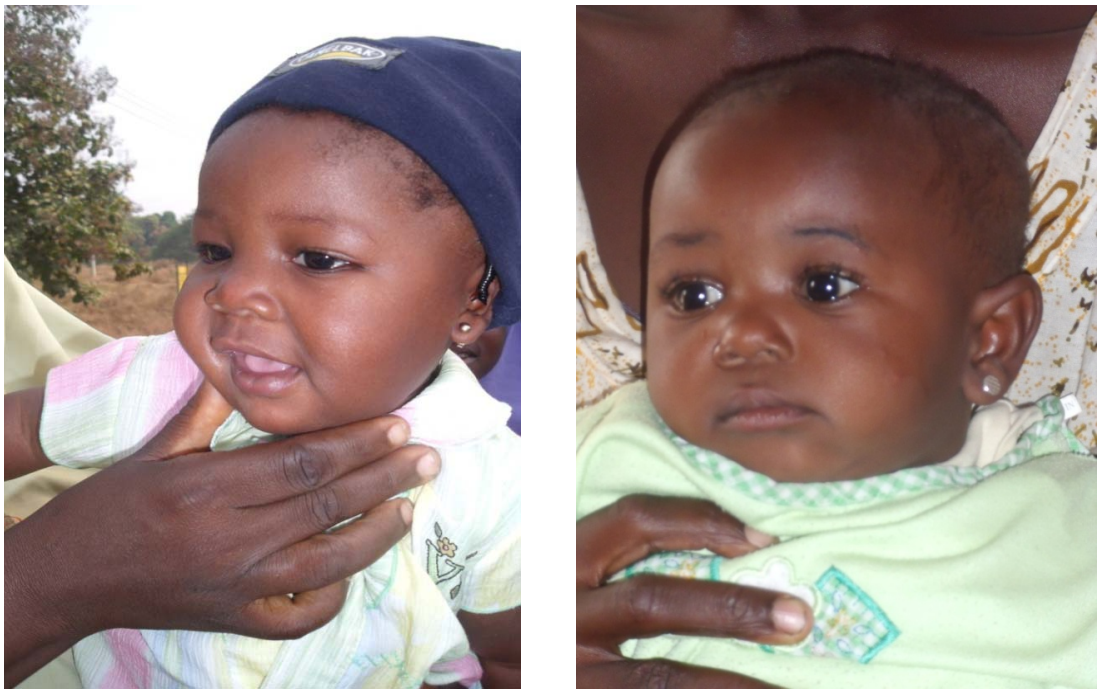
> *Yes they advise us to visit the clinic whenever the baby is sick, but they are always doubtful of the hospital treatment because they feel the hospital prescription does not have total cure and so they encourage traditional medicine.* (Mother of child 6–24 months, FGD Kiyi)

Grandmothers themselves indicated trust for health workers and an interest in learning new information.

Radios in the rural areas and in the urban centers were reported as sources, but their effectiveness in reaching women in the rural areas is uncertain as they tend to be owned and controlled by men. Grandmothers in urban and rural areas reported listening to radio as well. TV and newspapers were also found to be part of the sources of information, especially for literate mothers.

Community leaders and fathers mentioned religious institutions as sources of information for infant and young child feeding and care. Market associations were rarely mentioned as sources of information.

Community mobilizers and community meetings exist, but respondents did not identify them as a significant source of information related to infants and young children. However, respondents stated that information from the chief's palace was highly regarded and adhered to.



Babies at focus group discussion sessions for mothers of children under six months in Dafa Community, Kwali Area Council. Photos: Oluseyi Akintola.

## Other findings

**Maternal nutrition:** As with complementary feeding, respondents indicated a general awareness that there are certain foods that are important for pregnant and lactating women, but there was little consensus about what those foods are:

