USAID'S INFANT & YOUNG CHILD NUTRITION PROJECT



ETHIOPIA

QUALITATIVE ASSESSMENT OF NUTRITION, PMTCT, AND OVC SERVICES

Addis Ababa and Oromia, Ethiopia

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Acronyms

AFASS	acceptable, feasible, affordable, sustainable, and safe
AIDS	Acquired Immune Deficiency Syndrome
ANC	antenatal care
ART	antiretroviral therapy
CBN	community-based nutrition
CHD	Community Health Day
EBF	exclusive breastfeeding
ENA	Essential Nutrition Actions
EOS	enhanced outreach strategy for child survival
EPI	Expanded Programme on Immunization
FANTA-2	Food and Nutrition Technical Assistance II Project
FGD	focus group discussion
FMOH	Federal Ministry of Health
HIV	human immunodeficiency virus
НО	Health Officer
IMNCI	integrated management of newborn and childhood illnesses
IYCN	Infant & Young Child Nutrition Project (USAID's flagship project)
KOOW	Kebele-Oriented Outreach Worker
MSG	mother support group
MSH	Management Sciences for Health
NGO	nongovernmental organization
NNP	National Nutrition Program
NNS	National Nutrition Strategy
NRC	nutrition rehabilitation center
OTP	outpatient therapeutic feeding program
OVC	orphans and vulnerable children
PATH	Program for Appropriate Technology in Health
PCR	polymerase chain reaction
PLW	pregnant and lactating women
PMTCT	prevention of mother-to-child transmission of HIV
TFP	therapeutic feeding program
TSF	targeted supplementary feeding
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

Executive summary

Malnutrition is a major factor behind the high rates of child morbidity and mortality in Ethiopia. Maternal malnutrition, which is also a determining factor for both maternal and child health, morbidity, and mortality, has been one of the areas that has lately attracted the attention of many in the HIV community. The Infant & Young Child Nutrition (IYCN) Project recently commissioned a qualitative assessment of prevention of mother-to-child transmission of HIV (PMTCT), orphans and vulnerable children, and nutrition services and practices in Ethiopia— where both maternal and child malnutrition are serious health issues. The IYCN Project is the United States Agency for International Development's flagship infant and young child feeding project. In Ethiopia, IYCN is providing technical leadership in the development of a programmatic framework for the strengthening and expansion of preventive nutrition policies and programs within the context of HIV.

This assessment, conducted in health centers in the regions of Addis Ababa and Oromia, provides some insight into nutrition services and practices in Ethiopia. The assessment also highlights gaps that call for the attention of both policymakers and program implementers in maternal and child health and nutrition.

The assessment team collected qualitative data from four health centers in Addis Ababa and Oromia. The study populations comprised health facility staff (facility managers, health workers, case managers, mother support group [MSG] mentors), Kebele-Oriented Outreach Workers (KOOWs), mothers, and other PMTCT stakeholders. The team conducted in-depth interviews using semi-structured questionnaires and focus group discussions.

Major findings included the following:

- Nutrition counseling practices and tools are lacking, and supportive supervision is virtually nonexistent for nutrition activities within the health system.
- Nutrition rehabilitation centers (NRCs) were said to be nonfunctional in all health centers but one.
- The need to strengthen NRCs and establish cooking demonstration facilities surfaced several times in the course of discussions with the different groups.
- All the health centers have a strong mechanism for identifying and returning HIV-exposed infants lost to follow-up. A similar system exists for tracking mothers and all adults enrolled in PMTCT and antiretroviral therapy services.
- Critical training needs identified included nutrition counseling for health workers and refresher trainings on nutrition in general, and infant and young child feeding and maternal nutrition in particular for case managers, MSG mentors, and KOOWs.

The following recommendations were made based on the above findings:

• Health workers and the cadre of volunteers (case managers, MSG mentors, and KOOWs) need to be trained in nutrition counseling.

- Counseling tools need to be developed for use within the Ethiopian context.
- Cooking demonstration facilities need to be established and the strengthening of NRCs deserves due consideration.
- A clearly defined policy on supportive supervision of nutrition programs needs to be put in place. This policy needs to be supplemented by a protocol and systems that hold supervisors accountable for their work.
- IYCN must align itself with the current programs and interests of the Ethiopian government, as outlined in the National Nutrition Program, if it is to have a meaningful impact on infant and young child feeding practices in the country both locally and nationally.

Introduction

As is common in many resource-poor settings, mothers and children in Ethiopia face a variety of serious problems vis-à-vis nutrition. Twenty-seven percent of Ethiopian women of child-bearing age are malnourished, 47 percent of children younger than 5 years are stunted, and 38 percent of children younger than 5 are underweight (Ethiopia Demographic and Health Survey, 2005). Ethiopia has a high rate of mortality in children younger than 5, with nearly half-a-million deaths each year and 16 deaths per 1,000 live births (World Health Organization [WHO], 2006). Reports show that malnutrition accounts for 53 percent of deaths in children younger than 5 in the country—directly or as an underlying factor (Malnutrition and Mortality in Ethiopia, 2005). As opposed to the old belief that malnutrition is caused solely by food shortages, various studies within the Ethiopian context and elsewhere have described it as a more complex phenomenon, with various immediate and underlying causes that affect household food security, the mother and child care environment, and health-related factors (United Nations Children's Fund [UNICEF], 1990).

HIV/AIDS is the other main challenge Ethiopia has faced since the late 1980s. The average prevalence ranges between 0.9 and 7.7 percent in rural and urban areas, respectively, with a national average of 2.1 percent. It is estimated that currently one million people are living with the virus, of which an estimated 65,000 are children younger than 14 years. Additionally, there are approximately 540,000 HIV/AIDS orphans in the country (Federal Ministry of Health [FMOH], 2010). The total number of pregnant women who are HIV positive is 84,189. Furthermore, 14,140 HIV-positive children are born every year (Joint United Nations Programme on HIV/AIDS, 2009). Optimal infant and young child feeding practices and ensuring the nutrition and care of HIV-positive women and young children are areas of key concern for both the government and its key allies.

The Infant & Young Child Nutrition (IYCN) Project is the United States Agency for International Development's (USAID) flagship project on infant and young child feeding and nutrition. The IYCN Project aims to improve infant and young child growth and nutritional status, HIV-free survival of infants and young children, and maternal nutrition. In Ethiopia, IYCN is providing technical leadership in the development of a programmatic framework for the strengthening and expansion of preventive nutrition policies and services within the context of HIV. IYCN is also working to demonstrate how to strengthen preventive nutrition services and counseling for mothers and infants within the context of HIV. The overall IYCN objectives of this activity are as follows:

- Improve the environment for provision of nutrition and HIV services.
- Increase knowledge of HIV and infant and young child feeding among service providers, counselors, and volunteers.
- Improve dietary practices of pregnant and lactating women (PLW).
- Improve infant and young child feeding practices of mothers and caregivers of HIV-exposed and infected children up to 1 year of age, and improve the nutritional status of these children in order to improve the HIV-free survival of infants.

IYCN is working to strengthen the provision of high-quality nutrition counseling and services particularly infant and young child feeding counseling—through antenatal care (ANC)/ prevention of mother-to-child transmission of HIV (PMTCT) services and maternal and child health services, as well as mother support group (MSG) activities at the health center level. To accomplish this, activities have been initiated in two regions (Addis Ababa and Oromia) in selected health centers that are part of the Management Sciences for Health (MSH) HIV/AIDS Care and Support Project. IYCN is building on the existing services provided to mothers and infants in the MSH-supported health facilities.

In June–July 2010, IYCN conducted a qualitative assessment of nutrition, PMTCT, and orphans and vulnerable children (OVC) services in selected MSH health facilities in Addis Ababa and Oromia. IYCN used the results of this assessment to develop a quality improvement plan that aims to maximize training and on-the-job coaching and supervision, and to identify opportunities to better integrate nutrition messages into existing outreach programs. In September 2010, a quality improvement consultant traveled to Ethiopia to provide technical assistance to develop an approach for the integration of quality improvement principles into the IYCN program in Ethiopia.

Assessment goals and objectives

The overall purpose of this qualitative assessment was to provide information for the implementation of interventions carried out by the IYCN Project to increase support for optimal infant and young child feeding practices and maternal nutrition at the facility and community levels. The objective of this assessment was to collect information on current nutrition, PMTCT, and OVC services and counseling. The assessment also sought to ascertain the level of knowledge and attitudes toward maternal, infant, and young child nutrition, and to collect information on related successful approaches and lessons learned. The information is being used to design job aids to strengthen nutrition counseling and support and to develop quality improvement activities to strengthen nutrition services.

