A Question & Answer Guide

Infant and Young Child Feeding in the Context of HIV and AIDS

A reference tool for counsellors: Answers to questions commonly asked by mothers and their families
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This Question and Answer Guide for Counselors is part of an integrated set of materials adapted from WHO and UNICEF HIV and infant feeding counselling tools. It was developed initially for use in an operations research project at the Kilimanjaro Christian Medical Centre in Moshi, Tanzania. Technical support was provided by the Quality Assurance Project (QAP), managed by University Research Co., LLC (URC), under the U.S. Agency for International Development (USAID) Contract Number GPH-C-00-02-00004-00, and with financial support from the President’s Emergency Plan for AIDS Relief (PEPFAR).

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The Prevention of Mother-to-Child Transmission of HIV (PMTCT) is a strategy aimed at reducing HIV-infection among children born to HIV-positive mothers during pregnancy birth or through breastfeeding. The prevalence of HIV among pregnant women in Tanzania is 8.7 percent, compared to the national figures of 7 percent among persons aged 15-49 years. Among children under 15 years of age who are HIV-infected, 90 percent of the infections are attributed to mother-to-child transmission. Moreover, HIV and AIDS contributes to 16 percent of all deaths among children under-five. It is therefore of utmost importance that opportunities be identified and interventions be strengthened to reduce the transmission of HIV from mother to child in all three modalities.

The Ministry of Health and Social Welfare is committed to reducing the rates of transmission through the expansion and quality improvement of PMTCT services in Tanzania. The use of Nevirapine and safe birth practices have proven effective in reducing HIV transmission from mother to child during pregnancy and delivery. Safer infant feeding practices are known to decrease the rates of HIV transmission following birth.

The transmission of HIV from mother to child through breast milk is a very complex issue given the many challenges and considerations involved in making an informed infant feeding decision. Providing appropriate information, and counseling, based on the mother’s personal situation, is critical for reducing transmission rates. Timely follow-up care and support are also essential. Social and economic barriers, however, and limited knowledge and skills among service providers related to infant feeding counseling, have greatly influenced the HIV-free survival of infants born to HIV-infected mothers.

It is therefore critical that service providers throughout Tanzania be equipped with the knowledge, skills and appropriate counseling tools (or other job aids) that facilitate the dissemination of technically correct, up-to-date messages that are harmonized with the latest international guidance on infant feeding in the context of HIV. This Question and Answer Guide and companion materials on infant feeding are correctly positioned to support and facilitate appropriate PMTCT counseling.

It is my sincere hope that these materials will be widely disseminated and utilized to improve the quality of PMTCT services and increase community awareness on issues related to mother-to-child transmission of HIV and infant feeding practices. I greatly appreciate this effort and strongly recommend that these materials be incorporated into all PMTCT and ANC services throughout the country. I believe that this set of job aids, if well-utilized, can contribute to behavioral changes related to both infant feeding choices and practices, which will ultimately increase the HIV-free child survival of our children.

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It is my belief that these job aids, if used properly, will contribute to creating awareness among service providers and clients on issues pertaining to the transmission of HIV from mother to child, and will ultimately facilitate behavioral change towards safer and optimal infant and young child feeding practices in Tanzania.


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Directions for Use

This Question and Answer Guide was developed at the request of people like you — health care providers, especially infant feeding counselors, who need tools to help them explain the complicated and difficult issues related to feeding infants and young children in the context of HIV and AIDS. It is designed to help counselors provide information and support for preventing HIV transmission among pregnant women, mothers and their children using simple and culturally acceptable language.

Although this material was developed primarily for use with women in PMTCT programs or in Antenatal Clinics (ANC), it can also be used with women in other settings, as well as with fathers, elders, youth, local leaders and others in the community.

This guide is meant as a quick reference for counselors. It provides accurate, easy-to-understand answers to some of the most common questions that mothers, their families and communities are asking about infant feeding in the context of HIV and AIDS. The answers in this guide are based on the latest evidence and international recommendations.

This tool is not a complete reference guide and it is not meant as a substitute for training in infant feeding in the context of HIV. Counselors who use this guide are expected to already have some formal training on issues related to infant feeding in the context of HIV and AIDS. Other educational materials and teaching tools are also needed to support good interpersonal communication and counseling. We hope this tool will make your job as a counselor easier and more successful.

If you have any questions about how to use this guide or suggestions on how to improve it, please contact the Ministry of Health and Social Welfare, National PMTCT Programme.
General Questions About Protecting Babies from HIV

1 What can women do to protect themselves from becoming infected with HIV or other sexually transmitted infections (STIs)?

