

# Infant Feeding and HIV

A GUIDE FOR TRAINING COMMUNITY-BASED  
WORKERS AND VOLUNTEERS



Photos: JH-PIEGO (right); PATH/Mike Wang (left)



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Mobilising women and girls to fight HIV/AIDS

**IYCN** USAID's Infant  
& Young Child  
Nutrition Project

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## Training schedule

Day	1	Day 2
<b>9:00 – 10:30</b>	<ul style="list-style-type: none"> <li>- Introductions</li> <li>- Expectations and objectives</li> <li>- Beliefs on infant feeding</li> </ul>	<ul style="list-style-type: none"> <li>- Positioning and attachment</li> <li>- Feeding babies at 6 months</li> </ul>
<b>10:30 – 10:45</b>	Tea	
<b>10:45 – 1:00</b>	<ul style="list-style-type: none"> <li>- Mother-to-child transmission of HIV</li> <li>- Advantages of breastfeeding</li> </ul>	<ul style="list-style-type: none"> <li>- Complementary feeding</li> <li>- Preparing foods safely</li> </ul>
<b>1:00 – 2:00</b>	Lunch	
<b>2:00 – 4:00</b>	<ul style="list-style-type: none"> <li>- Why breastmilk is best</li> <li>- Infant feeding and HIV</li> </ul>	<ul style="list-style-type: none"> <li>- Helping children to eat</li> <li>- Feeding children of HIV-positive mothers at 6 months of age</li> </ul>
<b>4:00 – 4:15</b>	Tea	
<b>4:15 – 5:30</b>	<ul style="list-style-type: none"> <li>- How the breast makes milk</li> <li>- Starting breastfeeding immediately</li> </ul>	<ul style="list-style-type: none"> <li>- Activity planning</li> </ul>

## Training preparation

The following materials will be needed for the 2-day training:

### Stationary and supplies:

- Flip chart, note cards, masking tape, markers.
- A4 sheets of paper.
- Doll, or pillow, blanket, kanga, etc., that can be used as a “baby.”
- Breast model (see notes below on how to make a breast model).
- Examples of local, available, affordable foods (include healthy and unhealthy options, bottled water, breast models, etc.).

### Prepared flip charts and papers:

- Flip chart prepared with workshop learning objectives:
  - Name three advantages of breastfeeding for the baby and for the mother.
  - State why early initiation of breastfeeding is important.
  - Help a mother of a 0–2-month-old baby with correct positioning and attachment.
  - Define exclusive breastfeeding.
  - Identify three common difficulties of breastfeeding and their prevention, symptoms, and solutions.
  - Identify the age at which to begin introducing foods.
  - Describe the best first foods (local, available, and affordable) for children over 6 months.
  - Describe how to manage breastfeeding in three special breastfeeding situations.
  - Name three popular beliefs and myths about breastfeeding and explain how they relate to optimal breastfeeding practices.
  - Counsel women on appropriate infant feeding.
- One A4 sheet on the wall with the heading “Agree.”
- One A4 sheet on the wall with the heading “Disagree.”
- A4 sheets with the following:
  1. Advantages of breastfeeding for the baby.
  2. Advantages of breastfeeding for the mother.
  3. Advantages of breastfeeding for the family and community.
- Three flip charts, each prepared with the following headings:
  1. Barriers
  2. Messages
  3. Action
- Two flip chart sheets with headings: Breastfeeding risks, Replacement feeding risks.
- Flip chart prepared with the following questions:
  - Who is with a woman when she gives birth?
  - What do family members do to prepare before birth and at the time of the birth?
  - Who delivers the baby?
  - What is done with the baby immediately after birth?
  - Where is the baby placed?
  - What is given to the baby to eat or drink as soon as it is born? Why?
  - When does a mother start to breastfeed? Why?
- Flip chart prepared with the following questions:
  1. When do babies begin to eat something else other than breastmilk?
  2. What do babies eat?
  3. How much do babies eat at each meal?
  4. How many times a day do babies eat?
  5. How is the food prepared?

6. What is done to make sure that the food is clean and safe?
  7. What, if any, utensils do mothers or caregivers use to feed children?
  8. Do children have a separate dish?
  9. Does someone help them to eat? Who?
  10. How do caregivers know if children are hungry? Had enough to eat?
- Three flip charts prepared with the following headings: 0-6 months, 6-12 months, 12-24 months.
  - Flip chart prepared with three columns: Body building, Energy giving, Protective.

Participant materials:

- Participant manuals for each participant.
- Copies of Handout 1: Risks of different feeding methods, for each participant.
- Copies of Handout 2: Positioning and attachment, for each participant.
- Copies of Handout 3: Activity plan, for each participant.

# Expectations and objectives

## Materials and preparation

- Flip chart, note cards, masking tape, markers.
- Flip chart with learning objectives (covered until presented at the end of the session).

**Time:** 60 minutes

## Activity

1. Open the workshop and welcome participants. Review the training schedule and logistics.
2. Divide participants into pairs. Ask each pair to introduce themselves and agree on one expectation they share for the workshop. After 3-5 minutes, ask each pair to introduce each other to the larger group and share the expectation. Facilitators should write each expectation on a flip chart sheet.
3. Compare participant expectations to workshop objectives and discuss any discrepancies.

At the end of the training the participants will be able to:

- Name three advantages of breastfeeding for the baby and for the mother.
- State why early initiation of breastfeeding is important.
- Help a mother of a 0–2-month-old baby with correct positioning and attachment.
- Define exclusive breastfeeding.
- Identify three common difficulties of breastfeeding and their prevention, symptoms, and solutions.
- Identify the age at which to begin introducing foods.
- Describe the best first foods (local, available, and affordable) for children over 6 months.
- Describe how to manage breastfeeding in three special breastfeeding situations.
- Name three popular beliefs and myths about breastfeeding and explain how they relate to optimal breastfeeding practices.
- Counsel women on appropriate infant feeding.

# Beliefs about infant feeding

## Materials and preparation

- One A4 sheet on the wall with the heading “Agree.”
- One A4 sheet on the wall with the heading “Disagree.”

**Time:** 30 minutes

## Activity

*Note to facilitator: This activity is an opportunity for you (as a facilitator) to get a better understanding of participants’ attitudes and beliefs about infant feeding that you can keep in mind as you facilitate sessions over the next 2 days. Some of the statements below are incorrect, but this is not a time to provide correct information. Throughout the workshop these topics will be discussed in detail.*

1) Ask participants to stand in the middle of the room. Explain that you will read a statement; if they agree they should move to the side of the room under the agree sign. If they disagree they should move to the side under the disagree sign. Encourage everyone to move to one side, even if they do not feel strongly they can go to the side that is closest to how they feel.

2) Read the following statements one at a time. After participants have moved, ask a few from each side to explain why they are standing on that side.

- Breastmilk is best for babies when they are first born, but after a few months, babies start to be hungry and need to eat other foods.
- Cow’s milk is a good substitute for breastmilk when a woman is away from her baby or does not have enough breastmilk.
- Breastfeeding should be discouraged for women who are HIV positive because HIV can be transmitted through breastmilk.
- It is important to give water to babies, especially when the weather is very hot.
- There are many reasons why women are unable to give only breastmilk for the first 6 months, it is very difficult.
- It is better to throw away the first milk that comes in since it is watery and does not help the baby.
- Most children born to mothers who are HIV infected will become infected with HIV.

# Mother-to-child transmission of HIV

## Learning objectives

By the end of this session, participants will be able to:

- Name how HIV is transmitted from infected mothers to their children.
- Explain that most babies born to HIV-infected mothers will not be infected with HIV.
- Explain that there are ways to reduce the risk of mother-to-child transmission.
- Describe what they can do in their community to help reduce the risk of mother-to-child transmission.
- Encourage all women to be tested for HIV during pregnancy.

## Materials

- Blank A4 sheets, tape, markers.

**Time:** 60 minutes

## Activity

1) Ask: When can HIV be transmitted from HIV-infected mothers to their children? Allow participants to answer [Participants should mention: during pregnancy, during labour and delivery, and through breastfeeding].

2) Ask: Will most children born to mothers who are HIV infected become infected with HIV themselves? Encourage participants to discuss.

3) Ask 20 participants to stand up in the front of the room. Present the following:

- Imagine that each person standing up is a baby who was born to an HIV-infected mother.
- How many of these 20 babies do you think will become infected with HIV during pregnancy, labour, or birth? *Encourage several participants to discuss.*
- *After participants discuss, ask five people to raise their hands.*
- About 5 out of the 20 babies will be infected with HIV during pregnancy, labour, or birth. These are the numbers based on women who do not go for prevention of mother-to-child transmission (PMTCT) services during pregnancy. The number of babies who would be infected is lower if women use PMTCT services.
- How many of these 20 babies do you think will become infected with HIV through breastfeeding? *Encourage several participants to discuss.*
- *After participants discuss, ask three other people to raise their hands.*
- About 3 out of 20 babies would be infected during breastfeeding. A baby's risk of HIV infection depends on how he or she is breastfed. When mothers breastfeed and give other foods and liquids before 6 months (which is how most children in our community are fed) it almost doubles the risk of passing HIV to the baby.
- In summary, out of 20 babies born to HIV-positive mothers, around 8 would be infected with HIV, even if their mothers do not use PMTCT services or practice safer infant feeding.