Methodology

This was a qualitative assessment consisting of a combination of a cross-sectional analysis of PMTCT, OVC, and nutrition services across four health centers in two regions and a cross-sectional analysis of knowledge and attitudes of, and services provided by, MSG mentors and Kebele-Oriented Outreach Workers (KOOWs). Data were collected through semi-structured interviews and direct observation of infant and young child feeding counseling.

Assessment sites

This assessment was conducted in two regions: Addis Ababa and Oromia. Further, two health centers in Addis Ababa (Bole 17 and Nefas Silk No. 2) and two health centers in Oromia (Adama and Shashemene) were selected for assessment. The following inclusion criteria were considered in the selection process for the health centers:

- MSH-supported health centers.
- Health centers with MSG mentors.
- Health centers with high case loads, with particular focus on PMTCT cases.
- Easily accessible health centers for close monitoring at the pilot phase.

Recruitment of study participants

The study population included facility managers, health workers, KOOWs, mothers, MSG mentors, and an informant from the FMOH. Table 1 provides a breakdown of the study participants.

Study population	Bole 17	Nefas Silk No. 2	Shashemene	Adama	Total
Facility managers	1	0	1	1	3
Health workers	2	2	2	2	8
MSG mentors	3	3	4	4	14
KOOWs	0	0	4	0	4
Mothers (exit interviews)	9	8	10	8	35
Total	15	13	21	15	64

Table 1. Study participants.

Ethics

IYCN submitted the assessment design and tools to the PATH Research Determination Committee for review, and it was determined that the assessment was not research. However, the committee made suggestions on the instruments related to research ethics and participant consent. In addition, all individual participants were properly briefed on the objectives of the assessment, and interviews proceeded with their verbal consent.

Assessment design

This was a qualitative assessment that consisted of a combination of cross-sectional analysis of PMTCT, OVC, and nutrition services across four health centers in two regions and a cross-sectional analysis of MSG mentors and KOOWs.

Data collection tools

The assessment team developed a set of questionnaires and a focus group discussion (FGD) guide. IYCN developed semi-structured questionnaires for in-depth interviews with the respondent from the FMOH, health workers, and facility managers; and an FGD guide for KOOWs and MSG mentors.

Semi-structured interviews and participants

Semi-structured questionnaires for in-depth interviews with various key informants—tailored to each specific informant group—were developed and used to target the pre-identified informants: facility managers, health workers, and the FMOH informant.

The questionnaire for facility health workers included sections on trainings received by the respondent, services provided at the health facility, and current status of the referral system. The questionnaire for health center chiefs included sections on services provided by the facility, community outreach activities, supervision from the National Public Health Directorate, availability of nutritional protocols and guidelines in the facility, and strategies to track children born to HIV-positive mothers.

Focus group discussions and participants

The remaining targets of the assessment, MSG mentors and KOOWs, were approached using FGDs. Discussion guides prepared for each group were used in both instances and all discussions were held in Amharic, as all group members were comfortable speaking the language. FGD sessions started with a proper introduction of participants, a briefing on the objectives of the assessment/discussion, and a request for verbal consent. Discussions were tape-recorded when possible.

Counseling: Observations and exit interviews

Another key area of interest for this assessment was the nutrition counseling activities in the respective health facilities. This component of the assessment included direct observation of health workers' interactions with clients based on a checklist that was prepared for the purpose. The team followed the standard approach of an observational method in which there was no interference on the part of the observer. This activity was coupled with exit interviews of clients who were identified using a simple random sampling methodology whereby every third woman exiting a service/contact point was interviewed. The team used an interview guide and a checklist for this purpose.

Key findings

1. Participant backgrounds

Health workers at the PMTCT sites were nurses with diplomas, nurses with BSc degrees, and health officers who had been on assignment as antiretroviral therapy (ART), PMTCT, and/or ANC focal persons for 1–16 months, with the exception of one nurse, who had been on assignment for $3\frac{1}{2}$ years.

Case managers—also known as adherence counselors—were support staff to health center PMTCT and ART services. They worked closely with the ART and PMTCT focal persons and provided the key link between these services and ANC. Their primary responsibility was counseling ART and PMTCT service clients on adherence, positive living, health facility delivery, breastfeeding, the need for follow-up of HIV-exposed infants, and other related issues raised by clients. Case managers were HIV-positive mothers who were beneficiaries of the PMTCT services themselves, and who were strong enough to share their own experiences and encourage and inspire mothers to deliver and rear HIV-free children. Case managers were high school graduates.

MSG mentors were HIV-positive mothers who could read and write and were willing to serve on a voluntary basis with only transport money provided as an allowance. They were beneficiaries of the PMTCT services. There were four MSG mentors based in each health center and they worked regular working hours on alternate days in groups of two. Their primary role was to educate mothers on PMTCT.

KOOWs were voluntary workers based in the kebele office and usually supported by a local nongovernmental organization (NGO) that provided them with a 200 birr monthly stipend. Their responsibilities included home-based care of AIDS patients and tracing defaulters among those on ART and anti-tuberculosis drugs. Additional responsibilities included distributing condoms and identifying individuals at high risk of developing pulmonary tuberculosis. KOOWs organized coffee ceremonies within the community to discuss various issues, such as family planning, ANC, and breastfeeding.

Of the 35 mothers who participated in exit interviews, 15 (42.8 percent) had come to the health center for ANC, nine (25 percent) had come for immunization, three (8.5 percent) for the sick-baby clinic, six (17.1 percent) for ART, and two (5.1 percent) for Plumpy'nut[®].

2. National guidelines, organization, and programs

2.1. Major nutrition activities implemented by the Federal Ministry of Health

In response to the repeated drought emergencies and famines in the past decades, Ethiopia has made significant progress in the coordination and management of acute malnutrition. However, much remains to be done to establish a system to improve the prevention of malnutrition, particularly chronic malnutrition, which accounts for 80 percent of the malnutrition observed in the country. Though often invisible, this form of malnutrition causes irreversible damage to the physical and mental growth and development of children.

In order to address chronic malnutrition, the FMOH developed a comprehensive strategy document in 2008—the National Nutrition Strategy (NNS)—that gave rise to the development of the National Nutrition Program (NNP) in 2009. The NNP was designed to translate the strategy and address both emergency nutritional situations and the preventive aspect of nutrition. Some of the key components of the NNP that currently make up the major nutrition activities of the FMOH are community-based nutrition (CBN), the enhanced outreach strategy for child survival (EOS) and its transition to Community Health Days (CHDs), and the rollout of the outpatient therapeutic feeding program (OTP).

Community-based nutrition works toward early detection of growth faltering to prevent children from becoming malnourished. It counts on the family and the community as the first lines of protection. CBN relies heavily on the Health Extension Program and aims to build up families' and communities' capacity and ownership to make informed decisions on child care practices. The FMOH, in collaboration with the World Bank and UNICEF, has so far expanded CBN activities in 217 woredas.

The **enhanced outreach strategy for child survival** has been providing biannual vitamin A supplementation, deworming, and nutritional screening of children younger than 5 years and PLW. The latter is accompanied by targeted supplementary feeding (TSF) for the malnourished. Under the NNP, the EOS is transitioning to **Community Health Days** organized locally by health extension workers and voluntary community health workers for the delivery of vitamin A supplements, deworming, and nutritional screening. The NNP is also rolling out the **outpatient therapeutic feeding program** to bring it closer to communities so that children in need of an immediate response can access life-saving services. This is in addition to the therapeutic feeding units established in health facilities—both hospitals and health centers.

Table 2 summarizes the key nutrition actions under each program component of the NNP.

Programs component	Nutrition actions			
CBN	Breastfeeding			
	 Complementary feeding and key caring practices 			
	 Feeding and care of the sick child 			
	 Maternal nutrition and iron supplementation 			
	 Growth monitoring and promotion 			
	Community-led total sanitation			
	Counseling			
	Community conversations			
EOS/CHD (+TSF)	Vitamin A supplementation			
	Deworming			
	 Screening of children younger than 5 years and PLW 			
	• TSF			
TFP and OTP	 Management of severe acute malnutrition: facility-based (TFP) and 			
	community-based (OTP)			
	Referral mechanisms			
Micronutrient interventions	Salt iodization			
	Iron and folic acid supplementation			

Table 2. Key nutrition actions under the NNP.