Women and their partners can protect themselves from becoming infected with HIV and other STIs by:

- Knowing and disclosing their HIV status
- Being faithful with one partner who is not infected with HIV or an STI and who is also faithful to them
- Using a condom correctly and consistently every time they have sexual intercourse
- Abstaining from sexual intercourse

Both women and their partners should undergo Voluntary Counseling and Testing (VCT) for HIV. Knowing and disclosing their HIV status will help both women and their partners make informed decisions about having children and other aspects of their sexual and reproductive lives.

During pregnancy and breastfeeding, it is especially important for both women and their partners to protect themselves from HIV and also from other STIs. If there is any question about the HIV or STI status (or faithfulness) of either partner, couples should use condoms every time they have sexual intercourse. This will protect both partners. Protecting the mother from HIV infection is the surest way to prevent passing the virus to the baby during pregnancy, labor and delivery, or through breast milk.

2 Can ANY mother pass on HIV to her baby?

No, only an HIV-positive woman can pass on the HIV virus to her baby while she is pregnant, during labor and delivery, or while breastfeeding.

If a woman has not been tested for HIV, however, she may not know that she has the virus. It is therefore important for pregnant and breastfeeding women to be tested and to know their HIV status so that they can be counseled about how best to protect their babies from the virus.
3 What are the ways that HIV can pass from an HIV-positive mother to her baby?

If a woman is HIV-positive, her blood and breast milk contain HIV. HIV from a mother can pass to her baby during pregnancy, but especially during labor and delivery, if the baby comes in direct contact with the mother’s blood and body secretions. If the mother breastfeeds her baby, the HIV in the breast milk may pass to the baby.

4 Do all babies born to HIV-positive mothers become infected with HIV?

No, not all babies born to HIV-positive mothers become infected with HIV. Imagine 100 babies born to mothers with HIV. About 40 of these babies will become infected if no preventive actions are taken. Out of these 40 babies, about 25 will become infected during pregnancy, labor and delivery. About 15 babies will become infected during breastfeeding. This means that about 60 babies will not become infected with HIV, even if they are breastfed. There are preventive actions that can be taken and health care services are now available to reduce the number of babies infected.
5 Why do some babies who are born to HIV-positive women become infected with HIV while others do not?

We do not understand yet why some babies born to HIV-positive women become infected with HIV while others do not. Research has shown that multiple factors affect the risk that mothers will pass HIV to their babies. These factors include:

- Recent infection or re-infection with HIV
- Stage of the mother’s illness
- General maternal health and nutritional status
- Breast health
- Infant feeding practices
- Duration of breastfeeding
- Health of baby’s mouth and digestive tract

These factors are discussed in greater detail in Question 21.

6 Can you tell which HIV-positive mothers will infect their babies through breastfeeding and which will not?

No, it is NOT possible to know which HIV-positive mothers will pass on HIV to their babies through their breast milk and which will not. That is why it is so important that all HIV-positive women take certain precautions during their pregnancy and when feeding their babies.

There are several factors that can increase the risk of a mother transmitting HIV to her baby:

- New HIV infections during pregnancy or breastfeeding
- Advanced stage of the disease
- Long duration of breastfeeding
- Thrush or sores in the baby’s mouth
- Mixed feeding (defined below)
- Breast problems (cracked nipples, mastitis, etc)
- Mother’s poor nutritional status
Can you tell if the baby has become infected with HIV?

It is very difficult to tell if a baby has become infected with HIV. The common test for HIV (that tests antibodies) cannot be used until the baby is between 15 and 18 months old and has stopped breastfeeding for 6 weeks. Other tests are available for younger babies, but they are very expensive and are not readily available in routine service delivery. Poor growth and frequent illness may indicate that a baby is infected. Regular follow-up care, including growth monitoring, can help with early diagnosis.

Can anything be done to prevent or reduce the risk of an HIV-positive woman passing HIV to her baby?

Yes. There are preventive actions that can be taken and health care services are now available to reduce the number of babies infected.

✦ Safer delivery practices, such as avoiding invasive procedures and carefully managing all stages of labor, can reduce the amount of mother’s blood and body fluids that the baby is exposed to during delivery.

✦ Antiretroviral drugs (ARVs) are provided through PMTCT service delivery for HIV-positive pregnant women to take during labor. A single dose of Nevirapine syrup should also be given to the baby as prophylaxis within 72 hours of birth.

✦ Exclusive breastfeeding during the first 6 months of life can greatly reduce the risk of passing HIV to the baby.

✦ Safer breastfeeding, meaning proper positioning and attachment of the baby to the breast and feeding on demand (day and night), can greatly reduce the incidence of breast problems, which increases the risk of passing HIV to the baby.