4) Ask the same 20 participants to stay in front of the room. Present the following:

- Now imagine that each person standing up is a baby who was born to an HIV-infected mother, but this time the mother and baby take antiretrovirals and practice exclusive breastfeeding.
- How many of these 20 babies do you think will become infected with HIV during pregnancy, labour, or birth? *Encourage several participants to discuss.*
- *After participants discuss, ask two people to raise their hands.*

- About 2 out of the 20 babies will be infected with HIV during pregnancy, labour, or birth. The number is lower because these women used PMTCT services.
- How many of these 20 babies do you think will become infected with HIV through breastfeeding? *Encourage several participants to discuss.*
- *After participants discuss, ask one **other** person to raise his/her hand.*
- About one baby would be infected during breastfeeding if a mother breastfeeds exclusively for 6 months.
- In summary, out of 20 babies born to HIV-positive mothers, around 3 would be infected with HIV if their mothers use PMTCT services and practice exclusive breastfeeding. So by taking these preventive actions, mothers can reduce the risk of transmission to their baby by more than half.

5) Explain that even when women do not use PMTCT services, most children will not become infected. But because there are ways to reduce the risk of HIV transmission, it is important for all pregnant women to be tested so that if they are positive, they can learn how to reduce the risk of HIV transmission to their baby. Women who are negative need to protect themselves from HIV infection during pregnancy and breastfeeding.

6) Ask: Why do some babies who are born to HIV-infected women become infected with HIV while others do not? Encourage participants to discuss.

7) After participants discuss, present the following information:

- Research has shown that there are many factors that can increase the risk that mothers will pass HIV to their babies. These factors include:
  - Recently infected or re-infected with HIV while pregnant or breastfeeding.
  - Being in labour for a long time.
  - The mother is very sick with HIV (the stage of her illness).
  - Mother has breast problems while breastfeeding, including cracked nipples, swollen breasts, or mastitis.
  - The baby has oral thrush or sores in his or her mouth.
  - The baby breastfeeds and receives other foods or liquids at the same time.

8) Ask: What can be done to help prevent or reduce the risk of an HIV-infected woman passing HIV to her baby? Encourage participants to discuss. They should mention the following:

- All pregnant women and their partners should go for HIV testing and seek health care services if they are positive.
- Women who are positive should give birth in a health facility.
- Women who are positive should attend PMTCT services.
- Women who are positive should take antiretroviral drugs (ARVs) during labour and give ARVs to their baby when it is born.
- Talk with a health worker about how best to feed her baby safely.
- Sleep under an insecticide-treated net during pregnancy. These nets are available for all pregnant women for free or at a subsidised fee (Kshs. 40) at the antenatal care (ANC) clinic.

9) Ask: How can men support women who are HIV positive and pregnant? Allow participants to discuss.

10) Explain that husbands and partners can help pregnant women stay healthy and reduce the risk of HIV transmission to the child by:

- Going for voluntary counselling and testing (VCT) together.
- Making sure the woman goes to the health facility for ANC regularly and receives early treatment of infections and illness.

- Talking with a counsellor about how to feed the baby and making an informed decision together.
- Using condoms during sexual intercourse to prevent infection or re-infection.
- Making sure the woman delivers in the health facility or with a skilled and trained attendant.
- Encouraging the woman to eat healthy meals and extra food during pregnancy and breastfeeding.
- Encourage her to sleep under an insecticide-treated mosquito net.
- Supporting her to take her ARVs (if recommended by her doctor).

11) Ask: If a pregnant woman is already positive, does she still need to protect herself against HIV? Allow participants to discuss.

12) Explain that a woman who is infected or re-infected with HIV during pregnancy or breastfeeding is more likely to pass the virus to her child. Unprotected sexual intercourse while pregnant or breastfeeding places a woman at risk of HIV infection, and increases the risk of HIV infection to her child. When someone is newly infected or re-infected with HIV, the amount of HIV in her blood is very high, increasing the risk of mother-to-child transmission.

13) Ask: Where can women and their partners access PMTCT services in our community?

14) Ask: Does anyone have an example of how they have advised pregnant women about mother-to-child transmission? Encourage participants to share examples and experiences.

15) Ask: What can you do to help women and their partners reduce the risk of transmitting HIV to their children?

16) Divide participants into pairs for a role play. Explain that one person will play the role of an Ambassador of Hope/Community Counsellor/Family Ambassador and the other person will play the role of a woman in their community. The woman comes to them for advice with the following problem:

*I am a pregnant and I fear that I may be HIV positive. I am afraid to go for antenatal care because I do not want to be tested for HIV. I think it will be better to try to eat healthy foods during my pregnancy and get some rest so I can stay healthy. I plan to deliver my baby at home. I am worried that my husband will throw me and the baby out if I test positive. I have heard that there are services for HIV-positive pregnant women, but I am so worried about my husband's reaction, I do not want to go for ANC.*

17) After 5 to 10 minutes, ask participants to come back to the large group. Facilitate a discussion with the following questions. Encourage several participants to share:

- What advice did you give to the pregnant woman? Did anyone give different advice?
- Do you think the pregnant woman will follow the advice?
- Would anyone have done anything differently?
- Is what happened similar to what would happen in our community?

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**Trainer's notes:****Mother-to-child transmission**

HIV can be transmitted from mothers to their children during pregnancy, during labour and delivery, or through breastfeeding.

Pregnancy: Normally, the mother and the foetus (foetus is the medical word for a baby before it is born) do not share the same blood. The placenta allows food and other helpful substances to pass from the pregnant woman to the foetus, and blocks most germs and toxins. As long as the pregnant woman stays healthy, the placenta helps protect the foetus from infection. If the pregnant woman has other infections or illnesses, if her HIV infection is new, if she has HIV and is sick, or if she is not eating enough, the placenta may not be able to protect the foetus from HIV. Infections like malaria and sexually transmitted infections (STIs) may keep the placenta from working properly, making it easier for HIV to pass to the foetus.

Labour and delivery: Most HIV transmission takes place during labour and delivery, when the baby can come in contact with maternal blood and fluids. If a woman gives birth in a health facility, there are actions health workers can take to help reduce the risk of transmission to the baby.

Breastfeeding: HIV is in breastmilk and can be transmitted to a baby through breastfeeding. For many HIV-positive women in our community, breastfeeding is the safest option. There are ways to make breastfeeding safer. During the first 6 months, mothers should give only breastmilk. The risk of transmission is much higher if babies are breastfed and given other foods and liquids (even water) at the same time.

Risk of transmission: The most important risk factor for mother-to-child transmission is the amount of HIV in the mother's blood. This is called the viral load. The risk of transmission to the baby is greatest when the viral load is high. Women who have recently been infected with HIV or have late-stage HIV or AIDS often have high viral loads. ARV treatment can reduce viral load.

Some of the risk factors for transmission are the same and some are different during pregnancy, labour and delivery, and breastfeeding.

<b>Maternal factors that may increase the risk of HIV transmission</b>		
<b>Pregnancy</b>	<b>Labour and delivery</b>	<b>Breastfeeding</b>
High maternal viral load (new or advanced HIV/AIDS) Viral, bacterial, or parasitic infection (like malaria) Sexually transmitted infections Maternal malnutrition	High maternal viral load (new or advanced HIV/AIDS) Water break (rupture of membranes) more than 4 hours before labour begins Invasive delivery procedures that increase contact with the mother's blood or body fluids (like episiotomies) First baby in multiple birth Bacterial infection of the membrane (from untreated STI or other infection)	High maternal viral load (new or advanced HIV/AIDS) Breastfeeding and giving other foods and liquids at the same time during the first 6 months Breast infections, sores, or cracked nipples When baby has mouth sores or thrush Maternal malnutrition

Remember: Ambassadors of Hope, Community Counsellors, and Family Ambassadors can help support pregnant women by encouraging them to go to a health facility for PMTCT services. There are ways to reduce the risk of transmission and it is important for them to use these services.

# Advantages of breastfeeding

## Learning objectives

By the end of this session, participants will be able to:

- List the benefits of breastfeeding for children, mothers, families, and communities.

## Materials and preparation:

- Note cards.
- Markers, tape.
- A4 sheets with the following:
  1. Advantages of breastfeeding for the baby.
  2. Advantages of breastfeeding for the mother.
  3. Advantages of breastfeeding for the family and community.

**Time:** 45 minutes

## Activity

1) Present the following information:

- The Government of Kenya is committed to promoting, protecting, and supporting optimal infant and young child feeding practices, because feeding children properly can have important health, social, and economic benefits.
- During the first 6 months, optimal infant and young child feeding practices include:
  - Starting to breastfeed within the first 30 minutes to 1 hour of birth, and
  - Giving only breastmilk (and no other foods or liquids – not even water) whenever the baby wants for the first 6 months.
- These optimal infant feeding practices are necessary to ensure that babies start to grow and develop properly.
- After the first 6 months breastmilk continues to be important for a child's growth and development. We will talk more about feeding children after 6 months in later sessions.