TFP: therapeutic feeding program.

In addition to these major activities being undertaken as part of the NNP, the FMOH is engaged in other nutrition activities, such as micronutrient interventions that include iodine fortification and the use of iron sprinkles, an IMNCI (integrated management of newborn and childhood illnesses) program, and strengthening the nutrition information system as part of the Health Management Information System that strives to collect information from the gotte, kebele, woreda, zonal, and regional levels.

2.2. Coordination

In terms of coordination and sharing of responsibilities, the FMOH has the overall leadership role, which includes resource mobilization, program design in coordination with relevant stakeholders, and the development of guidelines and manuals. The Regional Health Bureaus—with almost nonexistent nutrition representation—are primarily implementers, providing administrative support through their hierarchies. The following figure shows the coordination mechanism recommended in the NNP.

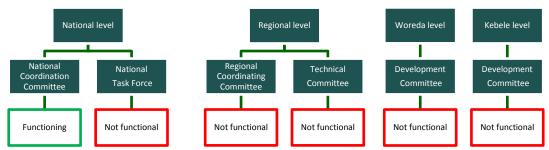


Figure 1. Current status of the coordination mechanism recommended in the NNP.

A national nutrition coordination body is led by the state ministers of the various sectors, including the Ministries of Water Resources, Agriculture, Education, Finance and Economic Development, and Women's Affairs. This coordination body was formed in preparation for implementation of the NNS and was meant to be replicated all the way down to the kebele level; however, this has not yet been realized. It is worth noting that there is no focal person at the FMOH who is directly responsible for nutrition activities, which leads to lack of ownership.

2.3. Successful programs related to infant and young child nutrition

Even though Ethiopia has had a long history of malnutrition, and the highest rates of malnutrition in sub-Saharan Africa, most of its programmatic approaches had focused on the management of acute malnutrition, with minimal or no emphasis on the less visible but more rampant problem of chronic undernutrition. The comprehensive and multisectoral strategy designed to address all forms of malnutrition (NNS), and its translation into the NNP for its realization, were launched only in 2008. As mentioned above, the NNP comprises a number of promising and comprehensive preventive nutrition activities, such as those introduced by the CBN program in most woredas. However, the short lifespan of the program makes it impossible to judge whether these program activities have been successful or not. Personal observations of the respondents in some pocket areas of the CBN woredas suggest, however, that it has strong potential to meet its targets. It is noteworthy that the CBN program engages the community in various ways and has a fairly high rate of early detection of malnutrition. The major achievement and most successful nutrition activity among the above-mentioned program components is the coverage of vitamin A supplementation and deworming of children younger than 5 years of age. The current coverage stands at 96 percent, which is a significant increase from the previous low coverage of less than 60 percent. In addition, the regular screening of children younger than 5 and PLW in EOS woredas, and the provision of subsequent TSF support when needed—though far from perfect—is commendable (FMOH, 2009).

2.4. Staffing and resources

There are no staff dedicated full time to nutrition at any level in the health system (see Table 3). However, there is at least one focal person who handles nutrition-related issues, in addition to other primary responsibilities.

Level	Full-time	Part-time	Educational background	Nutrition background
National	0	0	-	-
Regional	0	1?	MD, MPH, HO, or Nurse	No
Zonal	0	1?	MD, MPH, HO, or Nurse	No
Woreda	0	1?	MD, MPH, HO, or Nurse	No
Health facility	0	0	-	-

Table 3. Staffing at different levels in the health system.

HO: Health Officer.

Technical and financial support for nutrition over the past 2–3 years

Table 4 lists some of the prominent supporters of the NNP noted by respondents during the interviews. This may not be an exhaustive list. Additionally, the distinction between financial and technical support is vague, as most would involve both.

Table 4. List of NNP supporters.

Supporting agency	Type of support	Program area supported	Areas of implementation
World Bank	Financial and technical	NNP, CBN	CBN woredas (217 so far)
Japan International Cooperation Agency	Financial	NNP, universal salt iodization	
Canadian International Development Agency	Financial	NNP	
Spain	Financial	NNP	
USAID	Financial and technical	NNP	
Irish Aid	Financial	NNP	
UNICEF	Financial and technical	CBN, EOS/CHD/TSF, OTP	CBN woredas, EOS woredas, and ~1,200 health facilities
WHO	Financial and technical	TFP/OTP	
Donor agencies/ Governments	Financial and technical	NNP	

Supervision and monitoring visits

The FMOH does not have specific supervision systems or protocols dedicated to individual health interventions, including nutrition. Rather, it follows an integrated approach whereby the team that conducts supervision is expected to cover all activities. The main problem with this approach is that there is no mechanism for direct accountability, as the teams that conduct supervision activities focus only on those areas in which they are interested or have a stake. Moreover, there is a lack of supervisory tools and resources, as well as knowledge of nutrition.

Guidelines and tools on nutrition

Table 5 lists a number of guidelines and manuals on nutrition that have been produced by the FMOH and its development partners. However, the use of most of these guidelines is very limited, mainly because of weak dissemination practices. Most of these materials entered distribution without proper and effective promotion. As a result, they have ended up either in storage or shelved in recipients' offices.

Guidelines	In use?
Infant and Young Child Feeding (2004)	Limited use in health facilities
A guideline on micronutrient interventions (2004)	Limited use in specific programs and campaigns
NNS (2008)	Translated into the NNP
NNP document (2009)	Being rolled out
HIV and Nutrition Guidelines (2008)	Limited use in health facilities
Management of Severe Malnutrition (2007)	Used in TFP settings and during emergencies
IMNCI guidelines	Used in health facilities
Guidelines for TSF	Limited use in EOS woredas

Table 5. Nutrition guidelines and manuals and their use.

2.5. Gaps in infant and young child nutrition services

As mentioned in the preceding sections, there are several gaps that need to be filled in order to improve infant and young child nutrition services in Ethiopia. All in all, the interventions look good on paper, and guidelines and protocols are typically based on international standards and recommendations are in place. However, the major problem lies in implementation. There are no gaps specific to any particular region; however, in general, infant and young child and maternal nutrition—like any other health service in the country—is understaffed and suffers from a lack of resources. Moreover, there is high turnover of staff in areas in which the implementation of nutritional activities is progressing according to plan. Often after turnover, positions are left vacant.

3. Findings from PMTCT sites: Facility managers' views

3.1. Prevention of mother-to-child transmission of HIV services in clinics

The FMOH has developed a four-pronged national strategy for PMTCT: primary prevention of HIV infection; prevention of unintended pregnancies among HIV-positive women; prevention of HIV transmission from infected women to their infants; and treatment, care, and support of HIV-positive women and their infants and families. All health centers have a system of identifying infants born to HIV-positive mothers as part of their PMTCT program.

The following is a brief description of the flow of PMTCT services, commencing from a woman's first visit for ANC:

- All women coming for ANC are routinely informed—individually or in a group—about the benefits of HIV testing for mothers and babies. During this process—known as provider-initiated HIV counseling and testing—mothers reserve the right to say "NO." Those who say "YES" will be tested.
- Women with positive results are referred to MSG mentors, and ANC follow-up continues. Their partners will also be tested.
- MSG mentors counsel an HIV-positive woman and transfer her to the ART nurse for antiretroviral drugs.
- The ART nurse takes a CD4 count. If not eligible for treatment based on her count, the woman will commence treatment and ANC follow-up continues. If she is eligible for treatment based on her count, she will be put on complete antiretroviral prophylaxis that starts at 27 weeks of gestation.
- Follow-up continues and the mother is advised to deliver at a health facility.
- At delivery, the infant will be started on prophylaxis as an HIV-exposed infant.
- A dried blood sample will be taken from the infant for polymerase chain reaction (PCR) testing after 45 days.
- Follow-up continues until cessation of breastfeeding, with re-screening done six weeks later.

3.2. Nutrition activities in health centers

The health system in Ethiopia, in general, does not assign a nutritionist or dietician to work fulltime as an integral part of the services offered. As a result, none of the health centers visited on this trip had well-trained personnel dedicated to working full-time on nutrition. In most instances, health workers in Expanded Programme on Immunization (EPI), ANC, and/or ART clinics are asked to cover nutrition-related activities—in addition to their primary responsibilities. Moreover, their activities are mainly confined to identifying children not eligible for support from the "food by prescription" program—in facilities in which this program is operating—and providing them with prescriptions for food support.