✦ Immediate treatment of breast problems, such as cracked and bleeding nipples, engorgement, or mastitis, can reduce the risk to the baby.
General Questions About Infant Feeding in the Context of HIV

9 What do the terms exclusive breastfeeding, replacement feeding, mixed feeding, and complementary feeding mean?

Exclusive Breastfeeding means an infant receives ONLY breast milk and no water, glucose water, tea, porridge, rice, or other liquids or foods with the exception of medicinal drops or syrups. Exclusive breastfeeding is recommended until the baby is 6 months old.

Replacement Feeding means not breastfeeding, but instead feeding the baby infant formula or other suitable replacement milks.

Mixed Feeding means feeding the baby BOTH breast milk and other foods or liquids, such as water, glucose water, tea, infant formula, cow milk or other breast-milk substitutes, porridge or rice. Mixed feeding is harmful and therefore NEVER recommended for an infant before 6 months.

Complementary Feeding means giving other foods and liquids in addition to breast milk or replacement milks starting at 6 months.

10 Why is exclusive breastfeeding generally recommended for babies from birth until 6 months of life?

- Exclusive breastfeeding provides the best food for a baby by supplying all the nutrients and water a baby needs for the first 6 months of life. No additional foods or water are needed. Mixed feeding is harmful and therefore NEVER recommended for an infant before 6 months.

- Colostrum (the thick yellowish milk that mothers produce during the first few days after delivery) provides babies with very special protection against many infectious diseases. Colostrum also helps the baby to pass the first stool. There is no need to give water or anything else to initiate bowel movements.

- After the colostrum is finished, breast milk continues to give the baby the special vitamins, other nutrients and antibodies that help to make a baby
Breast milk helps protect the baby from getting sick, and promotes recovery if the baby does fall sick.

Breast milk is also very gentle and does not irritate a baby’s sensitive digestive tract. Other foods like porridge, rice, tea, animal milks, and even infant formula and plain water, can hurt a baby by exposing him or her to germs and disease. Some liquids and foods can also cause allergies. These germs or allergies can irritate a baby’s sensitive mouth and digestive tract. They can even cause diarrhea, pneumonia and other life-threatening illnesses.

Exclusive breastfeeding protects the mother from becoming pregnant again soon after giving birth.

**When a mother is HIV-positive, what is the most appropriate feeding option to reduce the chances of passing HIV to her baby?**

The most appropriate infant feeding option for an HIV-infected mother depends on her own individual circumstances, including: her health status and that of her baby; her family situation; the adequacy and availability of replacement foods to feed her baby; the health services in her community; and the counseling and support she is likely to need to ensure the HIV-free survival of her baby.

Exclusive breastfeeding is the best option for HIV-infected women for the first 6 months of life unless replacement feeding is “acceptable, feasible, affordable, sustainable and safe” for them and their infants before that time. (See the AFASS definitions below in Question 13.) Mixed feeding should be avoided because it carries a higher risk of HIV transmission than exclusive breastfeeding.

When replacement feeding is “acceptable, feasible, affordable, sustainable and safe,” (AFASS) avoidance of breastfeeding by HIV-positive women is recommended. Infant formula, modified fresh cow milk and other breast-milk substitutes can be used for replacement feeding. During the first 6 months of life, however, infant formula is considered the most nutritionally complete replacement food, if it
is prepared and given to the infant following the instructions on the formula tin exactly.

HIV-positive mothers can also express and heat treat their breast milk in order to inactivate the HIV and make the milk safe for the baby. Heat treatment of expressed breast milk can be used from birth, but has been most successfully implemented during the transition period between exclusive breastfeeding and the introduction of replacement feeds or complementary foods, while the baby is still receiving some breast milk. Using heat treated breast milk minimizes the exposure of the baby to the virus in the breast milk during these periods of mixed feeding.

12 Why should HIV-positive mothers who breastfeed do so exclusively?

Exclusive breastfeeding, day and night, is recommended for HIV-positive mothers who cannot safely and consistently practice replacement feeding. Research has shown that exclusive breastfeeding greatly reduces the risk of transmission of HIV, as compared to mixed feeding. HIV-exposed infants who are exclusively breastfed from birth to 6 months have a much better chance of surviving than those who are mixed-fed.

Exclusive breastfeeding also increases the chances of a baby surviving other common illnesses, such as diarrhea and pneumonia. It has a protective effect on the baby because it provides important antibodies and nutrients to build the immune system. All HIV-positive mothers, who choose to breastfeed, should be strongly encouraged and supported to exclusively breastfeed during the first 6 months of life.

13 What do the terms “acceptable, feasible, affordable, sustainable and safe” (AFASS) mean in relationship to infant feeding in the context of HIV?