2) Divide participants into groups of four or five. Pass out several note cards and one pen to each small group. Assign a number to each small group by having one representative from each group count off 1, 2, or 3 around the room until each small group has a number (1, 2, or 3).

3) Read the following instructions:

- All ones should write down all the advantages of exclusive breastfeeding for the baby.
- All twos should write down all the advantages of exclusive breastfeeding for the mother.
- All the threes should write down all the advantages of exclusive breastfeeding for the family and community.

Allow 5 minutes

4) Ask all of the ones to share advantages they wrote down and post them on the wall under their heading (if an advantage has already been mentioned by another group they do not need to say it again).

5) Ask all of the twos to share advantages they wrote down and post them on the wall under their heading.

6) Ask all of the threes to share advantages they wrote down and post them on the wall under their heading.

7) Ask participants to look at all of the advantages. Facilitate a discussion with the following questions:

- Are any missing for any of the three categories? Allow participants to write and post any additional advantages.
- Are any not in the correct category?

8) Review the advantages participants identified and add any of the following that were not listed:

<b>BENEFITS OF EXCLUSIVE BREASTFEEDING</b>		
<b>Baby</b>	<b>Mother</b>	<b>Family and community</b>
<ul style="list-style-type: none"> <li>• Supplies everything the baby needs to grow well during the first 6 months of life</li> <li>• Digests easily and does not cause constipation</li> <li>• Protects against diarrhoea and pneumonia</li> <li>• Provides antibodies to illnesses</li> <li>• Protects against infection, including ear infections</li> <li>• During illness helps keep baby well-hydrated</li> <li>• Reduces the risks of allergies</li> <li>• Increases mental development</li> <li>• Promotes proper jaw, teeth, and speech development</li> <li>• Suckling at breast is comforting to baby when fussy, overtired, ill, or hurt</li> <li>• Promotes bonding</li> <li>• Is the baby's first immunisation</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces blood loss after birth (immediate breastfeeding)</li> <li>• Is always ready at the right temperature</li> <li>• Saves time and money</li> <li>• Makes night feedings easier</li> <li>• Delays return of fertility</li> <li>• Reduces the risk of breast and ovarian cancer</li> <li>• Promotes bonding</li> </ul>	<ul style="list-style-type: none"> <li>• Is available 24 hours a day</li> <li>• Reduces the need to buy medicine because the baby is sick less often</li> <li>• Is always ready at the right temperature</li> <li>• Delays new pregnancy, helping to space and time pregnancies</li> <li>• Reduces time lost from work to care for a sick baby</li> <li>• Children perform better in school</li> <li>• More children survive</li> </ul>

9) Ask: If exclusive breastfeeding has so many benefits, why do children in our community receive other foods and liquids before 6 months of age? What are the risks of giving children other foods and liquids before 6 months? Encourage participants to discuss.

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### **Trainer's notes:**

#### **Breastfeeding reduces blood loss after giving birth**

Breastfeeding immediately after giving birth (within the first 30 minutes to 1 hour) will help the uterus (womb) to contract, which decreases the amount of bleeding. Nipple stimulation caused by breastfeeding makes the pituitary gland in the brain release a hormone called oxytocin that makes the uterus contract. Breastfeeding helps to limit blood loss from the uterus after giving birth.

### **Breastfeeding delays fertility**

Breastfeeding exclusively (day and night) can delay the return of ovulation and menstruation after giving birth. When a mother starts to give other foods and liquids, she is likely to start to ovulate and menstruate again.

The lactational amenorrhea method (LAM) is a contraceptive method that takes advantage of the natural infertility that breastfeeding mothers experience. In order for a woman to practice LAM she must follow the three criteria below.

#### 1. The woman's menstrual periods have not started again

Following childbirth, the return of menstrual periods is a sign that a woman is fertile again. During the first 3 to 6 months after giving birth, a woman who is exclusively breastfeeding is unlikely to ovulate before her menstrual period resumes. However, once a woman starts to menstruate, there is a probability that ovulation has resumed. Bleeding during the first 2 months postpartum is not considered menstrual bleeding. Menstruation may be considered to have returned when the woman experiences 2 days of consecutive bleeding or when she thinks her menstrual bleed has returned.

#### 2. The baby is exclusively breastfed frequently day and night

During the first 6 months the baby only breastfeeds. That means the baby does not receive any water, other liquids, or foods. Whenever the baby shows signs of wanting to be fed, by sucking on his/her hand, by moving or opening his mouth, or by moving his head about, be it day or night, the mother breastfeeds her baby. This is called breastfeeding "on demand." All of a baby's thirst, hunger, nutritional, and sucking needs are met at the breast. The baby is nursed frequently for as long as he/she wants to remain on the breast. Exclusive breastfeeding means a minimum of eight feeds during a 24-hour period in the early days and weeks and at least one feeding during the night without any intervals greater than 4 to 6 hours.

#### 3. The baby is less than 6 months old

At 6 months of age, the baby needs to begin receiving complementary foods while continuing to breastfeed. Introduction of water, liquids, and foods can reduce the amount of sucking at the breast, triggering the hormonal mechanism that causes ovulation and menses to start again.

Breastfeeding delays fertility return (ovulation). Exclusive breastfeeding, day and night, causes the first menstrual period to happen before a woman ovulates (it is a sign that fertility is returning). If a mother is not exclusively breastfeeding she will ovulate before her first menstrual period. The absence of menstrual periods and frequent breastfeeding day and night during the first 6 months after giving birth are what make LAM work. When any one of these three criteria is no longer met, another family planning method must be introduced for birth spacing.

Studies have shown that if 100 women started LAM and used it according to the criteria, 1 or at most 2 women would become pregnant. LAM is as effective as any other reversible contraceptive method. Encourage women to talk with a health worker about LAM and if it is the right contraceptive choice for them.

## Why breastmilk is best

### Learning objectives

By the end of this session, participants will be able to:

- List current infant feeding practices in their communities.
- Identify barriers to exclusive breastfeeding.
- Suggest messages and actions they can take to promote exclusive breastfeeding.

### Materials and preparation

- Flip charts with each of the following headings:
  1. Barriers
  2. Messages
  3. Action
- Markers
- Tape

**Time:** 45 minutes

### Activity

1) Make the following points:

- Breastmilk is the perfect food for a baby during the first 6 months. It has everything a baby needs in the right amounts.
- Breastmilk is made to meet the needs of baby humans, just as cow milk is made to meet the needs of baby cows and goat milk is made to meet the needs of baby goats.
- Animal milk is different from breastmilk. Animal milk can be too strong for a baby's digestive system. Breastmilk is much easier for a baby to digest.
- It is dangerous to give animal milks to babies before 6 months of age.
- Breastmilk also has certain things that animal milks do not. Breastmilk has fats that help a baby's growing brain and eyes. These fats are not present in animal milk.
- Breastmilk helps protect a baby against many infections (including diarrhoea, respiratory illness, pneumonia, ear infections, meningitis, and urinary tract infections).

2) Ask: Is formula good for babies? What is formula made from? After participants discuss, explain the following:

- Formula is made from a variety of products, including animal milks, soya, and vegetable oils. Although they have been adjusted so that they are more like human milk, they are still far from perfect for babies.
- There are differences between animal and human milk. Although things can be added to animal milk to make it more similar to breastmilk, the quality of animal milks cannot be improved to be of the same quality as breastmilk.
- Oftentimes caregivers do not have access to clean water, so when they try to prepare formula they are using unsafe water or unclean containers. This also increases the risk of a child falling ill.
- Babies who are fed formula may have problems drinking animal milk in the future. They may develop diarrhoea, abdominal pain, rashes, and other symptoms.

3) Explain that not only is breastmilk best for babies, but giving other milks or formula during the first 6 months is dangerous.

- Research from all over the world shows that babies who are given only breastmilk for the first 6 months are much less likely to get diarrhoea.

- Babies who are fed only formula are more likely to get diarrhoea than babies fed only on breastmilk.
- Babies who are given breastmilk and other foods or liquids are most likely to have diarrhoea.
- Babies who are not exclusively breastfed get diarrhoea more often, partly because other feeds do not have the protective factors of breastmilk, and partly because these other feeds are often made with ingredients and utensils that are contaminated with harmful germs.

4) Ask: What are the disadvantages of feeding formula or animal milk? Allow participants to discuss. After they have discussed, explain the following:

- Artificial feeding may interfere with bonding. The mother and baby may not develop such a close, loving relationship.
- An artificially fed baby is more likely to become ill with diarrhoea, respiratory, and other infections.
- He may get too little milk and become malnourished because he receives too few feeds or because they are too watery (diluted).
- He is more likely to develop allergies and possibly asthma.
- He may become intolerant of animal milk, so that the milk causes diarrhoea, rashes, and other symptoms.
- The risk of some chronic diseases in the child, such as diabetes, is increased.
- He may not develop so well mentally, and may score lower on intelligence tests.
- A mother who does not breastfeed may become pregnant sooner. She is more likely to become anaemic after childbirth, and later to develop breast and ovarian cancer.
- Artificial feeding is harmful for children and their mothers.
- Formula feeding is expensive and time-consuming.