Table 6 depicts the main nutrition activities that are being carried out in the health centers. It should be noted that the only nutrition rehabilitation center (NRC) said to be functional at the time of the assessment was in the Nefas Silk No. 2 health center.

Activity type	Content/Description	Target beneficiaries
Growth monitoring	Growth monitoring and prescription of Plumpy'nut [®] if	Children younger
Growin monitoring	needed	than 5 years
Food by prescription	Screening and prescription of Plumpy'nut [®] , or referral	Children younger
Food by prescription	to World Food Programme food support when needed	than 5 years
NRC	Cooking demonstrations and nutrition support	Mainly children
NRC		younger than 5 years
Nutrition counseling	Health education for well-baby and sick-baby clinics	Mothers and children

Table 6. Nutrition activities in health centers.

The most common practice however involves the following sequence of events:

- Health education in infant and young child feeding is provided in the waiting areas for all clients of ANC, EPI, family planning, and ART services.
- Those already identified as HIV positive are provided individual counseling in infant and young child feeding, while the rest receive only group education.
- No tools are used in most instances. The Adama health center mentioned that they use posters for counseling at each contact point; however, the posters apparently had been displaced at the time of the assessment due to renovations.

Table 7 provides the key contact points for nutritional counseling.

Contact point	Key message	Tools used?	Additional support needed	
ANC services	Feeding and nutrition in pregnancy—increased intake	No	Training (expressed	
Labor/Delivery	Immediate breastfeeding, benefits of giving colostrum, EBF	No	shortage of trained personnel)	
Few days postpartum	EBF until 6 months	No	Information advantion	
Dried blood sample (PCR)	EBF until 6 months	No	Information, education, and communication	
Well-baby clinic	EBF until 6 months	No	materials with up-to-date	
6 months	AFASS to help the mother make an informed decision	No	content	
9 months	AFASS to help the mother make an informed decision	No	Up-to-date educational films	
Tuberculosis clinic	General nutrition advice			

Table 7. Key contact points for nutritional counseling.

AFASS: acceptable, feasible, affordable, sustainable, and safe; EBF: exclusive breastfeeding.

Community outreach activities

There are no outreach activities in any of the health centers. There are EPI outreach activities scheduled at the Shashemene health center, which provides routine EPI vaccination twice a month and tetanus toxoid once a month. However, these two activities are not being conducted on a regular basis. Respondents expressed that the EPI outreach—if done regularly—would provide an opportunity to conduct nutritional assessment of children younger than 5 years to identify and prevent malnutrition at an early stage.

Tracking systems and coordination committees

System for tracking infant feeding counseling: The respondents stated that they do not have a tracking system for infant feeding counseling. A log book is kept in Adama, in which the types of counseling and other services provided to children younger than 5 years and their mothers is recorded. Nevertheless, the respondents agreed that there is no strong and systematic approach or mechanism to track the services registered upon subsequent visits.

System for tracking loss to follow-up: The health centers have a system in place to track infants lost to follow-up as an integral part of the PMTCT services offered; however, the system is not always functional. As part of registration for the service, mothers are requested to provide

a primary telephone number and a secondary telephone number, of a relative or friend. In addition, they are requested to bring a *teyajj*—a person who will commit to be contacted, provide information in case of loss, and bring them to the health center if needed. This three-tier tracking mechanism is supplemented by the involvement of KOOWs, and has so far been successful in identifying and returning mothers on ART to PMTCT services.

Coordination committee: There is no coordination committee dedicated to nutrition in the health centers included in this study. However, the Adama health center has a multidisciplinary team composed of heads of each unit. The team meets on a monthly basis. The main agenda of team meetings includes HIV services, problems encountered while providing these services, and possible solutions to such problems. Nutrition forms a part of these discussions, although the subject is usually limited to issues concerning logistics.

The nature of the tracking systems of the four health centers is summarized in Table 8.

Table 8. Health center tracking systems.

Availability of system for:	Bole 17	Adama	Shashemene	Nefas Silk No. 2 [*]
Tracking infant counseling	No	Yes	No	Not available
Tracking infants lost to follow-up	Yes	No	No	Not available
Coordination committee	No	No	No	Not available

* Respondent not available on three visits.

Staff development and supervision

Table 9a summarizes the trainings related to nutrition that have been offered to the staff of the four health centers in the past two years.

Table 9a. Staff nutrition-related trainings.

	Description of	Duration	No.	No. still providing
Staff category	training content	of training	trained	nutrition services
Doctor	Infant and young child feeding		1	1
Nurse	Food by prescription	5 days	4	4
BSc nurse	Food by prescription	5 days	1	1
Health Officer	Food by prescription	5 days	4	2

The head of the health center in Bole 17—a medical doctor—is trained in infant and young child feeding and provides constant on-the-job training to his staff. In addition to the above trainings, several other trainings are attended by the staff of this health center, as described in Table 9b.

Table 9b. Supplemental trainings at the Bole 17 health center.

Staff category	Description of training content	Duration of training	No. trained	No. still providing nutrition services
Doctor	n/a	-	0	-
Nurse (mixed)	 HIV and nutrition 	5 days	4	4
	 PMTCT-related nutrition 	3 days	2	2
	 Infant and young child feeding, on the 	5 days	4	4
	job			
Case manager	Basic refresher: counseling and nutrition	1–2 days	2	2

3.3. Facility checklist

Tables 10 through 14 list the various guidelines, protocols, posters, pamphlets, equipment, and supplies available in the health centers, as well as the general state of nutritional counseling. Protocols for vitamin A supplementation for postpartum women and iron and folic acid supplementation for PLW are available as part of IMNCI guidelines, but not as separate entities. However, in some instances, FMOH produces pamphlets on key issues. As a case in point, for vitamin A campaigns, it produces leaflets that contain symptoms of vitamin A deficiency, benefits of taking vitamin A capsules, the dosage of vitamin A, etc. Posters (where available) are considered up to date, but are not given out.

	Availability			Used as required
Guidelines/Protocols	Bole 17	Adama	Shashemene	(for all health centers)
Optimal infant and young child feeding	No	No	No	n/a
Infant feeding within the context of HIV	No	No	No	n/a
Checklist for infant and young child feeding counseling	No	No	No	n/a
IMNCI	Yes	Yes	Yes	Yes
Key household practices	No	No	No	n/a
Protocol for vitamin A supplementation for infants	Yes	Yes	Yes	
Protocol for iron and folic acid supplementation for PLW	Yes	Yes	Yes	
Protocol for postpartum supplementation of vitamin A	Yes	Yes	Yes	

Table 10. Nutrition guidelines and protocols.

Table 11. Nutrition information, education, and communication materials: Posters.

	Availability			Used as required
Posters	Bole 17	Adama	Shashemene	(for Shashemene only)
Promotion of exclusive breastfeeding	Not sure	No	No	
Optimal complementary feeding	Not sure	No	No	
Breastfeeding within the context of HIV/AIDS	Not sure	No	No	
Feeding of the sick child	Not sure	No	No	
Healthy eating	Not sure	No	Yes	Yes (outpatient department, TB clinic)
Vitamin A supplementation	Not sure	No	Yes	Yes (outpatient department, under-five clinic)
Iron and folic acid for PLW	Not sure	No	No	
Food, water, environmental hygiene, and sanitation	No	No	No	
OVC-related posters	No	No	No	

Table 12 Nuturition	information	advaction	and some		metaniala.	Dammhlata
Table 12. Nutrition	information,	equivation,	and comm	iumication	materials: 1	Pampmets.

	Availability		
Pamphlets	Bole 17	Adama	Shashemene
Promotion of exclusive breastfeeding	Not sure	No	No
Optimal complementary feeding	Not sure	No	No
Breastfeeding within the context of HIV/AIDS	Not sure	No	No
Feeding of the sick child	Not sure	No	No
Healthy eating	Not sure	No	No
Vitamin A supplementation	Not sure	No	No
Iron and folic acid for PLW	Not sure	No	No
Food, water, environmental hygiene, and sanitation	Not sure	No	No
OVC-related pamphlets	No	No	No

Table 13. Equipment and supplies.