> *FGD Moderator: In respect to what to eat during pregnancy, during pregnancy, do you attend the clinic for antenatal care services?*
>
> *Responses: Yes! We attend antenatal services in the clinic during pregnancy.*
>
> *FGD Moderator: What kind of food do you think pregnant women should eat for body building?*
>
> *Responses: Corn food, oranges, bananas, vegetables, and so on.* (Mothers of children < 6 months, FGD Dei-Dei)
>
> *We eat fruits like orange vegetables and so on. (*Mother of child < 6 months, FGD Mkpape)
>
> *Response: Yes, when women become pregnant some foods become difficult for them; hence, they vomit if they eat such food. Thus, they would be selective in the variety of food to eat.*
>
> *FGD Moderator: Do they eat their preferred food enough or in little quantities?*
>
> *Response: If the food is the type that makes them vomit, they don't eat enough, but if the food does not makes them vomit, they tend to eat much in terms of quantity.*
>
> *FGD Moderator: What are good foods to eat when pregnant?*
>
> *Response: If they see rice, beans, meat and fish they eat very well, but if it is something that makes them vomit…they cannot eat.* (Fathers, FGD Yangoji)

A clinician commented on the counseling they give to mothers, and hinted at economic constraints that might prevent women from following the advice:

> *As you can see, Yangoji is blessed with a lot of fruit and we encourage them to take. They must not go to the city or Kwali to get leaf, fish or other things to get a proper or good diet, but they can use available resources within them, like all the garden eggs they have and leaves that are very nutritious.*
>
> *Though they have the food, how to cook it and bring out the nutrition of the food is the problem. Sometimes a woman may have eggs and these eggs are protein-based food which the doctor recommended taking, but she would prefer taking the eggs to the market for sale, and as such prefers to take carbohydrates and* Kanu *(soup).* (Clincian, IDI Yangoji)

**Infant and young child feeding in the context of HIV:** Responses of mothers, fathers, and grandmothers indicate a wide range of levels of knowledge and types of attitudes within and across communities about HIV in general and PMTCT in particular. Several respondents stated an interest in learning more "modern" information about infant and young child feeding and care practices, as well as HIV and PMTCT. A sample of exchanges illustrates the point:

*Well, the mother cannot breastfeed the baby so as to prevent the baby from contacting the virus.* (Mother of baby 6–24 months, Kiyi)

*FGD Moderator: Do you think an HIV-infected mother can breastfeed her baby after birth?*

*Response: No, if she does, the baby would be infected.*

*FGD Moderator: Don't you think her breastmilk can be expressed and heated for the baby to drink?*

*Response: No.* (Grandmothers of children < 24 months, FGD Dafa)

*FGD Moderator: How do they feed breastmilk—that is, a mother with HIV?*

*Response: Such a mother cannot breastfeed her baby so as not to transmit the virus to the baby.*

*Moderator: Are you aware that such a mother can express her breastmilk, and then heat it to feed the baby with it?*

*Response: Is that [so]?* (Mother of child 6–24 months, Mkpape)

*Respondent 1: It is not good to abandon her (an HIV-infected woman); rather we sit, advise, jest and laugh with her, and we take her to the hospital. When she delivers her baby, if God says the baby will survive, the baby will or will not.*

*Moderator: There are even drugs now for HIV?*

*Respondent 1: Yes, I am aware. Some people think you cannot eat with them, but it is not true. You can even sleep with them. The means of contracting HIV is through blood contact with an infected person as a result of sexual intercourse, sharing of razor blades and other sharp objects. So, it is advisable to stay very close with an HIV patient for advice to take away her mind from her condition.*

*Moderator: Is it advisable for the infected mother to breastfeed the baby?*

*Respondent 1: No, the baby is given tin milk and hot water.*

*Moderator: Are you aware of the recent research that they can breastfeed the baby but the milk must be heated before the baby drinks because the viruses do not survive heat?*

*Respondent 1: Yes!*

*Moderator: With the availability of antiretroviral drugs, is there possibility of recovery?*

*Respondent 1: Yes, there is, although I am using this opportunity to call on grandmothers to show concern to their daughters-in-law infected with the virus—to show concern to them and not to be hostile and rude to them for their condition.*

*Respondent 2: If I have money I will support to go to the hospital.*

*Moderator: What measure would you take to take care of her?*

*Respondent 2: I will take her to the hospital for diagnosis and treatment and I will give her good and nutritious food so as to be better.*

(Mothers and grandmothers, FGD Yangoji)

## Summary, recommendations, and conclusion

### Summary

This qualitative assessment of KAPP related to infant and young child feeding among primary caregivers of children under 24 months old, influencing groups, and health workers, found that:

- Knowledge and reported practices on when to initiate breastfeeding after delivery are varied among respondents. Some mothers reported up to a two-day delay in initiation. Respondents stated that use of colostrum is increasing. According to respondents, pre-lacteal feeds, most commonly water, are given across communities.
- Water and gruels are introduced very early to babies because some mothers and grandmothers believe that breastmilk does not have enough water. Grandmothers also reported that they often give traditional herbs in water to babies to drink from the first month onward.
- There is a significant difference between knowledge and reported practice of exclusive breastfeeding across communities. Breastmilk expression is generally not practiced in rural communities. Mothers who reported leaving their children for long periods of time said that they breastfeed immediately before leaving and on their return.
- Thin, watery gruels are not defined as "food"; rather, "food" means more solid foods that are harder to chew and swallow. Thin gruels are often introduced in the first days or weeks of life, and more solid foods are introduced anywhere from three months to a year of age.
- Reported child feeding practices varied amongst respondents. Grandmothers were open to learning "modern" information about health, nutrition, and HIV/AIDS. Fathers and grandmothers lack basic concrete knowledge about the importance of exclusive breastfeeding; the transition to complementary foods and when to wean; and the need for a diverse, adequate diet. Such knowledge would help them to more effectively support mothers to practice optimal infant and young child feeding, caregiving, and health care seeking behaviors.
- Complementary foods are not generally fortified for children. Respondents considered personal tastes, as well as economic ability to obtain foods, to be important determinants of what children and adults eat, rather than choosing foods to ensure a balanced diet. There is awareness of different food groups such as "body building" and "energy giving," but not of which foods belong to which category.
- There is little consistency around how many times a day children eat, whether they eat the same or different foods from adults, whether they eat at the same time as adults, and whether they eat from separate utensils. Some respondents said they start out complementary foods at five or six times per day, then reduce to the "normal" three.
- There is an appreciation of the need for active, responsive feeding for children. Health workers expressed concern about "forced feeding," that is, caregivers using a spoon or fingers to insert food into an infant's mouth if the infant does not have an appetite, especially during illness. Direct observation could clarify whether this is just active feeding or whether it is truly "forced," which would have negative implications.

- Basic awareness of the importance of hygiene and sanitation for children's health is widespread. A few respondents mentioned the importance of washing hands and utensils with soap and water. Without more direct observation it is unclear what actual practices are around hygiene, food safety, and sanitation.
- Service providers' knowledge and training on infant and young child nutrition is very basic, and they requested more detailed training about breastfeeding, complementary feeding, and HIV/AIDS, including PMTCT. Job aids and counseling/negotiating tools at the health facility level are few and very general.
- There are varied beliefs and levels of knowledge about HIV/AIDS and PMTCT among mothers, fathers, and grandmothers. Several respondents indicated they were not aware of what services were available in their areas for people to prevent or to be treated for HIV.

## Recommendations

- Develop and pretest communications strategy, including key messages for different audiences, using different media as appropriate. The following are examples of messages based on the findings described above.
    - General
        - Build on positive attitudes towards breastfeeding, "modern" health care and information, and respect for experts.
        - Very clear messages that any type of water, non-water liquid, or gruels are unnecessary and risky for babies under 6 months.
        - Guidance on where locally to seek information about HIV and PMTCT.
    - Grandmothers
        - Emphasize that herbal baths are beneficial for babies; no drinking of herbs is required for benefits, especially before 6 months.
        - Supporting the mother to breastfeed exclusively is a very important way to help grandchildren; grandmothers can do this best.
        - Need a grandmothers/mothers-in-law infant and young child feeding program for guidance in order to make informed decisions.
    - Mothers
        - Need concrete support from health workers on immediate initiation, good latch, emptying breasts, etc., to maximize supply.
        - Signs that a baby has had a good breast feed (to assure about adequate milk).
        - Signs that a baby is ready for other foods (not until 6 months).
        - Specific local dietary recommendations for complementary feeding as well as their own diets.
        - Hand washing messages; soap/cloths as incentives?
    - Fathers
        - Encourage them to take specific actions that contribute daily to the nutritional status of their children.

    - Programs/activities for fathers on infant feeding and nutrition issues, particularly for informed decision on infant and young child nutrition at the household level.
  - Health workers
    - Provide concrete job aids on breastfeeding basics: latch, positioning, supply, immediate care of problems (plugged ducts, etc.), introducing complementary feeding.
    - Locally tailored complementary feeding guides to address frequency, adequacy, density, utilization and active feeding.