5) Ask: Are there other foods or liquids that babies are given during the first 6 months? Participants should mention water, porridge/uji, fruits, and others.

6) Ask: Why are babies given these other foods and liquids?

7) Ask: Why shouldn't babies be given other foods or liquids before 6 months?

8) Present the following information:

- Other foods and liquids can be difficult for a baby to digest. During the first 6 months, babies' digestive systems are still developing, so foods that are healthy after 6 months can be difficult for babies to eat before 6 months. For example, if a baby eats paw paw (which is a healthy food for babies after 6 months because it has many vitamins that help protect against illness and help a baby to develop well), the body will not be ready to use all of the vitamins and instead they will just pass through the baby.
- Giving other foods and liquids, even water, can make the baby full and reduce the amount of breastmilk that a baby takes.
- Giving water, other liquids, and foods is dangerous and can cause diarrhoea because the ingredients and utensils can be contaminated with harmful germs.
- For the first 6 months of life, feeding a baby only breastmilk will help a baby to grow up healthy, strong, and smart.

9) Ask: Do breastfed babies need to drink water? Encourage participants to discuss.

10) Explain that one of the main ingredients in breastmilk is water. There is enough water in breastmilk to quench the baby's thirst even when it is very hot. This is why breastfed babies do not need water, juices, or any other liquids during the first 6 months of life.

11) Facilitate a discussion to encourage participants to think about how they can encourage and support mothers to practice exclusive breastfeeding. Ask each of the questions below and allow participants to discuss. Note participants' comments on the prepared flip charts for each of the questions (barriers, messages, action):

1. If exclusive breastfeeding is so much better for babies, why are babies in our community given water, other liquids, and foods before 6 months?
2. What information do you think is most important to help mothers change the way they are feeding their babies? Think about how to respond to the barriers we just talked about.
3. What can you do to improve infant-feeding practices in your community?

# Infant feeding and HIV

## Learning objectives

By the end of this session, participants will be able to:

- Explain how to make breastfeeding safer for HIV-positive mothers.
- Offer support and advice to HIV-positive mothers to feed their babies safely.
- Describe how to feed an HIV-positive child.
- Refer group members for PMTCT services in their community.

## Materials

- Flip chart sheets with headings: Breastfeeding risks, Replacement feeding risks.
- Handout 1: Risks of different feeding methods.
- A4 sheets, tape, markers.
- Participants' manuals.

**Time:** 60 minutes

## Activity

1) Ask: What advice would you give to an HIV-positive mother about how to feed her newborn baby? Encourage several participants to share their thoughts.

2) Explain that mothers who are HIV positive have two options for how to feed their children: giving only breastmilk or giving only commercial infant formula (called replacement feeding because it replaces breastmilk). We have talked about the benefits of breastmilk and the risks of giving other foods and liquids.

3) Ask: For an HIV-positive mother, what are the risks to her child if she breastfeeds? What are the risks if she does not breastfeed? Encourage participants to discuss and note their comments on a flip chart.

4) Present the following information:

- For exclusive breastfeeding, although there is a risk of HIV infection through breastfeeding, there is new information that shows that exclusive breastfeeding lowers the risk of HIV transmission by half as compared with mixed feeding (mixed feeding means breastfeeding and giving other foods and liquids at the same time to an infant younger than 6 months). If the mother's viral load is low, whether as a result of antiretroviral prophylaxis or treatment, the risk of HIV transmission through breastfeeding is far less.
- For replacement feeding, there is double the chance that a baby will die from other infections (like diarrhoea or pneumonia) by 6 months and no difference in HIV infection and death between a child who is exclusively breastfed and a child that is exclusively replacement fed.
- Because it can be difficult for women to feed their baby replacement foods in a clean and safe way and never breastfeed, exclusive breastfeeding is often the safest choice for HIV-positive mothers in our community.

5) Ask: How are most babies in our community fed during the first 6 months?

6) Explain that most babies in our community are breastfed and given other foods and liquids at the same time before they are 6 months old. This is called mixed feeding and puts

babies at a much higher risk of illness, death, and HIV infection. Mixed feeding – the most common practice – has the greatest risk of HIV infection and death from other illnesses.

7) Share the following information:

- For most HIV-positive women in our community, **exclusive** breastfeeding is the best way to feed their babies for the first 6 months, with continued breastfeeding through at least 12 months.
- Although giving only formula (and never breastfeeding) can reduce the risk of HIV transmission, it can double the number of children who become sick and die from other illnesses. For this reason, exclusive breastfeeding for the first 6 months, and continued breastfeeding through at least 12 months, is the safest option for most women in our community.
- We need to support HIV-positive women to exclusively breastfeed and be sure that people know about the dangers of giving other foods and liquids while breastfeeding before 6 months. At 6 months, HIV-positive mothers should introduce complementary foods and continue breastfeeding through 12 months. At 12 months, mothers should talk with a health worker again about how best to feed their babies and about whether stopping breastfeeding would be appropriate.
- If, despite recommendations to exclusively breastfeed, mothers think that they can safely feed their children using infant formula and not breastfeeding, they should talk with a health worker to learn if this would be an appropriate option for them and how to do this safely.

8) Ask: Why do you think mixed feeding is so dangerous? Why do you think giving formula is so dangerous?

9) Pass out Handout 1. Explain that these pictures show the risks associated with the different feeding options. Ask the following questions about babies born to HIV-positive mothers:

- Looking at the 20 children fed only breastmilk, how many will die from diarrhoea, pneumonia, or other infections? How many will be infected with HIV?
- Looking at the 20 children fed only replacement milk, how many will die from diarrhoea, pneumonia, or other infections? How many will be infected with HIV?
- Looking at the 20 children fed breastmilk and other foods and liquids, how many will die from diarrhoea, pneumonia, or other infections? How many will be infected with HIV?
- Which of these feeding methods has the greatest risk?

10) Ask: Why is it important to understand these risks?

11) Divide participants into four groups. Pass out a marker and several pieces of A4 paper to each group. Ask: Why do you think women who are HIV positive do not exclusively breastfeed for the first 6 months? Ask participants to write each reason on a piece of paper. After 5 minutes ask participants to tape their reasons to the wall. [Participants might mention the following: do not know the risk, are not supported, worry about stigma, etc.]

12) Ask: Which of these reasons can you address as Ambassador of Hope/Community Counsellor/Family Ambassador in your community? Remove any that they do not think they can address. Ask participants to talk about what they can do in response to each of the reasons.

13) Explain that because exclusive breastfeeding is the best feeding choice for most mothers – both HIV infected and uninfected – it is important for you to be strong advocates for exclusive breastfeeding in your community.

14) Ask: How can we support HIV-positive women to exclusively breastfeed for 6 months? What services are available in our community to help women who are HIV positive? Encourage participants to share their opinions and write them on a flip chart.

15) Explain that the next several sessions will focus on ways to make breastfeeding successful, including starting breastfeeding immediately after birth, helping counsel women who think they do not have enough milk, and proper positioning and attachment.

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**Trainer's notes:**

Research from all over Africa has shown that formula feeding is not a safe option for most HIV-positive women. One of the latest studies to confirm this was in rural Uganda.

***Formula feeding a dangerous option in rural Africa***

Results from a study in Rakai, Uganda, published in December 2008 confirmed once again that promoting formula feeding for HIV-exposed infants can be dangerous in certain settings. In a mostly rural area, mothers received antenatal infant feeding counselling and chose exclusive breastfeeding or formula feeding. By 12 months, formula-fed infants had a 6 times greater risk of death compared to breastfed infants (18% vs. 3%). Even though very few mothers breastfed exclusively, at 12 months HIV-free survival was 96% among breastfed infants and only 86% among formula-fed infants. Even though the program provided free formula, utensils, and significant support, many mothers did not wash utensils before using them, gave formula in bottles, used unsafe drinking water, and had difficulty preparing formula in correct amounts. The authors concluded that programs should not promote formula feeding in rural Africa.

Available from:

<http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=19065270>.

# Starting breastfeeding immediately

## Learning objectives

By the end of this session, participants will be able to:

- List the benefits of early initiation of breastfeeding.

## Materials and preparation

- Note cards
- Markers
- Flip chart with the following questions:
  - Who is with a woman when she gives birth?
  - What do family members do to prepare before birth and at the time of the birth?
  - Who delivers the baby?
  - What is done with the baby immediately after birth?
  - Where is the baby placed?
  - What is given to the baby to eat or drink as soon as it is born? Why?
  - When does a mother start to breastfeed? Why?

**Time:** 30 minutes

## Activity

1. Facilitate a discussion with participants about practices in their communities using the following questions. Allow several participants to share their thoughts and experiences.

- Who is with the woman when she gives birth?
- What do family members do to prepare before birth?
- What do family members do at the time of the birth?
- Who delivers the baby?
- What is done with the baby immediately after birth?
- Where is the baby placed?
- What is given to the baby to eat or drink as soon as it is born? Why?
- When does a mother start to breastfeed? Why?

2. Ask: What do the breasts make during the first 3 days after a woman gives birth?

3. Listen to participants' responses and add:

During the first 3 days the breasts make a yellow, thick liquid that is the first milk. This milk is called colostrum.