Counselors can use the following terms and the related counseling card to help guide the discussion with the mother and family members about whether or not replacement feeding is an appropriate infant feeding option given their individual situation.
Acceptable: The mother perceives no barrier to choosing the infant feeding option for cultural or social reasons, or for fear of stigma or discrimination.

Feasible: The mother and family have adequate time, knowledge, skills, and other resources needed to prepare and serve replacement feeds, and the support to cope with family, community, and social pressures.

Affordable: The mother and family, with available community or health system support, can afford the costs of preparing and using replacement feeding including all ingredients, cooking fuel, clean water, etc without compromising the health and nutrition of the family.

Sustainable: The mother and family have access to a continuous and uninterrupted supply, through a dependable system of distribution, of all ingredients and commodities needed to safely feed the baby using the chosen method, for as long as the infant needs it.

Safe: Replacement milk can be correctly prepared and done so in nutritionally adequate quantities, and it can be hygienically stored and fed to the baby using clean utensils.

Safe: Replacement milk can be correctly prepared and done so in nutritionally adequate quantities, and it can be hygienically stored and fed to the baby using clean utensils.

Since there is a chance that HIV can pass from an HIV-infected mother to her baby through breast milk, isn’t replacement feeding always better for the baby?

If a mother is HIV-infected, replacement feeding is considered better for the baby ONLY when an assessment of her individual situation at home and in the community shows that it is completely “acceptable, feasible, affordable, sustainable and safe” (AFASS) for her not to breastfeed. Each of these conditions must be discussed thoroughly with each individual woman to enable her to make an informed choice.

Replacement feeding is definitely not the best option for an HIV-positive mother and her baby if the family:
Cannot afford or readily obtain infant formula or adequate replacement milks
Does not have adequate cooking fuel, clean water and access to good health care, or
The mother is at risk of physical harm or psychological injury due to stigma and discrimination for practicing replacement feeding

What are some key counseling questions to help assess a mother’s situation and guide decisions related to infant feeding and AFASS?

The following questions are important to ask an HIV-infected mother during counseling:

- What is your source of drinking water and how far away is it?
- Can you tell me something about your home environment (cooking facility, latrine and garbage disposal)?
- Can you explain how you plan to clean and store the utensils you would use to prepare your baby’s replacement milk?
- After explaining the cost of purchasing replacement milks, ask the following: How do you feel about your ability to cover the monthly costs of replacement feeding?
- How would you store unprepared replacement milks, or the ingredients used to prepare them?
- What do you use for cooking fuel and where do you get it?
- How do you feel about waking up at night to prepare replacement milk for your baby?
- How would your family feel about replacement feeding?
- Where do you go for health services?
Questions About the Advantages and Disadvantages of the Recommended Feeding Options for HIV-Infected Mothers

What are the advantages and disadvantages of exclusive breastfeeding?

There are several important advantages and disadvantages of exclusive breastfeeding (giving only the mother’s milk to the baby).

**Advantages**

- Breast milk is the perfect food for babies, and it protects them from many diseases, especially diarrhea and pneumonia.
- Breast milk is free, always available and does not need any special preparation.
- Exclusive breastfeeding reduces the risk that a baby will become infected with HIV.
- Many women breastfeed their babies, so people will not wonder why she is breastfeeding.
- Exclusive breastfeeding helps a mother recover from childbirth and can help protect her from getting pregnant again too soon.

**Disadvantages**

- As long as the woman breastfeeds, her baby is exposed to HIV in the breast milk and could become infected with the virus.
  
  *The risk is even higher if:*

- The mother’s condition worsens and she develops symptoms of AIDS (CD4 below 350)
- She is re-infected with another strain of the virus while breastfeeding
- She develops cracked nipples, mastitis, breast abscesses or other breast problems
- She mixes breastfeeding with giving other foods or liquids when the baby is less than 6 months old
17 What are the advantages and disadvantages of using expressed and heat treated breast milk?

**Advantages**
- Heat treated breast milk can be used during the transition between exclusive breastfeeding and replacement feeding.
- The HIV in breast milk is inactivated by heating the milk, yet most of the nutrients are preserved.
- Breast milk is the perfect food for babies.
- Breast milk is free and always available.
- Other caregivers can help feed the baby.

**Disadvantages**
- Heat treated breast milk does not contain active HIV but it may not be as effective as unheated breast milk in protecting the baby from other diseases. (It is still more protective than infant formula or animal milks.)
- Expressing and heat treating breast milk is an unknown practice so it may be difficult to readily accept.
- Expressing and heat treating breast milk takes time and must be done frequently, both day and night, especially when the baby is very young. It may be hard to do over a long period of time.
- Expressed breast milk needs to be stored in a cool place and used within 6 hours of heating, or else it will spoil.
- Women using expressed heat treated milk lose some of the benefits of natural birth control associated with exclusive breastfeeding.