	Availability			Used as required		
Equipment and supplies	Bole	Adama	Shashn.	Bole	Adama	Shashn.
Functioning baby weight scales	Yes	Yes	Yes		Yes	No
Functioning adult weight scales	Yes	Yes	Yes		Yes	Yes
Length measuring boards	Yes	Yes	No		Yes	
Mid-upper arm circumference measuring tapes	Yes	Yes	Yes		Yes	Yes
Cooking demonstration equipment	Yes	No	No			
Stocks of Road to Health cards	Not sure	No	No			
Commercial infant formula	No	No	No			
Vitamin A capsules	Yes	No	Yes			Yes
Iron-folic acid tablets	Yes	No	No			
Folic acid tablets	Yes	No	No			
Zinc tablets	No	No	No			
Ready-to-use therapeutic food Specify: Plumpy'nut [®] , corn soy blend		Yes Plumpy'nut [®]	Yes Plumpy' nut [®]		Yes	Yes

Table 14. Nutrition counseling facilities.

Nutrition counseling facilities and materials	Situation
Overall counseling space	None of the health centers visited had a designated nutrition counseling room. Nutrition counseling shares space with other services (e.g., ART, ANC, family planning, EPI). Lack of space was mentioned by all as a major problem.
Privacy	Except in Shashemene, the rooms are not designed for privacy.
Basic furniture (chairs and tables)	Have basic furniture.
Registers	No dedicated registers (against recommendations of the new Health Management Information System).
Follow-up cards	No.
Other materials	None.

3.4. Gaps in nutrition services

The biggest gap that was identified—and a point that was repeatedly raised by all respondents is the need for cooking demonstration facilities. Discussions with facility managers, health workers, case managers, and MSG mentors revealed that knowledge on cooking and healthy dietary practices is just as important as direct nutritional support and supplements—if not more important. The respondents agreed that clients suffer from poor diet in part due to lack of knowledge—even when they have adequate food or the financial means to buy foodstuffs. Therefore, cooking demonstration units and nutrition education for mothers by properly trained nurses/nutritionists would contribute greatly to the strengthening of existing PMTCT services.

Nutrition supplementation and food support to OVC and HIV-positive mothers were also mentioned by the respondents as suggestions on how to incorporate nutrition activities into the health services they receive.

Although the FMOH has a policy of integrated supportive supervision, all the health centers visited stated that no regular and systematic supervision is provided to them from any level within the system—including the FMOH. Because of the 'integrated' approach, even when a team happens to visit a facility, it does not have either the expertise or the interest to focus on nutrition. As a consequence, no nutrition-specific supportive supervision is provided.

When these visits occur—which is infrequently—they constitute more of an audit than supportive supervision. Moreover, they usually do not have any specific tools to guide them through the process. However, this gap is partially filled by NGOs that have joint programs within the health facility. As a result, different groups from different partners come to the centers for supervision focusing on the specific activities they support. One such example mentioned by the respondents is that of Save the Children, which started the food by prescription program and provides supervisory support to the health centers at which they have implemented this activity. At the time of the interview, Save the Children had visited the Adama health center twice since the commencement of their program two months prior to this assessment. In addition, Concern International was mentioned as having a stake in nutrition activities at the Bole 17 health center, and they used to regularly visit for support. While such supportive supervision visits from partners have been helpful, they are not particularly systematic or sustainable. In fact, they are piecemeal approaches, whose contribution to overall system development is doubtful.

In general, the absence of trained personnel is a major constraint for nutrition activities in all the health centers that were visited. The shortage of personnel leads to over-stretched staff, who have less time to focus on nutrition-related activities such as proper counseling. Additionally, there is a shortage of tools and resources such as audio/visual materials to aid various nutrition activities. There is also a high turnover of staff, which often results in the replacement of positions with new and junior staff who are less familiar with some of the critical thematic areas, such as infant and young child feeding, IMNCI, and PMTCT.

4. Findings from PMTCT sites: Health workers' views

4.1. Overview of counseling activities at health centers

In all health facilities visited, counselors provide group health education to all clients who arrive early, irrespective of the purpose of the visit. The duration of the health education sessions varies from 20 minutes to one hour, the average being 40 minutes. The counselors are nurses or volunteers. In Addis Ababa, nurses provide health education in the areas of family planning, HIV screening, and PMTCT and nutrition. In Shashemene and Adama, volunteers provide health education in the same areas. The service is provided before the day starts, and mothers who

arrive early receive the health education. Those who arrive late do not receive health education. Mothers who are screened and found to be HIV positive continue to receive nutrition counseling on infant and young child feeding from the volunteers. HIV-negative mothers are not followed. In Addis Ababa, the same nurse who provides health education also provides ANC, PMTCT, and well-baby clinic services. In Adama and Shashemene, where health educators are volunteers, the session is repeated in the afternoon if there are sufficient clients.

4.2. Knowledge of key infant and young child feeding practices

Most of the informants had received either basic or comprehensive ART and PMTCT training prior to being assigned to their current posts. Some had also received additional refresher trainings on PMTCT while in service.

Among respondents, the level of knowledge and experience related to infant and young child feeding and maternal nutrition varied considerably. Most of them were able to mention some of the key practices of infant and young child feeding and maternal nutrition, while some were not very familiar with these concepts. In most cases, experience included working in the various clinics within the health system, specifically maternal and child health and ANC clinics.

Table 15 summarizes the nutrition-related trainings attended by the respondents. Two of the health workers interviewed had not received any relevant training in the last two years.

Training	No. of respondents trained	Attended	Content	Duration
ENA	1	>2 years ago	Standard ENA content	?
Management of acute malnutrition	1	>2 years ago	Severe acute malnutrition	1 week
FANTA-2 nutrition training	1	January 2010	Management of adult and child malnutrition	3 days
Food by prescription	2	June 2010	Screening and management of severe malnutrition	3 days
Nutrition within HIV/AIDS	1	November 2009	Nutrition within HIV/AIDS	3 days

Table 15. Nutrition trainings attended by respondents.

ENA: Essential Nutrition Actions; FANTA-2: Food and Nutrition Technical Assistance II Project.

Only two out of the seven respondents were able to mention a comprehensive set of key infant and young child feeding practices on which they would be able to counsel a mother. The other respondents mentioned only exclusive breastfeeding for the first six months. Of the respondents who professed awareness of more comprehensive messages, while some of the messages were appropriate, not all of them were correct.

Respondents mentioned the following messages for counseling a mother on feeding her infant less than 6 months of age:

- Exclusive breastfeeding, with no additional foods or fluids given until 6 months of age.
- Proper positioning and attachment of the baby, avoiding cracks—with demonstrations.
- On-demand feeding, with at least eight feedings in 24 hours.

- The superiority of breastmilk over formula foods.
- Personal hygiene and cleanliness.
- The importance of maternal nutrition, including the need for mothers to increase intake of food to improve production of breastmilk.

When asked if their counsel would be any different for an HIV-positive mother, respondents stated the following points in addition to the points mentioned above:

- Proper positioning and attachment of the baby to avoid cracks and breast abscess.
- Avoiding breastfeeding from cracked nipples.
- Protecting the child from oral injuries and from harmful traditional practices such as uvulectomy.
- Cessation of breastfeeding and introduction of replacement foods—if the mother could afford the latter. If she were able to afford replacement foods, she would be advised to start expressing breastmilk to provide to the baby from a cup beginning at least 15 days before cessation, so that the transition to complementary feeding may be easier.
- Advising the mother to continue breastfeeding and to introduce complementary feeding—if she could not afford replacement feeding.
- Proper screening and follow-up of children.

One of the respondents stated that she would not advise an HIV-positive mother to breastfeed. The same person also advised early introduction of complementary feeding, at 4 months of age.

With regard to the key messages the respondents would provide while counseling a mother on complementary feeding, three of them mentioned the following:

- Feeding the baby additional foods, commencing at 6 months of age.
- Continuing breastfeeding until 2 years of age—if possible.
- Not using a bottle for feeding.
- Providing advice on personal hygiene and sanitation.
- Introducing formula foods such as *Cerelac* and *Mother's Choice* if affordable. If a mother could not afford commercially fortified foods, advising that she commence with mashed potatoes and *mitin*—a gruel made of locally prepared multigrain flour.
- Explaining that introducing complementary foods requires patience and must be done slowly until the infant becomes used to them.
- Providing advice on how to prepare meals from foods the mother already has, and how to present foods with similar nutritional content in different ways.