4. Ask: Why is it important for the baby to have this first milk?

5. After participants discuss, add:

- It helps protect babies against viruses and bacteria. It is like the baby's first immunisation.
- It cleans the baby's stomach and helps protect the digestive tract.
- It has all the food and water the baby needs.
- Putting the baby in skin-to-skin contact helps regulate the baby's temperature.

6. Present the following information:

- The ministry of health recommends that women begin to breastfeed within the first 30 minutes of birth.
- There are many benefits to mothers and babies if breastfeeding is started very soon after giving birth.
- Early initiation of breastfeeding helps stop bleeding.

- The earlier you put the child to the breast, the faster the milk comes. This will help mothers to make enough breastmilk.
- Starting breastfeeding soon after birth helps reduce the risk of newborns dying.
- Starting breastfeeding immediately helps control the mother's blood loss after giving birth.

7. Ask: Do women in our community start to breastfeed as soon as they should? Why or why not? How can we support women in our community to start breastfeeding right after giving birth?

# How the breast makes milk

## Learning objectives

By the end of this session, participants will be able to:

- Describe how the breast makes milk.
- Correct common myths about breastmilk production.

**Time:** 60 minutes

## Activity

1) Ask: Do the size of a woman's breasts affect how much milk she can make for her baby? Encourage participants to discuss.

2) Explain that the size of a woman's breasts do not affect how much milk she can make.

3) Ask: Do you think it is possible for a woman to make enough breastmilk to feed her baby only breastmilk for the first 6 months? Encourage participants to discuss.

4) Ask: Is it common for women to feel like they are not making enough milk? Encourage participants to share their experiences and those of their wives, relatives, and friends.

5) Ask: Have you ever heard that a woman's thoughts and feelings can affect her milk?

6) Share the following information:

- Almost all women can make enough milk to feed their baby only breastmilk for 6 months and continue breastfeeding until their baby is 2 years or older.
- Even women who are sick or very thin can make enough milk for their baby.
- When a baby suckles at the breast, the tongue and the mouth touch the nipple.
- The nerves in the nipple send a message to the mother's brain that the baby wants milk.
- The brain responds and tells the body to make the milk flow for this feed and to make milk for the next feed. The more the baby suckles, the more milk is produced.
- How a mother feels and what she thinks can affect how her milk flows. If a woman is happy and confident she can breastfeed, her milk flows well. But if she doubts whether she can breastfeed, her worries may stop the milk from flowing.
- Ambassador of Hope/Community Counsellor/Family Ambassador can help support women to feel confident that they can make enough breastmilk to feed their baby.
- It is important to remind women that the more they breastfeed the more milk they will produce.
- Most women find that if they breastfeed whenever the baby is hungry in the day and in the night, they will make enough breastmilk for their baby.
- If a mother feeds water or other foods, the baby will not suckle for these and reduced suckling can reduce breastmilk production. So, when mothers give other liquids or foods because they are afraid they do not have enough breastmilk, they actually can reduce the amount of breastmilk they have.

7) Ask: What would you say to a woman who thought she did not have enough milk to exclusively breastfeed her baby? Encourage several participants to respond.

8) Present the following information:

- In addition to how often a woman breastfeeds, how she breastfeeds can also help her to be successful and for her baby to grow well.
- For example, it is important for a woman to finish feeding from one breast before starting to feed from the other.
- Breastmilk changes during a feed. At the beginning of a feed the milk looks grey and watery. At the end of the feed, the milk is whiter and has more fat for energy.
- Babies need both the milk at the beginning and the milk at the end to grow and develop well.
- Some mothers may take the baby off the breast before he has finished so that he takes from both, but it is better for the baby to finish taking from one breast before switching to another.
- Advise mothers to start feeding from the right breast at one feed and from the left breast at the next feed. This way both breasts will continue to make milk.

9) Divide participants into groups of four. Assign one of the case studies below to each group. Ask the group to discuss what advice they would give to a mother/caregiver in their situation.

- A woman just gave birth at home and her mother-in-law wants to give the baby some warm water to cleanse the baby's stomach before the baby starts to breastfeed.
- A father wants to be supportive and is going to the shop to buy formula for his wife who should be giving birth any day now.
- A mother with a 3-month-old son thinks that she should start to give her baby some cow's milk because now that the baby is bigger her breastmilk is no longer enough to help the baby grow strong.
- A mother with a 1-month-old baby thinks that she does not have enough milk and does not know what to do. Her baby cries all of the time.

10) Give the participant 10 minutes to discuss their scenario and ask them to develop a role play where they will act out the scenario and give correct advice.

11) Ask each group to present their role play. After one group performs, ask the following questions of the entire group:

- Is this a common scenario in our community?
- Do you agree with the advice that was given?
- Would you have done anything differently?

Encourage participants to give each other feedback. Then invite the next group to present and ask the same questions after each role play until all groups have performed.

# Positioning and attachment

## Learning objectives

By the end of this session, participants will be able to:

- Describe correct positioning and attachment of the infant to the breast.
- Demonstrate alternative positions for mothers and babies while breastfeeding.
- Help a mother of a baby 0–2 months old with correct positioning and attachment.

## Materials and preparation

- Handout 2: Positioning and attachment.
- Dolls, breast models (*see materials list for instructions on making a breast model*).
- Prepare for the following demonstration.

*The demonstrations in this session need a lot of practice if they are to be effective.*

*One trainer leads the session. Another trainer demonstrates helping a mother who is sitting.*

*Before the demonstration:*

- *Ask a trainer to help you with the demonstration.*
- *Explain that you want her to play a mother who needs help to position her baby.*
- *Ask her to decide on names for herself and her “baby.” She can use her real name if she likes.*
- *Explain what you want to happen as follows:*
  - *You will demonstrate how to help a mother who is sitting.*
  - *She will sit holding the doll in the common way, with the doll across the front.*
  - *You will greet her and ask how breastfeeding is going, and she will say that it is painful and that she has sore nipples.*
  - *You will ask her to “breastfeed” the doll, while you observe.*
  - *She will hold it in a poor position: loosely, supporting only its head, with its body away from hers, so that she has to lean forward to get her breast to its mouth. She will pretend that breastfeeding is painful. You will then help her to sit more comfortably and to improve the doll's position.*
  - *When the position is better, she should say “Oh! That feels better.”*

**Time:** 45 minutes

## Activity

1) Ask: Is the way a mother holds her baby while she is breastfeeding important? Why? Encourage participants to discuss.

2) Explain that the way a mother holds her baby (positioning) affects the way the baby attaches to her breast. For proper attachment, a baby should take the nipple deeply with mouth open wide, and more of the areola should be seen above the baby's mouth than below. Ask: Why is it important for the baby to attach onto the breast in a particular way?

3) Explain that bad positioning and attachment in the first couple of months can cause:

- The baby to not get enough milk, which can cause the baby to grow poorly or the mother's breasts to become engorged.
- The mother to be uncomfortable or in pain.
- Breast sores, which are very dangerous for mothers who are HIV positive because it can increase the risk of transmission.

- 4) Ask: What are signs that a mom might have trouble with positioning and attachment? (Possible answers: she is in pain, her child is growing poorly.)
- 5) Explain that even though most mothers in our community breastfeed, it is common for women to have difficulties with proper positioning and attachment, which can cause problems.
- 6) Explain that to know if a mother needs help with positioning and attachment, you need to watch her breastfeeding her baby. Conduct the demonstration with a co-facilitator as described above. Ask participants if they have any questions.
- 7) Ask for a volunteer to sit in the front with a “baby.” Ask these questions to the participants and encourage them to provide advice to the “mother.” They can go up and move the baby and the mother:
- Where should the baby’s head be?
    - The baby’s head and body should be in a straight line. A baby cannot suckle or swallow easily if his head is twisted or bent.
  - Where should the baby’s stomach be?
    - The baby’s stomach should be against the mother’s stomach.
  - Where should the mother’s arms be?
    - The baby’s whole body should be supported with the mother’s arm along the baby’s back. This is particularly important for newborns and young babies. For older babies, support of the upper part of the body is usually enough. A mother needs to be careful about using the hand of the same arm, which supports her baby’s back, to hold his bottom. Holding his bottom may result in her pulling him too far out to the side, so that his head is in the crook (bend) of her arm. He then has to bend his head forward to reach the nipple, which makes it difficult for him to suckle.
- 8) Review the following information about holding a baby in the right position:
- Mother should be sitting (or lying) somewhere comfortable so she is relaxed. If it helps, she can support a baby on a cushion.
  - Baby should be facing the breast.
  - Baby and mother should be stomach to stomach.
  - Baby’s back and the head should be in a straight line.
  - Mother should bring the baby to the breast, not her breast to the baby.
  - Mother should support baby’s buttocks with her palm.
  - Hold the baby at the back of his shoulders – not the back of his head. Be careful not to push the baby’s head forward.
- 9) Pass out copies of Handout 2. Ask: Which of these shows proper attachment? Why? Allow participants to discuss.
- 10) Ask how do you know that a baby is properly attached to the breast? Present the following information:
- Hold the baby with his nose opposite the nipple, so that he approaches the breast from underneath the nipple.
  - Touch the baby’s lips with the nipple, so that he opens his mouth, puts out his tongue, and reaches up.
  - Wait until baby’s mouth is opening wide, before moving the baby to breast. His mouth needs to be wide open to take a large mouthful of breast.