18 What are the general advantages and disadvantages of replacement feeding?

There are several important advantages and disadvantages of replacement feeding.

**Advantages**
- There is no risk of passing HIV to the baby through breast milk if the baby is exclusively replacement fed from birth.
Disadvantages

✚ Replacement feeding is expensive relative to exclusive breastfeeding. There are numerous ongoing costs involved, including the costs of ingredients, the preparation and feeding utensils, clean water and fuel.

✚ A baby is more likely to become sick from diarrhea or chest infections and can become malnourished. Reasons for this include: replacement feeds are not as nutritious as breast milk; they do not contain the antibodies that protect a baby from infection; and can be easily over-diluted and contaminated if not prepared correctly and fed properly.

✚ The mother needs a reliable supply of clean water (boiled for 2 minutes), fuel, and soap for preparation of replacement feeds.

✚ Replacement feeds take time to prepare and must be made fresh each feed, unless refrigeration is available.

✚ The mother may be exposed to stigma and discrimination for using infant formula or other breast-milk substitutes instead of breastfeeding. People may suspect that she is HIV-positive, and this could lead to stigma and discrimination.

✚ Women who opt to replacement feed do not benefit from exclusive breastfeeding’s natural protection against becoming pregnant too soon.

What are the specific advantages and disadvantages of using infant formula for replacement feeding?

There are several important advantages and disadvantages of using infant formula for replacement feeding.

Advantages

✚ There is no risk of passing HIV to the baby through infant formula.

✚ Many of the nutrients that a baby needs have already been added to the formula.
Disadvantages

- Infant formula is expensive and the mother or caregiver must always have enough on hand. During the first 6 months of life, a baby will need between 40 and 51 tins of formula, depending on the weight of the tins (400g to 500g). This will cost approximately TSh 150,000 (2007).

What are the specific advantages and disadvantages of using modified fresh cow milk for replacement feeding?

There are several important advantages and disadvantages of using modified fresh cow milk for replacement feeding.

Advantages

- There is no risk of passing HIV to the baby through modified cow milk.
- Modified cow milk (including costs of all ingredients needed to prepare) may be cheaper than infant formula.
- Cow milk is readily available in some areas, especially if the mother or her family has a cow.

Disadvantages

- The modified cow milk is hard for a baby to digest and does not contain all of the nutrients that are required for a child’s growth and development, and therefore additional micronutrients or a multi-vitamin syrup are needed.
- The micronutrients and multi-vitamin syrup needed, either added to the milk or given as a supplement to the baby, are expensive and not readily available.
- The baby needs about 15 liters of milk per month for the first 6 months. The mother will also need to buy sugar to mix with the cow milk. The ingredients in total will cost about Tsh 65,000 (2007) for the first 6 months.
Questions About Safer Breastfeeding in the Context of HIV

What factors can increase the chances that an HIV-positive mother will pass HIV to her baby through breast milk?

There are several factors that can increase the chances of passing HIV to a baby through breast milk.

*These include:*

**Timing and severity of HIV infection in the mother.** There is a higher chance of the mother passing the virus to her baby if she has just become infected with HIV (seroconverted) or has been recently re-infected with the virus. The risk of transmission is also increased if the mother has AIDS (CD4 below 350), especially if she is in an advanced stage of the disease. In such situations, the amount of virus (viral load) in the blood and body fluids, including breast milk, is higher.

**Mixed feeding.** Giving breast milk along with other liquids or foods, including water, reduces the protection provided by breast milk alone. Giving a baby food or liquids other than breast milk can damage the baby's digestive tract and may allow the HIV virus to pass more easily into the baby’s body.

**Duration of breastfeeding.** The longer a baby is breastfed, the longer he or she is exposed to the virus in the breast milk and the higher the chances are then that the baby will become infected with the virus. However, exclusive breastfeeding is recommended for HIV-infected women for the first 6 months of life unless replacement feeding is “acceptable, feasible, affordable, sustainable, and safe” (AFASS) for them and their infants before that time. The decision about when to stop breastfeeding must be made very carefully, taking into consideration the individual mother’s situation, both financial and social, to allow for safe replacement feeding.