For HIV-positive mothers who plan on commencing complementary feeding, the respondents reported the following counseling:

- Introducing complementary foods at 6 months of age and continuing breastfeeding until 1 year, with the condition that a mother can stop breastfeeding at any time when she is confident that she can provide enough food (both in terms of quality and quantity) and that the infant is taking the food well. The earlier she ceases breastfeeding, the lower the risk of transmitting HIV to the infant.
- One respondent stated that she would have the infant screened for HIV. If the infant tested negative, she would advise cessation of breastfeeding based on the AFASS principle. However, if the infant tested positive, she would recommend continuing breastfeeding and introduction of complementary foods—as stated above.

With regard to advice on nutrition for a mother with a sick child, the main responses included the following:

- Increase frequency of breastfeeding.
- Increase frequency and amount of feeding.
- Increase fluid in the diet.
- Provide energy- and vitamin-rich foods.
- Adhere to medication.

Additionally, increased intake of food—both in amount and frequency—was mentioned by most respondents as key messages for nutritional counseling of sick PLW.

4.3. Contact points for nutrition counseling

Mothers are welcome to visit the health facility at any time between the contact points. However, they usually come only when they have problems such as inadequate milk production, breast engorgement, cracked nipples, or problems with the infant. In any case, a mother who visits the facility in between contact points should be counseled accordingly and referred to the under-five clinic for further evaluation of the child. The key messages in Table 16 provide a summary of individual responses and do not reflect the level of knowledge of the individual respondent. In general, they reflect theoretical knowledge, not necessarily practical knowledge.

Two of the respondents—junior graduates who had been on their current assignments for only 1–2 months—hesitated to answer, stating that they had no experience to share. In general, knowledge on the key messages for the specific contact points was lacking. Furthermore, with the exception of one health worker at the Shashemene health center, who stated that she uses a comprehensive flip chart on breastfeeding for all contact points, none of the other health centers possess similar tools.

Contact points	Key messages	Additional support needed
ANC services Labor/Delivery	 Approximately two additional meals per day. Initiate breastfeeding within one hour of delivery. Immediate breastfeeding, including colostrum. Continue breastfeeding even if there is no milk. Increase intake of food and fluids—as above. 	 Comprehensive charts showing the key messages at each contact point. Other audio/visual aids and tools to help facilitate the counseling sessions. Making use of the media to
Few days postpartum	 Exclusive breastfeeding. Increase intake of food and fluids. 	educate the community.Proper training for staff.
PCR testing	 Continue exclusive breastfeeding. Increase intake of food and fluids. 	 Increasing the number of staff would improve the
6 weeks well-baby/ immunization	Growth monitoring-based advice.	practice and quality of services, as staff would
10 weeks well-baby/ immunization	Growth monitoring-based advice.	have more time to devote per client.
14 weeks well-baby/ immunization	Growth monitoring-based advice.	
6 months	 Introduce complementary foods. Continue breastfeeding. Instruction on how to prepare food from existing ingredients. Emphasis on hygiene and sanitation. Instruction on the use of clean/boiled water to prepare food. 	
9 months	Taking a history of complementary feeding and advise accordingly.	

4.4. Challenges of nutrition counseling by health workers

Although the health workers affirmed that they are trying to address the counseling needs of mothers with the limited training, experience, and resources they have at their disposal, they noted a variety of concerns and challenges.

Overwhelming poverty of the clients is one of the most common challenges faced by health workers. Respondents described destitute mothers saying "I cannot provide what you are saying" when asked to commence complementary feeding, which usually brings the discussion to a dead end. "Counseling them in the face of complete economic deprivation is meaningless and often frustrating," said Birke, one of the staff at the Shashemene health center.

As already mentioned, the health workers stated that they are stretched thin, and thus are not able to spend as much time with each mother as would be appropriate in a counseling session. They are often rushed in order to serve all the clients registered for a particular day, thereby reducing the amount of time devoted to addressing any one client's specific problems. This has a detrimental effect on the overall quality of services, especially on the nutrition component, in which counseling plays a significant role.

Community opinions and traditional values have also stood in the way of successful nutritional counseling. It is not uncommon for a mother to be hesitant when offered advice that clashes with long-held traditional views and beliefs. In the end, the latter often outweigh professional advice.

Exclusive breastfeeding is a good example of the clash between traditional and professional advice, since mothers are often of the opinion that "as the infant gets thirsty, we need to give water."

One last challenge that was mentioned by the health workers relates to exclusive breastfeeding for working mothers who need to be away from home for longer than the infant can afford to go without breastmilk. For reasons that could not be explained by the respondents, the mothers are reluctant to accept the recommended option of expressing and preserving their breastmilk to cater for the period they need to be away.

4.5. Gaps in nutrition counseling by health workers

One of the main technical gaps that precludes proper nutritional counseling with clients is the shortage of up-to-date tools that would help facilitate and/or supplement counseling sessions.

Additionally, mothers and children suffer from nutrition-related problems, not only because of lack of food, but also due to lack of knowledge. Mothers often do not know how to prepare food for themselves and for their children using ingredients they have on hand, and there are no cooking demonstration facilities within health facilities to address this gap.

Another gap that was identified is the lack of functional NRCs within health centers. Most of the health centers have an NRC that was set up for nutritional rehabilitation of malnourished children, but at the time of the assessment, only the Nefas Silk No. 2 health center NRC was functional. The Bole 17 health center stressed a lack of qualified/trained personnel as the reason for their nonfunctional NRC (they have not even been able to fully use their budget). The other health centers reported lack of personnel and supplies as the main reasons their NRCs were not in use.

5. Findings from PMTCT sites: Exit interviews with mothers

5.1. Overview of the findings

None of the clients who came for services received adequate information on child growth. The 15 mothers who had come for ANC were told about pregnancy weight gain. However, of the mothers who had come with babies, only half were informed about infant weight gain. Further, weight gain was not recorded on the under-five card. All clients were aware of when to return for the next service.

Decisions on infant feeding options were not made based on individual choices. All mothers were told to breastfeed their babies, and their opinions were not solicited.

None of the health education sessions involved the use of counseling cards or job aids. Emphasis was given to the key messages on infant and young child feeding, including "exclusive breastfeeding up to 6 months" and "complementary feeding after six months." Other key messages, such as "initiate breastfeeding within one hour after delivery," "give colostrum," and "allow the baby to finish feeding from one breast and then give the second," along with advice on proper positioning and attachment and continuation of breastfeeding with complementary feeding, were not provided during the sessions.

5.2. Key messages given to mothers

Antenatal care

Mothers who came to the clinic for ANC were told to eat properly. They were also advised to exclusively breastfeed up to 6 months of age and initiate complementary feeding after 6 months.

Postpartum care (younger than 6 months)

Mothers were advised during immunization visits to exclusively breastfeed.

Postpartum care (older than 6 months)

Mothers were advised to initiate complementary feeding at 6 months of age. However, information about the preparation of complementary foods and the consistency and frequency of feeding was not part of the key message.

Responsiveness of messages to child's nutritional status

Mothers who brought their child for immunizations at the age of 45 days were told if the child was gaining weight. They were also told to continue breastfeeding. Some mothers were giving cow's milk or formula milk after the age of 3 months because they thought they did not have enough breastmilk.

Counseling messages

Key messages on infant and young child feeding, including exclusive breastfeeding up to 6 months of age and complementary feeding after 6 months, was provided to all women. However, there was little emphasis on continuing breastfeeding with

Aberash, a 33-year-old woman, was in the 36th week of her pregnancy at the time of this assessment. She was not married and had tested HIV positive. Since the time she had learned her HIV status. Aberash had been visiting the health center in Shashemene at least once every week-and sometimes more often. Her primary concern was transmitting HIV to her unborn baby. Sr Terunesh*, the nurse responsible for ANC services at the health center, had been counseling Aberash on a number of issues related to her well-being and that of the baby. These discussions usually included nutrition-related issues, specifically breastfeeding and its potential hazards. In addition to these counseling sessions, Sr Terunesh had connected Aberash with the MSG for continued support, counseling, and encouragement, both from the mentors and from other mothers in the group.

* Not her real name.

complementary feeding. In facilities in which nurses provided health education, they advised HIV-positive mothers to discontinue breastfeeding at 6 months.