- It is important to use the baby's reflexes, so that he opens his mouth wide to take the breast himself. Do not try to force a baby to suckle by pulling his chin down to open his mouth.
- Quickly move the baby to the breast, when he is opening his mouth wide.
- Bring the baby to the breast, do not move the breast to the baby.
- When bringing the baby to the breast, aim the baby's lower lip below the nipple, with his nose opposite the nipple, so that the nipple aims towards the top of the baby's mouth, his tongue goes under the areola, and his chin will touch her breast.
- Baby's mouth should be wide open.
- Baby should take the areola, not only the nipple, in her/his mouth.
- Baby's lower lip should be curled outward.
- Baby will take slow, deep sucks if attachment is correct.
- Baby may be heard swallowing.
- Baby is calm at the breast.

11) Summarise this session by presenting the following:

- It often takes several tries to get a baby well attached. You may need to work with the mother again at a later time, or the next day, until breastfeeding is going well.
- If she is having difficulty in one position, try to help her to find a different position that is more comfortable for her. There are many positions in which a mother can breastfeed.
- In any position, the important thing is for the baby to take enough of the breast into his mouth so that he can suckle effectively.
- Positioning and attaching the baby correctly at the breast helps prevent breast sores and reduces the risk of transmitting HIV to the baby.
- If a woman continues to have difficulties breastfeeding, encourage her to go to the health facility for additional advice and support.
- Feeding a baby with a bottle can cause babies to not attach properly. Improper attachment causes breast problems (sores, cracked nipples, etc.) for the mother, which are especially dangerous for women who are HIV infected. Bottles are also dangerous because they are very difficult to clean properly. If a woman is not breastfeeding, the child should be fed liquids using a cup (even small babies can be fed using a cup).

# Feeding babies at 6 months

## Learning objectives

By the end of this session, participants will be able to:

- Explain when children should start to eat food in addition to breastmilk.
- Describe the importance of feeding children properly at 6 months.
- Explain that breastfeeding continues to be important for children until 2 years of age and beyond.

## Materials

- Flip chart sheets, blank A4 sheets, tape, markers.
- Participants' manuals.
- Flip chart with the following questions:
  1. When do babies begin to eat something else other than breastmilk?
  2. What do babies eat?
  3. How much do babies eat at each meal?
  4. How many times a day do babies eat?
  5. How is the food prepared?
  6. What is done to make sure that the food is clean and safe?
  7. What, if any, utensils do mothers or caregivers use to feed children?
  8. Do children have a separate dish?
  9. Does someone help them to eat? Who?
  10. How do caregivers know if children are hungry? Had enough to eat?

**Time:** 60 minutes

## Activity

1) Divide participants into groups of five and ask them to answer the following questions based on the practices in their communities. (Display the flip chart sheet):

1. When do babies begin to eat something else other than breastmilk?
2. What do babies eat?
3. How much do babies eat at each meal?
4. How many times a day do babies eat?
5. How is the food prepared?
6. What is done to make sure that the food is clean and safe?
7. What, if any, utensils do mothers or caregivers use to feed children?
8. Do children have a separate dish?
9. Does someone help them to eat? Who?
10. How do caregivers know if children are hungry? Had enough to eat?

Pass out blank A4 sheets and pens to participants and ask them to select one group member to note their responses so they can refer to their notes in the larger group.

2) After 5-10 minutes invite representatives from each group to share their responses. Summarise current practices.

3) Facilitate a discussion using these additional questions:

- What are the signs of a healthy, well-nourished child?
- Why are some children short for their age?
- Why are some children sick more often than others?
- Why do some young children have a blank or listless look?

- What happens to children who do not eat properly?

5) Share the following information:

- One way to tell if a child is healthy is to see if he or she is growing properly (gaining enough weight).
- Before 6 months, breastmilk provides everything a baby needs, but at 6 months, and as babies continue to grow, they need other foods.
- At 6 months children start to need a variety of other foods while continuing to breastfeed.
- Breastmilk continues to help children grow well and protect them from illnesses until 2 years and beyond. Mothers should be supported to breastfeed often even after babies start to eat other foods.
- The foods that are given to children at 6 months are called complementary foods, because they complement breastmilk – they do not replace breastmilk.
- The amount and types of complementary foods that babies and young children eat are responsible for their health, growth, and development.
- Appropriate complementary feeding promotes growth and prevents stunting among children 6–23 months old. Stunting (when children are short for their age), which shows that children are malnourished, is permanent if not corrected by two years of age and affects intelligence. In Western Province, almost one out of every three children is stunted.
- Rates of malnutrition are usually highest at 6 to 23 months of age, when babies start to eat foods other than breastmilk. If babies are not fed well during this time it can have lifelong consequences.
- Appropriate complementary feeding involves continued breastfeeding and giving the appropriate amount of good-quality foods.
- Babies 6–12 months old are especially vulnerable, because they are just learning to eat. Babies this age must be fed soft foods frequently and patiently. These foods should be given in addition to breastmilk; they do not replace breastmilk.
- Malnutrition affects health, intelligence, productivity, and ultimately a country's potential to develop.
- Adequate weight gain is a sign of good health and nutrition. It is important to continue to take children to the health facility for regular check-ups and immunisations, and to monitor growth and development.
- After 6 months of age, children should receive vitamin A supplements twice a year or take multiple micronutrients on a daily basis. Encourage mothers to consult a health care provider for the proper advice.
- If a mother is HIV positive, it is important for her to consult a health care provider for counselling on infant feeding options when her baby is 12 months old, such as safer breastfeeding or the use of other suitable milks.

Answer any questions participants have.

# Complementary feeding

## Learning objectives

By the end of this session, participants will be able to:

- List good first foods for children.
- Divide foods into food groups.
- Describe healthy meals for children at different ages.
- Help women overcome challenges to appropriate complementary feeding.

## Materials

- Local, available, affordable foods (include healthy and unhealthy options, bottled water, breast models, etc.).
- Flip charts with the following headings: 0-6 months, 6-12 months, 12-24 months.
- Flip chart with three columns: Body-building, Energy-giving, Protective.

## Role-play preparation

- Identify four participants to play the role of a mother with a 9-month-old baby who is not growing well. Ask her to read the role-play instructions and prepare for her role.
- Prepare four note cards with role-play instructions:  
*You are a mother with a 9-month-old baby. This is your first child. You have been giving watery uji in a bottle, you still breastfeed, you give pieces of chapatti, and sometimes give mashed mangoes. You took your child to be measured and the nurse told you he was not growing properly and had not grown since last month. You are very worried and upset. You do not know what to do.*

**Time:** 75 minutes

## Activity

1) Post the three flip charts (0-6 months, 6-12 months, 12-24 months) on the wall and leave several markers near each flip chart. Ask participants to go around the room and write the foods that are good for babies and children for each age group. Continue until there are several foods listed on the 6-12 and 12-24 months flip charts.

2) Ask participants to walk around the room with you and look at the flip charts. Ask if there is anything that people think should be added or removed. (*Note: In the 0-6 category there should only be breastmilk. If formula is listed it should state that it is only for women who are HIV positive and who use it exclusively for replacement feeding.*)

It is important to emphasise that there are many cultural beliefs about what foods can and cannot be given to babies – correct any myths. Also, emphasise that the kinds of foods given to babies are similar for children 6-12 months and 12-24 months; they are often just prepared in a different way and older children eat more food, more often.

3) Present a prepared flip chart with information on food groups:

<b><u>Body-building</u></b> Make children strong	<b><u>Energy-giving</u></b> Give children energy	<b><u>Protecting</u></b> Prevent and fight illness
Beans, dengu, meat, chicken, fish, and egg yolks	Rice, potatoes, ugali, maize, millet, and matoke	Fruits and vegetables like leafy greens, carrots, pumpkin, oranges, mangoes, and paw paws

4) Ask participants to name other examples of common foods that are available in their communities and to say what group they belong to.

5) Explain that when you feed children, try to give food from at least two different food groups at each meal. Do you think this is possible? What are some possible combinations based on foods that you normally prepare for your family? What are foods that you have given to your children? Some foods are better than others, what foods are especially good for children and why?

6) Facilitate a discussion with the following questions:

- How should food be prepared for children? [Mashed, soft, etc.]
- Should uji be thin or thick? Why? [It should be thick enough to stay on the spoon. Otherwise it is too watery and will not give children enough energy and they will become full with water rather than food.]

7) Explain that as children grow they need to eat more. To be sure they are eating enough, mothers can breastfeed more often, give more food, feed children more often, and give foods that have a lot of energy even in small amounts (like fats and oils).

8) Explain that there is information about the amounts of food to give at different ages in your participants' manual, ask participants to turn to their manuals and review the guidelines below:

6 months

- Two to three tablespoons at each meal.
- Two meals each day.