**Thrush or sores in the child’s mouth.** If the baby has oral thrush or visible sores in his or her mouth, the virus can more easily pass through the skin of the mouth or tongue and enter the baby’s body. It is very important to treat thrush or sores immediately.
Poor breast health, such as cracked nipples, swollen breasts or mastitis. If a mother does not feed her baby on demand or frequently during the day and night, or if the baby is not attached properly during breastfeeding, the mother’s nipples can become cracked or the breasts can become sore, swollen, or red. These problems can allow the HIV virus to be more easily transmitted to the baby. To reduce the risk of infection, a mother with any kind of breast problem should go immediately to the health center for treatment. Good counseling and support for breastfeeding practices can help to prevent many of these problems.

Health and nutritional status of the mother. If a mother is malnourished, her immune system is likely to be impaired. This can lead to a more rapid progression of the disease. As the disease progresses, the viral load increases, which increases the risk of HIV transmission to the baby.

What actions can be taken to reduce the chances of a mother transmitting HIV to her baby through breast milk?

Take precautions to avoid STIs and HIV during pregnancy and breastfeeding. It is important for all women to make sure that they do not become infected (or re-infected) with HIV during pregnancy or breastfeeding. A recent HIV infection can greatly increase the risk of passing on the virus through pregnancy and delivery as well as through breast milk.

STIs can increase the risk of becoming infected with HIV. All pregnant women and breastfeeding mothers, and their partners, should take precautions by abstaining or avoiding unprotected sexual intercourse, or by using a condom correctly and consistently during pregnancy and breastfeeding.

Practice exclusive breastfeeding. Exclusive breastfeeding provides optimal nutrition, lowers the risk of HIV transmission, and reduces the risk of diarrhea, pneumonia and other illnesses.

Avoid mixed feeding. Mixed feeding injures the immature infant digestive tract and increases the chances of HIV transmission from the mother to the child through breast milk and exposes the infant to contamination. Mixed feeding increases the risk of diarrhea, pneumonia, malnutrition and death.
Shorten the duration of breastfeeding. A baby is exposed to HIV as long as he or she is breastfed. Shortening the duration of breastfeeding will reduce the amount of time that the baby is exposed to the HIV while allowing the baby to receive many of the early benefits of breastfeeding and breast milk. If an HIV-positive mother who is breastfeeding finds that both her financial and social circumstances have changed and that replacement feeding becomes “acceptable, feasible, affordable, sustainable and safe” (AFASS), she should carefully consider switching to replacement feeding. Given the many dangers associated with replacement feeding, mothers need guidance to determine if shortening the duration of exclusive breastfeeding is really appropriate.

At 6 months, if replacement feeding is still not “acceptable, feasible, affordable, sustainable and safe” (AFASS), continuation of breastfeeding with the addition of complementary foods is recommended, while the mother and baby continue to be regularly assessed. All breastfeeding should stop once a nutritionally adequate and safe diet without breast milk can be provided.

Treat sores in the child’s mouth immediately. A mother should immediately seek medical treatment if she notices oral thrush or any sores in or around her baby’s mouth.

Practice good breast care. If a mother is breastfeeding, she should take special precautions and take good care of her breasts by ensuring that her baby is properly positioned and attached to the breast during feeding, beginning with the very first feeds. She should also breastfeed on demand (day and night) and avoid long periods between feeds. If a mother needs to be separated from her baby for a long period of time (for more than 3 hours) because of work or for any reason, she should express some breast milk to avoid engorgement and other problems that can occur, such as mastitis.

Attend appropriate clinic for follow-up counseling and care. A mother should follow the postpartum visit schedule and continue to follow up at Under 5 Clinics or Care and Treatment Centers (CTC) so that a counselor can assess the progress of her infant feeding choice and help the mother to safely carry out her feeding option.
23 What are the special precautions that an HIV-positive mother should take to keep her breasts and nipples healthy?

All women who breastfeed, regardless of their HIV status, should try to avoid cracked or sore nipples, engorged breasts, mastitis and breast abscesses. An HIV-positive woman who chooses to breastfeed needs to know that these breast conditions increase the chances of transmitting HIV to her baby. She should receive good counseling and support to help prevent problems. It is particularly important to practice good breast care, to position and attach the baby correctly and to seek help right away if any problems develop.

All mothers should breastfeed frequently, both day and night, whenever the baby indicates that he or she is hungry. When a baby is less than 6 months old, he or she should breastfeed at least 10 to 12 times in 24 hours. This will help to ensure healthy breasts and nipples, as well as help maintain milk production. Older babies do not have to breastfeed as frequently, but should always breastfeed 6 to 8 or more times in 24 hours. During periods of separation from the baby, the mother should express her milk to prevent engorgement.