- For IYCN interventions, target mothers who are the primary caregivers for children at the household level. At the same time, the role of the husband (*maigida*) within the cultural context as the decision maker must be respected. Such basic infant feeding tips can be conveyed in folk media, village meetings, and social groups often attended by mothers/women.
- Considerable attention should be given to these social interactions that encourage concern for the nutrition of children. Mothers and mothers-in-law (as influences) should be counseled to bring children to health facilities. Mothers of vulnerable children have a particular role to play. Thus, there is a need for increased access to infant and young child nutrition information using identified community-based platforms to enable mothers to make informed choices as they shop for health at the community level. This is a joint responsibility of all stakeholders in child health.
- Given the central position of mothers-in-law and grandmothers, there is a need to bring them closer to the health system through the provision of a platform where regular meetings can be held with health officials at the community level. Such opportunities will help clarify issues relating to infant and young child feeding, and will lead to the development of positive attitudes to optimal, “modern” child feeding practices.
- Engage trusted bodies and traditional healers as part of the comprehensive strategy targeted to changing attitudes and strengthening the capacity of community members to make informed choices about child feeding.
- Organize constant and regular open infant and young child feeding campaigns in the communities to complement radio jingles. Such campaigns should focus on nutritional problems of children in particular communities under focus, rather than the re-orchestration of global health issues. This way, the mothers will feel a sense of belonging, and as such campaigns will be relevant to their immediate environment.
- Improve upon the knowledge base of service providers at the community level in the area of infant and young child nutrition. Towards this end, there is an imperative to organize workshops and training sessions for such providers, given their centrality in the nexus of child nutrition and health at the community level.

- As one moves farther away from the "headquarters," infrastructure dwindles in the more remote rural areas, especially in relation to adequately equipped health facilities, good roads, and potable water. All these have implications for infant feeding, especially as it relates to access and social cost in relation to the "pockets" of parents.
- Roll out new national guidelines on infant and young child feeding in the context of HIV through health worker training at all levels.
- Train health workers at all levels about maternal nutrition in the context of HIV and malaria, as well as impact on safe motherhood.
- Conduct dietary/food security assessments that can identify available and affordable local foods so that health workers can effectively tailor recommendations for improving maternal and infant/young child diets, as well as structural barriers to improving diets.

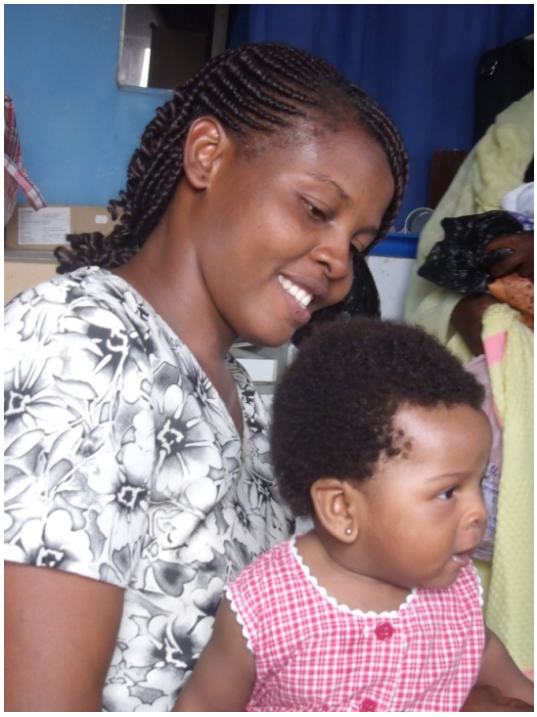


Photo: Oluseyi Akintola

## Conclusion

The findings of this study are encouraging in terms of very positive attitudes of community members about the importance of breastfeeding for the health, growth, and mental development of infants, as well as positive attitudes towards immunization, prenatal care, and health workers as trusted sources of health and nutrition information.

However, the findings of this study have clearly shown that there remain important gaps in knowledge about optimal infant and young child feeding practices; and even where the knowledge exists, there is a gap between the ideal and practice with regards to infant feeding practices at the community level. There are external and systemic challenges to improving behaviors, but with well trained and motivated health workers, as well as coordinated and targeted messaging in communities to caregivers and influencing groups, a great deal of progress can still be made towards increasing optimal infant and young child feeding practices that will, in turn, improve the health, nutrition, and development of children under five.