7-8 months

- One-half cup at each meal.
- Three meals each day.

9-11 months

- Three-fourths of a cup at each meal.
- Three meals each day.
- One snack.

12-24 months

- One cup at each meal.
- Three meals each day.
- Two snacks.

9) Ask: What are common measures that women use to know how much they are feeding their children? Do these recommendations make sense for women in your community? Is there a better way that you could explain it?

10) Explain when you share information with mothers and caregivers it might help to first talk with them about what they are doing and then help them to decide what they could realistically do to improve their current practices – give more food, feed more often, give more variety, give thicker porridge. Telling mothers that making many changes at once is not likely to lead to positive changes in behaviour.

11) Ask: What are some of the challenges that women and families in our communities face that prevent them from feeding their 6–24-month-old children appropriately? [Possible answers: lack accurate information, heavy workloads limit time to help feed children, perception that there is not enough food.] Note participants' responses on a flip chart.

12) (For each response noted on the flip chart) Ask: How can we help women to overcome this challenge? Encourage participants to share their thoughts and experiences.

13) Ask: How do you know if a child is growing well? Where can you take your child to be weighed and measured? How often should you take your child to be weighed and measured? Do most mothers in our community take their children to be weighed and measured as often as they should?

14) Ask each of the four participants you have identified before the session to play the role of a mother to come to the front. Divide participants into four groups and assign one “mother” to each group. Ask the group members to listen to the mother’s situation and offer her advice.

15) After 10 minutes, ask everyone to come back to the larger group. Ask each group to report on the advice they gave. Ask each “mother” to share her experience receiving advice and support. Facilitate a discussion after each group presents with the following questions:

- What advice did you give?
- Do you think the “mother” will follow this advice?
- Does anyone have any suggestions for improving this advice?

# Preparing foods safely

## Learning objectives

By the end of this session, participants will be able to:

- Describe how to safely store, prepare, and serve foods.
- List times when mothers/caregivers should wash their hands.

**Time:** 30 minutes

## Activity

1) Explain that how we store, clean, prepare, and cook foods is also important. Ask: Why is this important? What are the risks if we do not handle food properly? Encourage participants to discuss. After participants discuss, explain that more than half of all illnesses and deaths among young children are caused by germs that get into their mouths through food or water or dirty hands.

2) Ask: How can we store, clean, prepare, and cook food safely? Encourage participants to discuss correct any incorrect information and mention additional information as needed.

Allow participants to discuss and mention the following as needed:

- Cooked food should be eaten without delay or heated again, making it very hot. Do not give food that has been sitting for more than 2 hours, unless it has been kept very hot or very cold.
- Store cooked food in a covered container and use it within 1 hour. Always reheat food well after 1 hour.
- Wash all bowls, cups, and utensils with clean water and soap. If bowls, cups, or utensils are used for raw food they must be washed again before using them for cooked food.
- Only use water that is from a safe source or is purified. Water containers need to be kept covered to keep the water clean.
- Raw or leftover food can be dangerous. Raw food should be washed or cooked.
- Utensils used to cut or handle raw food should be cleaned before using them to cut or handle cooked food.
- Food, utensils, and food-preparation surfaces should be kept clean. Food should be stored in covered containers.
- Dispose of all household trash in a safe way (by burying or burning trash every day) to help prevent illness.

3) Explain that washing our hands with clean, running water and soap is very important. When are the times that we should wash our hands? Allow participants to discuss and mention the following as needed: before cooking food, before and after feeding a baby, after changing nappies or going to the toilet, and after touching animals.

4) Ask: Are these behaviours common in our community? How can you help support women and families to practice these behaviours?

# Helping children to eat

## Learning objectives

By the end of this session, participants will be able to:

- Describe how to encourage young children to eat.
- Explain why responsive feeding is important.

## Materials

- Flip-chart sheet, markers, tape.

**Time:** 30 minutes

## Activity

1) Ask participants to imagine a young child first eating. What comes to mind? Participants may mention the following:

- When a child is learning to eat, he often eats slowly and is messy. He may be easily distracted.
- He may make a face, spit some food out, and play with the food. This is because the child is learning to eat.
- A child needs to learn how to eat, to try new food tastes and textures.
- A child needs to learn to chew, move food around the mouth, and to swallow food.
- The child needs to learn how to get food effectively into the mouth, how to use a spoon, and how to drink from a cup.

Explain that it is very important for caregivers to encourage the child to learn to eat the foods offered.

2) Facilitate a discussion by asking the following questions:

- How do you encourage your children to eat?
- How do you know your child has eaten enough?

3) Summarise the discussion and share the following information:

- Feed infants directly and assist older children when they feed themselves.
- Offer favourite foods and encourage children to eat when they lose interest or have depressed appetites.
- If children refuse many foods, experiment with different food combinations, tastes, textures, and methods for encouragement.
- Talk to children during feeding.
- Look at children when you are feeding them.
- Feed slowly and patiently and minimise distractions during meals.
- Do not force children to eat.

4) Emphasise these points:

- A child needs food, good health, and proper care to grow and develop. Even when food and health care are limited, good care-giving can help make best use of these limited resources.
- Care refers to the behaviours and practices of the caregivers and family that provide the food, health care, stimulation, and emotional support necessary for the child's healthy growth and development.

# Feeding children of HIV-positive mothers from 6 months of age

## Learning objectives

By the end of this session, participants will be able to:

- Explain when children of HIV-positive mothers should begin to eat solid foods.
- Give advice to a woman who is HIV-positive on how to feed her 6-month-old baby.
- List special considerations for a baby born to a mother with HIV.

## Materials

- Flip chart sheet, markers, tape.

**Time:** 45 minutes

## Activity

1) Explain that we have just been talking about how to feed children after 6 months of age.

Ask: Is this advice the same for babies born to mothers who are HIV positive? Allow participants to discuss.

2) After participants discuss, present the following:

- At 6 months it is important for an HIV-positive mother to introduce complementary foods and continue breastfeeding to 12 months of age.
- A mother should continue breastfeeding at 6 months so her baby can continue to get the benefits of breastmilk.
- It is especially important for children with mothers who are HIV infected to eat the right kinds and right amounts of safely prepared foods in addition to breastfeeding. The information we discussed earlier about complementary feeding in general can be shared with women who are HIV positive.

3) Ask: What advice would you give to a woman who is HIV positive on how to feed her 6-month-old baby? Allow participants to discuss.

4) Ask: Should there be any special considerations for a baby born to a mother with HIV? Allow participants to discuss.

5) Explain that children of HIV-positive women must receive early treatment for illnesses and careful growth monitoring to make sure they are healthy. Mothers and caregivers can:

- Be sure the baby receives ARVs immediately after birth to reduce the risk of HIV transmission.
- Bring the baby for follow-up visits.
- Make sure the baby receives all immunisations by the time he or she is 1 year old.
- Bring the baby to the health facility if the baby has a fever, diarrhoea, chronic cough, malaria, hookworm, or other infections.
- Also, HIV-infected children are at a high risk of getting sick and being underweight. HIV-infected infants need to eat more even if they do not have any symptoms. It is important that the following problems receive medical attention:
  - Not eating enough (poor appetite, eating very little, or only liking certain foods).
  - Stomach pain.
  - Feeding difficulties (poor sucking, swallowing, or breathing).
  - Nausea, vomiting, diarrhoea.
  - Weight loss or continued failure to gain adequately.

6). Ask: At what age can a baby be tested for HIV? [Answer: 6 weeks.]

7) Explain the following:

- All babies have antibodies passed on from their mothers as a natural way to protect babies while they are developing their own immune systems. All babies born to HIV-infected mothers have HIV antibodies from their mothers, regardless of whether the babies are HIV infected themselves. Their mothers' antibodies will stay in their bodies for 12 to 18 months. HIV antibody tests on babies younger than 18 months will only show if the mother is infected, and cannot tell the difference between infected and uninfected children.
- There is now a test that can check babies for the virus itself. This test can be used with babies who are as young as 6 weeks. To test for the virus in children, a small needle prick is performed on the child's foot and the blood is dripped onto paper. The blood dries and the paper is transported in a sealed bag or envelope to a lab where the specimen is tested for HIV. Babies who test negative should be brought back for repeat testing at 12 and 18 months.
- Testing at 6 weeks is used to help identify children who are positive so they can start to receive treatment. It should not be used to change infant feeding decisions. For example, if an HIV-positive woman is exclusively breastfeeding, she should continue to breastfeed even if the child tests negative. The child's status does not change what is safest.

8) Ask: What infant feeding advice would you give to an HIV-positive woman who brought her baby in for testing at 6 weeks and when the results came learned that her baby is HIV positive? Encourage participants to discuss.

9) Explain that the recommendation for children who test HIV positive is to exclusively breastfeed (even if they were being fed formula before they should be breastfeed now), this way they can benefit from all of the protective qualities in breastmilk. At 6 months a mother should continue breastfeeding and start to give complementary foods. Also, if a baby tests negative mothers who are breastfeeding should continue to breastfeed.

10) Ask: What can caregivers do to help keep children born to HIV-positive women healthy, even before learning the child's status?