24 What should an HIV-positive mother do if her breasts or nipples develop problems while breastfeeding?

If an HIV-positive mother develops any cracks or sores or has any discharge from either of her nipples, she should go to the health facility immediately for treatment. If her breast starts to become engorged, she should feed the baby as often as possible from that breast and see if the engorgement goes away. If the mother’s breast develops mastitis or an abscess, she should also seek care and treatment immediately. She should hand express and discard the milk from the affected breast and should not feed the baby from that breast until it has healed. She should continue to feed often from the other breast.
If the nipples on BOTH breasts develop cracks, sores or discharge, the mother should seek care and treatment right away. If the baby is under 6 months old, the mother should be counseled to express and heat treat her breast milk, feeding it to her baby using a cup, until her breasts heal. She should continue breastfeeding once her breasts heal. If the mother chooses to use replacement milk instead, then she should be counseled to continue with replacement feeding and NOT return to breastfeeding, unless replacement feeding does not meet the AFASS criteria.

It is important for all mothers to check their babies’ mouth regularly for thrush (Candida) or sores and to seek medical treatment right away if either appear. Thrush in the baby’s mouth is often associated with painful and irritated nipples. If a baby has thrush, the mother should also be examined and treated if necessary to avoid other problems.
Questions About Maternal Health and Nutrition in the Context of HIV

Are there special nutritional considerations for an HIV-positive woman during pregnancy and while breastfeeding?

Any pregnant or breastfeeding woman, whether HIV-infected or not, has increased nutritional demands. An HIV-positive woman should be encouraged to eat balanced meals and a variety of appetizing foods every day. She is advised to increase the amount of food in each meal or she should take frequent meals. While breastfeeding, one whole extra meal should be added each day. Pregnant and breastfeeding women need to eat plenty of fruits, vegetables, animal products and legumes. They should also take iron and folic acid tablets according to health care provider recommendations.

Good nutritional status of the mother helps to improve the physical and mental development of her baby.

Are there special considerations for an HIV-positive pregnant woman related to antenatal care?

Yes, pregnancy lowers a woman’s immunity, and HIV lowers it even further. A woman is more susceptible to diseases, including opportunistic infections such as tuberculosis and fungal infections, if her immune system is impaired. Therefore, during pregnancy an HIV-positive woman should be encouraged to:

- Attend regular antenatal visits to monitor her pregnancy, check her general health, and receive counseling and psychological support
- Attend Care and Treatment Center (CTC) regularly for assessment and referral for ARV treatment
- Take an antimalarial medication as a preventive measure, regardless of symptoms, during the second and third trimesters. Pregnant women should always sleep under insecticide-treated bed nets
Practice good personal hygiene, safe food preparation and careful disposal of feces to prevent infections that can cause diarrhea and increase the nutritional needs of the mother.

Reduce the energy that she uses by avoiding strenuous labor and resting for at least 1 hour during the day, especially in the last 3 months of pregnancy.

Avoid cigarettes, alcohol, narcotic drugs and medicines that are not prescribed by her health care provider.

Take a tuberculosis prophylaxis for 6 months if she is living in the same household with someone with active tuberculosis.

Deliver at a health facility and choose a family planning method before being discharged from the facility.

Use condoms consistently and correctly during pregnancy to prevent re-infection with HIV and other STIs.

What are the special considerations for postpartum follow-up of HIV-positive mothers?

HIV-positive mothers need special follow-up care. Mothers should be encouraged to:

- Attend scheduled appointments at the Care and Treatment Center (CTC).
- Follow schedule for postpartum care services (7 days, 28 days, 42 days after delivery). These services consist of routine physical assessments, infant feeding support, and reproductive health care.
- Check for breast problems and treat immediately.
- Eat large and nutritionally balanced meals.
- Join a community support group for HIV or breastfeeding.
- Practice safe sex by using condoms consistently and correctly to avoid re-infection with HIV and other STIs.
Questions About Stopping Breastfeeding at or Before 6 Months

28 What guidance does an HIV-infected mother need when deciding whether or not to stop breastfeeding at or before 6 months?

When an HIV-positive mother is considering stopping breastfeeding at or before 6 months, she needs special guidance and support to understand the balance of risks and to review her infant feeding options in relationship to her own individual circumstances. It is important to know the health status of the mother and that of her baby, including the baby’s HIV status if early diagnostic testing is available. It is also important to review the AFASS criteria as they relate to the family situation at 6 months.

If replacement feeding is still not “acceptable, feasible, affordable, sustainable and safe” (AFASS), continuation of breastfeeding with the addition of complementary foods is recommended, while the mother and baby continue to be regularly assessed. All breastfeeding should stop once a nutritionally adequate and safe diet without breast milk can be provided.