Client satisfaction

Twenty-five of the mothers interviewed were satisfied with the services provided by the health facility. Ten clients were not satisfied with the services provided by student nurses in the Adama and Shashemene health centers. Pregnant women complained about their discomfort during examinations by student nurses. One of the pregnant women actually said, "I will be sick for a week when students are examining me." Mothers who came to have their children immunized complained that student nurses were not skilled enough. One of the respondents said, "They may miss the exact site of injection and may cause nerve damage. Little children need to be treated by well-trained professionals."

6. Findings from PMTCT sites: Case managers, mother support group mentors, and Kebele-Oriented Outreach Workers

6.1. Case managers

Case managers are provided a 15-day pre-service training on PMTCT, adherence counseling, and nutrition before they are deployed. Although they feel that the training has adequately prepared them for the tasks, the case managers asserted that they need formal refresher trainings to keep them up to date, in addition to the on-the-job mentorship they receive from MSH. Most of them have worked for more than two years, which they consider as more voluntary than employment. They are given only a transport allowance of 200 birr per month, although they are required to be in their respective posts from 8am to 5pm, Monday through Friday. Given the critical role they play in supporting these services, this discontentment can eventually build up and potentially affect the success of these programs.

6.2. Mother support group mentors

Typical mother support group mentor responsibilities

According to the MSG coordinator at MSH, MSG mentors are "the backbone of the PMTCT program," playing a key role in supporting mothers to bring up HIV-free children. In addition, they play a key role in counseling and supporting mothers immediately after testing positive. They are also the key link between ANC and the PMTCT program. They counsel ANC clients and mothers in the delivery ward, thereby playing a role for provider-initiated HIV counseling and testing after delivery.

MSG mentors are guided in their task of sharing their life experiences and encouraging mothers to live positively by a manual containing 11 modules. MSG mentors also prepare a coffee ceremony twice every week, with each session attended by up to 16 mothers. MSG mentors do not have responsibilities in their respective communities as part of their engagement in the health center or the PMTCT program. However, they usually develop a strong attachment with the mothers with whom they work. This extends to personal involvement, home visits, and other social support as necessary.

Identification

Any mother who receives counseling for her HIV status is referred to an MSG mentor for further follow-up and counseling support. As such, the system ensures that all HIV-positive mothers who visit the health center are welcome to participate in MSG activities. However, even though everyone is invited, participation is voluntary.

Typical mother support group meeting

A typical MSG meeting includes up to 16 mothers and takes place around a traditional coffee ceremony in a room provided by the health center for this purpose. The mentors read and prepare for the day using a discussion manual prepared by MSH. The manual covers 11 topics relevant to healthy and positive living. These topics are as follows:

- Basic HIV/AIDS
- PMTCT
- Positive living

- Family planning
- Breastfeeding
- Opportunistic infections
- Sexually transmitted infections
- Home-based care
- Income-generating activities
- EPI and infant care
- Infant feeding

The mentors share what they have read as a way of introducing the topic of the day. This is then followed by free and informal discussions, thereby creating an environment of cross-learning and mutual support.

Nutrition forms a significant part of these meetings and usually comes up during the course of discussions—even on days when the discussion topic is completely different. In addition, as mentioned previously, the manual itself has at least four topics that directly address nutrition in general, and breastfeeding in particular.

Challenges of MSG mentorship

The MSG mentors identified two major challenges they constantly face in their mentorship roles: (1) they frequently come across destitute mothers who respond with a complaint of an "I don't even have..." nature, which they say poses a serious challenge to the counseling process, or interferes in their interaction with the mothers; and (2) they think they do not have up-to-date information regarding recent developments in the areas in which they are expected to educate and counsel mothers. One of the mentors related an incident during which she advised a mother to stop breastfeeding at 6 months of age, after the mother had apparently been told by an ART nurse to continue breastfeeding.

Gaps in mother support group mentorship

The main gap that MSG mentors strongly emphasized is lack of training. Some mentioned that they had received only 3–5 days of training prior to their assignments as mentors. Others had not even received this training; and moreover, the training was focused more on positive living than on nutrition. They specifically asked for training on nutrition: both on maternal nutrition and infant and young child feeding. Although they did not stress other needs quite as strongly, they mentioned tools such as a flip chart containing several messages on one theme that can be used during presentations at coffee ceremonies and/or to facilitate subsequent discussions.

The MSG mentors emphasized the need to incorporate cooking demonstrations as a key additional activity. In addition, they also mentioned nutritional support/supplements to mothers in desperate need and income-generation activities/support for mothers graduating from the program after a 1½-year stay. The latter, according to the mentors, would enable mothers to continue caring for their children after all support has ended.

6.3. Kebele-Oriented Outreach Workers

Typical Kebele-Oriented Outreach Worker responsibilities

KOOWs visit the health center once a week to obtain a list of clients lost to follow-up. This process allows them to maintain a working relationship with the health center. The KOOWs then visit those individuals at their homes to bring them back into the health system. In addition, they act as liaisons between the health center and local NGOs that provide assistance to the poor and destitute.

KOOWs plan their own activities. They do not receive strong structural support or guidance, nor is there a reporting mechanism with the health center. Their only contact with the health center is when they retrieve the list of clients lost to follow-up. They conduct most of their activities including the coffee ceremonies—of their own accord. However, they have a manual that guides them on the details of each of their activities. For instance, the manual contains instructions on how to organize a coffee ceremony and initiate and conduct discussions on home-based caregiving. KOOWs stated that they refer to this manual frequently while planning for their activities.

KOOWs refer clients to the health center for diagnosis and treatment in the case of serious medical conditions. In addition, they refer individuals for HIV counseling and testing, tuberculosis screening, evaluation and initiation of ART, and health screening of OVC. The health center, in turn, refers clients who need further social and/or food support, since KOOWs liaise closely with local organizations that provide such support.

KOOWs are involved in educating mothers on maternal and child feeding and nutrition. The most common topics covered are personal hygiene and sanitation—including hand-washing practices. They also advise mothers to eat fresh foods and foods with low fat content. Additionally, the dangers of eating food that has been stored under unhygienic conditions are frequently discussed.

The most common infant and young child feeding topic covered by KOOWs is breastfeeding, including within the context of HIV. Accordingly, their main message to mothers is exclusive breastfeeding (giving no additional foods or fluids) for the first six months for both HIV-positive and HIV-negative mothers. On further probing regarding complementary feeding, the KOOWs stated that their main problem is mothers who cannot afford to purchase complementary foods to give to their children, and thus are forced to continue breastfeeding after six months.

Loss to follow-up

The health center keeps a register of mothers and children for follow-up activities. The register contains telephone numbers for each mother and a close relative or friend, and the name of the NGO providing food support—if the mother is receiving support. KOOWs use this information to reach mothers in their homes (if the health center has been unable to reach the mothers by telephone). If a KOOW is unable to trace a mother, the NGO providing food support is contacted, as it is unlikely that she has defaulted there. Once the mother is located, the KOOW visits her persistently until she returns to the health center.

Training

KOOWs complete a 12-day training program prior to their deployment. Topics include nutrition within the context of HIV, HIV and pregnancy, family planning, ANC, breastfeeding, tuberculosis, and malaria. Apart from a two-day refresher training on tuberculosis and malaria after deployment, they do not receive any further in-service/refresher training on infant and young child feeding practices or maternal nutrition.

Challenges faced by Kebele-Oriented Health Workers

The most common challenge faced by KOOWs revolves around the dilemma faced by many mothers: "I do not have enough to give. How can I carry out your advice?" The KOOWs insisted that even those who are supported do not receive enough and are usually not on time in reporting back. As a result, mothers complain to them that they need to sell a portion of the food handed out in order to buy cooking fuel and pay the rent. KOOWs said they feel helpless in the face of this situation, which usually brings their discussions with the mothers to a premature end.

Gaps in the work of Kebele-Oriented Health Workers

The KOOWs described training as the main issue that they thought required better support. They feel that training—specifically, training related to nutrition—would better equip them for their work. The KOOWs also mentioned the need for financial support to cover their expenses to organize the coffee ceremonies, along with other incentives, as the stipend they currently receive is simply too meager to sustain themselves.

7. Findings from PMTCT sites: Direct observation

7.1. Overview of observations of mothers receiving antenatal care

The purpose of this particular assessment was to observe the services provided at the facility level, and to make recommendations for improving the quality of these services based on the findings. In all the health facilities visited, pregnant women coming for ANC were weighed and informed whether they had gained weight. They were told to eat food, but not what types of food to eat or with what frequency. No infant feeding plans or options were discussed with the mothers. Mothers nearing term were told to breastfeed, without requesting their opinions.