11) Present the following information:

- Be brought for routine well-baby and immunisation visits. Waiting until a child falls ill can be too late. Children's immune systems are not as developed as adults' and they can get sick quicker.
- Receive routine immunisations (including measles and BCG) according to the recommended schedule.
- Bringing children to be weighed each month is important for all babies, but it is especially important for HIV-exposed children. Many HIV-infected children are underweight during the course of their illness. Research shows that an HIV-infected child's nutritional status is closely related to the child's survival.
- It is important for caregivers to know the signs and symptoms most commonly associated with HIV infection in children so they can get treatment immediately.
- If a child has a fever, diarrhoea, ear infections, or is not growing well, it is important for the caregivers to bring HIV-exposed children (or non-exposed children) to a facility immediately.
- Safe infant feeding in the first 2 years of life or longer is important for child survival and development.

- Giving only breastmilk for the first 6 months – which means giving no other foods or liquids, not even water – will be the safest choice for most women in our community. HIV-positive women who choose to breastfeed should be encouraged and supported to do so exclusively.
- It is important for parents and caregivers to understand the risks of giving babies born to HIV-positive mothers other foods and liquids while breastfeeding during the first 6 months. This is called mixed feeding and can significantly increase the risk of HIV transmission and the risk of death from diarrhoea, pneumonia, and other infections.
- It is important for women and caregivers who want to give formula (despite the recommendation to exclusively breastfeed for 6 months) to talk with a health worker about whether or not this can be done safely. For many families in our community, exclusive breastfeeding for the first 6 months is the safest option.
- Babies and children born to mothers with HIV can live healthy lives. It is important for them to be tested early for HIV (from 6 weeks of age using a special HIV-testing method, and again at 12 months and 18 months).
- Practice good personal and food hygiene to prevent common infections, and encourage mothers to seek prompt treatment for any infections or other health-related problems.
- There is medicine that can be given to babies and children to help prevent common illnesses and infections in children who are HIV exposed.
  - This medicine is called Cotrimoxazole, Bactrim, Septra, or Septrin.
  - Cotrimoxazole can help prevent the most common cause of death in young children with HIV – pneumonia – as well as protect against malaria and bacterial infections.
  - Cotrimoxazole is recommended for all HIV-exposed infants from 6 weeks through at least 1 year of age.
  - Cotrimoxazole is given once a day, from 6 weeks of age until the age of 12 months and can be continued for longer periods if recommended by a health worker.

12) Explain that many HIV-positive women in Western Province who choose to breastfeed when their baby is born stop breastfeeding before their child reaches 6 months of age. Ask: What are the risks of stopping breastfeeding early?

13) After participants discuss, explain that:

- When mothers try to stop breastfeeding before 6 months of age they often continue to breastfeed while they start feeding their babies other food or fluids. This is mixed feeding, which can cause diarrhoea and increase the risk of HIV transmission.
- It is very challenging for mothers to be able to provide a safe and nutritious diet without breastmilk. It is important for mothers to consider the risk of HIV transmission compared with the many risks of not breastfeeding. Formula-fed infants have a higher risk of illness and death. Also, studies have shown that stopping breastfeeding early (at 4 to 6 months) increases the risk of illness and death, does not improve HIV-free survival, and is challenging for mothers.
- Breastmilk saves babies, even when their mothers are HIV positive.
- At 12 months, mothers should talk with health care providers again about how best to feed their babies. If a mother cannot safely provide an adequate diet to replace breastmilk, she should continue to breastfeed.
- When a baby is 12 months old, stopping breastfeeding may become less difficult for the mother, less likely to cause disapproval or stigma, and less expensive than at an earlier age.

- For some HIV-positive mothers, 12 months is a good time to stop breastfeeding. For many others, it may be better to continue breastfeeding when starting to give soft foods.
- The right time to stop breastfeeding must always be a mother's choice and is best made by talking with a health worker.

13) Explain that babies born to mothers who are HIV infected can live long and healthy lives if they receive medical care and treatment early. It is important to bring HIV-exposed children to a health facility often and to find out if a child is HIV infected so that medical interventions can be taken to help the baby. However, many families wait to seek treatment until a child becomes very ill, and many do not want to bring their children in for testing. Ask: What can you do in your community to help children born to mothers who are HIV positive to stay healthy and receive treatment early?

## Activity plans

### Learning objectives

By the end of this session, participants will be able to:

- Create and implement a 6-month work plan.

### Materials

- Handout 3: Activity plan

**Time:** 45 minutes

### Activity

1) Ask participants to pair off with a partner and talk with each other about how they plan to incorporate infant feeding into their current community activities.

2) After 10 minutes, explain that creating an activity plan with a goal and objectives can help them achieve these goals and make positive changes in their groups and communities.

Present the activity plan template, defining each of the headings and sharing examples, and pass out Handout 3 to participants.

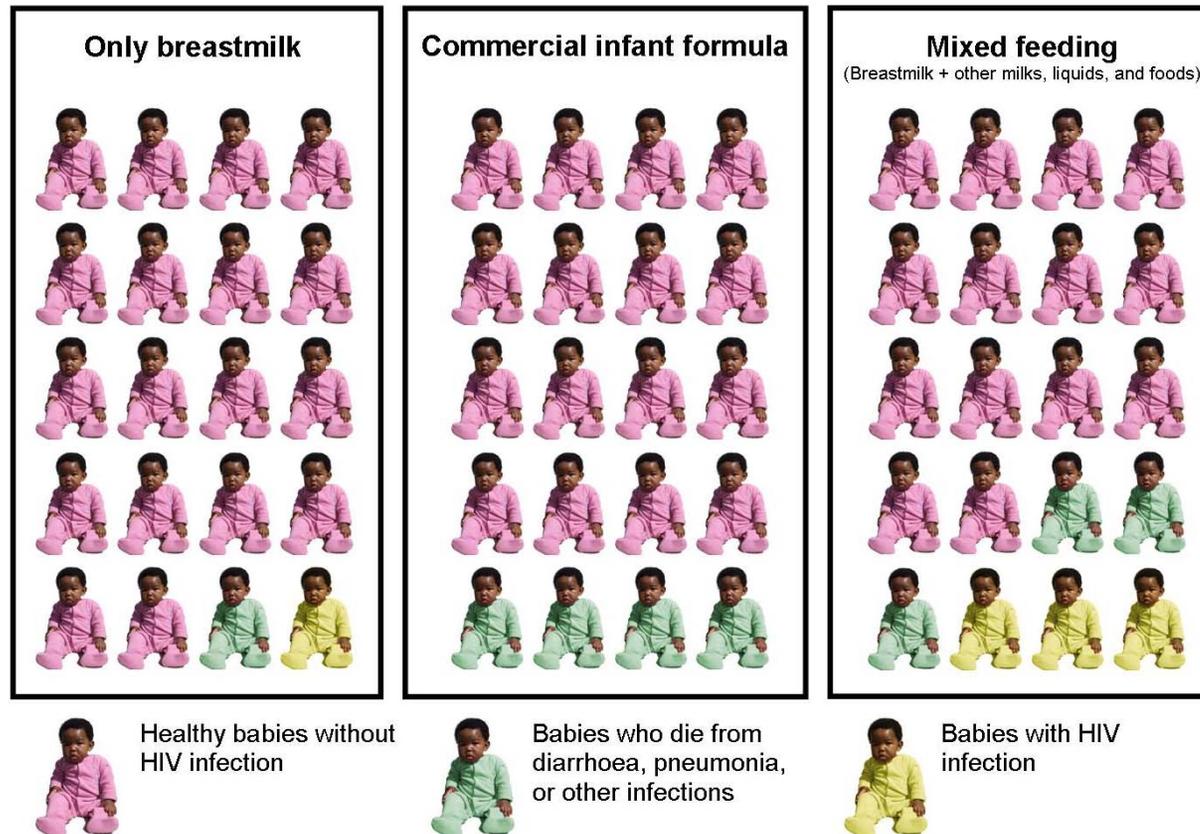
3) Ask participants to work individually for 15-20 minutes to create a personal activity plan for incorporating infant feeding into their current activities. Ask participants to identify an overall goal (based on the conversations they had earlier), then choose activities that can help them reach their goal. For each activity, ask participants to describe the activity, timeline, and how they will know if they have been successful.

Goal:		
Activity	Dates	Measures of success

4) Divide participants into groups so that each facilitator has one group. Ask each participant to present their plan to the people in their group. Encourage members of the small groups to ask each other questions and offer suggestions.

## Handout 1. Risks of different feeding methods

### Risk of HIV infection and death by different infant feeding method during the first 6 months of life



Adapted from: Republic of Kenya. Ministry of Health/Division of Nutrition and NASCOP. *Infant and Young Child Feeding in the Context of HIV and AIDS: Kenyan National Counselling Cards*. Nairobi; 2008.

**Handout 2. Positioning and attachment**



1



2

Source: WHO, UNICEF, UNAIDS. *Infant and Young Child Feeding Counselling: An Integrated Course*. WHO: Geneva; 2006.

### Handout 3. Activity plan

<b>Goal:</b>		
<b>Activity</b>	<b>Dates</b>	<b>Measures of success</b>

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