29 If an infant tests positive or is suspected of having HIV, should the mother continue to breastfeed?

Yes, infants and young children who are known to be HIV-infected or are suspected of having HIV, benefit greatly if they continue to receive breast milk. Therefore, their breastfeeding mothers should be strongly encouraged and supported to continue breastfeeding as long as possible.
What kind of support will an HIV-infected mother need to stop breastfeeding?

Health services should follow up all HIV-exposed infants, and continue to offer infant feeding counseling and support, particularly at key points when feeding decisions may be reconsidered, such as the time of early infant diagnosis and at 6 months of age.

**Mothers who choose to stop breastfeeding will need support to:**

- Avoid or at least minimize the dangers of mixed feeding and successfully transition from exclusive breastfeeding to exclusive replacement feeding over a short period of time
- Ensure that the baby has at least 2 cups of other forms of milk on a daily basis until the baby is about 2 years old. Without milk, it is very difficult to replace the important nutrients that breast milk provides for growth and development
- Start giving nutritious complementary foods, increasing the quantity, density and diversity of the foods as the baby grows
- Understand the importance of hygiene and safe preparation of the feeds
- Be aware of the common danger signs and the importance of regular check-ups for the baby
Questions About Complementary Feeding

31 When should a baby begin to receive foods in addition to breast milk or replacement milks?

Babies should begin to receive complementary foods in addition to breast milk or replacement milks when they are 6 months old. For babies who are breastfed, breast milk continues to provide half or more of the child’s nutritional needs from 6 to 12 months and at least one-third of their nutritional needs from 12 to 24 months. In addition to nutrition, breastfeeding continues to protect the child from many illnesses. It also provides closeness and contact that facilitate psychological development.

If an HIV-positive mother chooses not to breastfeed or to stop breastfeeding early, she may need special guidance about when to begin to give the baby complementary foods. Babies who are receiving an appropriate replacement milk should not need additional food until around 6 months. Babies who are not breastfeeding at 6 months need at least 2 cups of replacement milk every day, in addition to complementary foods, until they are about 2 years old, in order to ensure adequate growth and development.

32 How should babies be given complementary foods and what foods should they receive?

- Mothers and other care givers should wash their hands and the babies’ hands before preparing foods and feeding. All bowls, cups and utensils should be cleaned well. It is best to use a separate plate to feed the baby from.
- As babies grow, they gradually need to increase the amount, density and diversity of the foods they eat to ensure that their nutritional needs are met.
- When babies first begin to eat, they should receive 1 or 2 tablespoons of food 2 times each day, slowly increasing the amount, thickness and types of food that are offered.
- Between 6 and 8 months of age, babies need to eat 2 to 3 meals per day if they are receiving some kind of milk. If no milk is available, babies need to eat 5 meals per day. The baby’s food should be mashed, pureed or semi-solid.
Between 9 and 11 months of age, babies need to eat 3 to 4 meals each day, plus healthy snacks as desired.

Between 12 and 24 months of age, babies continue to need 3 to 4 meals each day, plus healthy snacks as desired. At this age, children can eat the same types of food as adults.

Avoid giving drinks that have no nutritional value such as tea, coffee, soda and other sugary drinks. Fresh animal milks and any water that is given to babies should be boiled.
Key Steps in Counseling an HIV-Positive Woman on Infant Feeding Options

1. Greet the woman. Introduce the purpose of the discussion and get her consent to initiate the counseling session.

2. Explain the risk of transmission of HIV, including transmission through breastfeeding. Explain that there are also risks involved in not breastfeeding. Discuss lower risk with Nevirapine and exclusive breastfeeding. Use the 2 counseling cards on risk.

3. Explain the different infant feeding options: 1) exclusive breastfeeding or 2) exclusive replacement feeding (infant formula or modified cow milk). Use the counseling card on infant feeding options.

4. Explore with the woman her home and family situation to determine which feeding option (or options) is “acceptable, feasible, affordable, sustainable and safe” (AFASS) for her to use. Use the counseling card on AFASS.

5. Discuss and assist the woman to choose an appropriate feeding option. Review the content (text and images) of the counseling brochure related to that feeding option.

6. Demonstrate how to practice the chosen feeding option, referring to the content of the appropriate counseling cards or brochures to guide the demonstration. Show the woman where in the brochures she will find this related information.

7. Provide follow-up counseling and support. Advise the woman on the importance of her own health and ask her to come to the health center if she or her baby has any problems. Show the counseling card on danger signs. At each contact, ask the woman to return with the baby for a follow-up visit to:
   - Monitor the growth of the baby
   - Check feeding practices and whether any change is planned
   - Check for signs of illness in both the mother and baby
   - Discuss feeding for infants between 6 and 24 months