7.2. Overview of observations of mothers with children younger than 6 months

All children who came for immunization were weighed, and mothers were informed about weight gain. Mothers were not asked about how they fed their children. However, they were told to continue breastfeeding for the first six months and to start complementary feeding at the age of 6 months (in Addis Ababa). No clear information was provided on continuing breastfeeding with complementary feeding. In Adama, mothers on ART were told to stop breastfeeding when the child was 6–8 months of age. In Shashemene, mothers were told to continue breastfeeding along with complementary feeding up to 12–18 months. Mothers who brought their children to be immunized against measles were told to provide complementary food if it had not been initiated, or to continue complementary feeding if it had already been initiated.

7.3. Overview of observations of mothers with children older than 6 months

Mothers were told to give complementary foods after the age of 6 months. There was no information about consistency, frequency, and adequacy of complementary feeding.

7.4. Other relevant information

Mothers who were HIV positive were linked to an MSG. There was a discussion on various infant feeding options in ART clinics. Pregnant mothers who had recently tested HIV positive were given the opportunity to decide on infant feeding options, and most of them agreed to exclusively breastfeed and stop after six months. The messages provided to clients were not harmonized with the national guidelines on nutrition within the context of HIV (see Section 4.1).

Counseling of HIV-positive women was held in the rooms in which MSG mentors host their coffee ceremonies. Further, health education was provided in areas in which some clients were not comfortable asking questions.

7.5. Challenges

The messages provided to clients were not harmonized with the national guidelines on nutrition and HIV. The messages were generally provided in the form of health education, which did not usually give the mothers an opportunity to ask questions and obtain maximum benefits from the service. Additionally, HIV-negative mothers were not followed after receiving their results.

Conclusions and recommendations

National guidelines and institutions

As of early 2009, the FMOH had launched the comprehensive NNP, which encompasses major areas of nutrition intervention. These areas include the CBN program, the EOS and its transition to CHDs, and rollout of the OTP. Though implementation of this program has already begun, it has a long way to go—both in terms of coverage and quality assurance. As may be expected, infant and young child and maternal nutrition is understaffed and suffers from a lack of resources. Moreover, there is high turnover of staff in areas in which the implementation of nutritional activities is progressing according to plan. Additionally, several of the coordination mechanisms—as outlined in the NNP—are not functional.

In order to address these problems, there needs to be some effort to increase political commitment for infant and young child feeding and maternal nutrition so that they receive the attention they deserve. Additionally, the coordination mechanisms that are described in the NNP need to be set in place, in order to create a system of accountability and coordination at all levels. With this in mind, re-establishing or strengthening of the national nutrition coordination body and re-instituting a unit (or at least a focal person) are mandatory. Accountability can also be improved by establishing intersectoral linkages, as well as a coordination mechanism at all levels that would report to the respective cabinets. Grassroots-level activities (e.g., health extension workers and agricultural extension workers) at the kebele level can also be linked, so they can inform and support each other. Lastly, subregional storage mechanisms should be established, so as to improve the follow-up by TSF that is often delayed due to poor logistics.

Supervision and support

Even though the FMOH has a policy of integrated supportive supervision, supportive supervision is virtually nonexistent for nutrition activities in the health system. None of the health centers visited had any meaningful supervisory support from any level within the health system. When supervision does take place (which is rarely), it is more like an audit than real support. Moreover, because of the 'integrated' approach of the FMOH toward supervision, even when a team happens to visit a facility, it does not have either the expertise or the interest to focus on nutrition.

Clearly defined policies and protocols on supportive supervision for nutrition programs are needed—backed up by sufficient staffing levels. However, supportive supervision cannot exist as long as there are no strong and functioning units within the health system to be responsible for the supervision. Thus, supportive supervision is a major gap in the system that calls for a concerted effort on the part of both the FMOH and its partners—both in terms of revising and strengthening the system and its approach, including the development of tools tailored to specific program entities, and capacity-building of senior health managers at the federal, regional, and zonal levels.

Training and support of health personnel

The level of knowledge on nutritional counseling among health personnel varies considerably, with junior personnel possessing inadequate information about the various issues. Additionally, health personnel are often not provided with up-to-date information, resulting in erosion of confidence and frustration when confronted with dissatisfied and/or confused clients. Moreover, there is a high turnover of staff, which often results in the hiring of younger staff who are not particularly familiar with infant and young child feeding. Those who are most knowledgeable and experienced have an idea of what messages need to be imparted to their clients; however, in reality, they are unable to offer adequate counseling due to heavy workloads and thus insufficient time to properly counsel each client. In addition, there is no system for tracking infant and young child feeding counseling provided during earlier visits.

In order to address some of these concerns, health workers, case managers, MSG mentors, and KOOWs require nutrition-related training in order to be better equipped for their work. Training needs include nutrition counseling training for health workers; refresher trainings on nutrition in general; and infant and young child feeding and maternal nutrition training for case managers, MSG mentors, and KOOWs specifically. Improving overall staffing—so as to decrease individual workloads—would increase the time service providers spend with each client, thereby immensely contributing to the improvement of nutrition counseling.

Infant and young child feeding tools and resources

Tracking systems

On the positive side, all the health centers have a strong mechanism for identifying and bringing HIV-exposed infants lost to follow-up back into the system. A similar system also exists for tracking mothers and all adults enrolled in PMTCT and ART services.

Counseling tools

On the flip side, counseling tools were found to be lacking in all of the health centers visited. This was mentioned as a serious challenge by most respondents, who said that the lack of up-todate tools for facilitating and/or supplementing nutrition counseling sessions precluded proper counseling of clients. In order to address this gap, up-to-date counseling tools for infant and young child feeding and maternal nutrition need to be prepared for the Ethiopian context. Tools can include flip charts with multiple messages on a particular theme, audio/visual materials such as films that can be presented and used for group counseling, and counseling cards with specific messages for individual counseling. Furthermore, a better distribution system and mechanism for sites to request and obtain additional materials is required. However, before venturing into this activity, preparing a complete inventory of what is already available in the country is highly recommended, in order to avoid duplication and waste of limited resources.

Nutrition rehabilitation centers

Most of the health centers have an NRC; however, only the NRC in the Nefas Silk No. 2 health center was said to be functional. The need to strengthen NRCs and combine cooking demonstration facilities with health centers was mentioned several times during the discussions with the different groups. Strengthening existing NRCs in health facilities (where NRCs exist)

has to be given serious consideration, so critical cases can be handled onsite. Moreover, NRCs are useful for partially addressing nutrition-related problems—at least in the short term. This intervention can be combined with the cooking demonstration facilities, where mothers can be simultaneously trained in basic cooking skills.

Cooking demonstration facilities

Mothers and children suffer from nutrition-related problems not only because of lack of food, but also from lack of knowledge about proper feeding practices. Mothers often do not know how to cook food for themselves or for their children using ingredients they already have. In light of the prevailing lack of mothers' knowledge, establishing cooking demonstration facilities within heath centers would immensely contribute to alleviating a major part of the observed nutritional problems. The government has already recognized the need for cooking demonstrations and has incorporated them as part of the CBN program that is being rolled out. However, this needs to be taken a step further and instituted within the health facilities so that the specific needs of HIV-positive mothers and their children are properly addressed.

Socioeconomic conditions and traditional beliefs

Poverty is endemic among health center clients. Not surprisingly, mothers often express the financial inability to carry out the instructions of health personnel. This challenge can possibly be addressed by providing health personnel with the skills to promote healthy infant and young child feeding practices using available food resources and by providing them with a realistic idea of how much food is actually needed for a young child.

Additionally, the advice given by health personnel is often at odds with the traditional beliefs of mothers, especially around such topics as breastfeeding. Therefore, the public needs to be educated on basic infant and young child feeding practices, in order that certain deleterious long-held traditional views and practices can be eroded, thereby making individual counseling much easier and more effective.

Working mothers expressed reluctance to express breastmilk and preserve it for feeding their babies while they are working. The reasons underscoring this reluctance are not clear, but public education is necessary for addressing such misconceptions.

IYCN Project alignment

The IYCN Project needs to align itself with the current programs and interests of the Ethiopian government, as outlined in the NNP. This is necessary in order to have a meaningful impact on infant and young child feeding practices in the country both locally and nationally.