

Session 9: Building confidence and giving support

Learning objectives

After completing this session participants will be able to:

- List the six confidence and support skills.
- Give an example of each skill.
- Demonstrate the appropriate use of the skills when counselling on IYCF.

Materials and preparation

- Flip chart, markers.
- Make copies of Demonstrations 1 to 4. Study the instructions, so that you are clear about the ideas they illustrate, and you know what to do. Give each of the participants a copy of the demonstration that she has to read.
- Ask different participants to help you to give the Demonstrations 1 to 4. Explain what you want them to do.
- Copies of the Counselling Skills Checklist.

Suggested time: 50 minutes

Session guide

Introduction

Introduce the session by sharing the following information:

- A mother can easily lose confidence in herself. This may lead to her feeling that she is not successful and give into pressure from family and friends.
- You can use confidence-building and giving support skills to help her to feel confident and good about herself.
- It is important not to make a mother feel that she has done something wrong. A mother easily believes that there is something wrong with herself, how she is feeding her child, or with her breastmilk if she is breastfeeding. This reduces her confidence.
- It is important to avoid telling a mother what to do.
- Help each mother to decide for herself what is best for her and her baby. This increases her confidence.

Explain that they will observe and practice six skills for building a mother's confidence and giving her support. These skills are also important when counselling caregivers and other family members.

Skill 1. Accept what a mother thinks and feels

Explain the skill:

- Sometimes a mother thinks something that you do not agree with—that is, she has a mistaken idea.
- Sometimes a mother feels very upset about something that you know is not a serious problem.

Ask: How will she feel if you disagree with her, or criticise, or tell her that it is nothing to be upset or to worry about?

Participants may mention that you may make her feel that she is wrong. This reduces her confidence. She may not want to say any more to you. Explain that:

- It is important not to disagree with a mother.

- It is also important not to agree with a mistaken idea. You may want to suggest something quite different. That can be difficult if you have already agreed with her.
- Instead, you just accept what she thinks or feels. Accepting means responding in a neutral way, and not agreeing or disagreeing.

Ask the two participants whom you have prepared to give Demonstration 1 to read out the words of the mother and health worker. After each response from the health worker ask the participants whether the response was agreeing, disagreeing, or accepting.

Introduce the role play by explaining that we will now see a role play showing acceptance of what a mother thinks. This mother has a 1-week-old baby.

Demonstration 1: Accepting what a mother thinks

Mother: 'My milk is thin and weak, and so I have to give bottle feeds.'

Health worker: 'Oh no! Milk is never thin and weak. It just looks that way' (nods, smiles).

Ask: Did the health worker agree, disagree, or accept?

Comment: This is an inappropriate response, because it is disagreeing. How would this make the mother feel?

Mother: 'My milk is thin and weak, so I have to give bottle feeds.'

Health worker: 'Yes – thin milk can be a problem.'

Ask: Did the health worker agree, disagree, or accept?

Comment: This is an inappropriate response because it is agreeing.

Mother: 'My milk is thin and weak, so I have to give bottle feeds.'

Health worker: 'I see. You are worried about your milk.'

Ask: Did the health worker agree, disagree, or accept?

Comment: This is an appropriate response because it shows acceptance.

Make these additional points:

- Reflecting back and giving simple responses are useful ways to show acceptance. Later in the discussion, you can give information to correct a mistaken idea.
- In a similar way, empathising can show acceptance of a mother's feelings.
- If a mother is worried or upset, and you say something like, 'Oh, don't be upset, it is nothing to worry about,' she may feel that she was wrong to be upset.
- This reduces a mother's confidence in her ability to make her own decisions.

Ask the two participants whom you have prepared to give Demonstration 2 to read out the words of the mother and health worker. Introduce the role play by explaining that the last role play showed acceptance of what a mother thinks. We will now see a role play showing acceptance of what a mother feels. This mother has a 9-month-old baby.

Demonstration 2: Accepting what a mother feels

Mother (in tears): 'It is terrible, (child's name) has a cold and his nose is completely blocked and he can't breastfeed. He just cries and I don't know what to do.'

Health worker: 'Don't worry, your baby is doing very well.'

Ask: Was this an appropriate response?

Comment: This is an inappropriate response, because it did not accept the mother's feelings and made her feel wrong to be upset.

Mother (in tears): 'It is terrible, (child's name) has a cold and his nose is completely blocked and he can't breastfeed. He just cries and I don't know what to do.'

Health worker: 'Don't cry – it's not serious. (Child's name) will soon be better.'

Ask: Was this an appropriate response?

Comment: This is an inappropriate response. By saying things like 'don't worry' or 'don't cry' you make a mother feel it is wrong to be upset, and this reduces her confidence.

Mother (in tears): 'It is terrible, (child's name) has a cold and his nose is completely blocked and he can't breastfeed. He just cries and I don't know what to do.'

Health worker: 'You are upset about (child's name) aren't you?'

Ask: Was this an appropriate response?

Comment: This is an appropriate response because it accepts how the mother feels and makes her feel that it is all right to be upset. Notice how empathising was used to show acceptance. So this is another example of using a listening and learning skill to show acceptance.

Skill 2. Recognize and praise what a mother and baby are doing right

Explain that as health workers, we are trained to look for problems. Often, this means that we see only what we think people are doing wrong, and try to correct them.

Ask: How does it make a mother feel if you tell her that she is doing something wrong, or that her baby is not doing well?

Wait for a few replies and then continue.

- It may make her feel bad, and this can reduce her confidence.
- As counsellors, we must look for what mothers and babies are doing right.
- We must first recognise what they do right, and then we should praise or show approval of the good practices.
- Praising good practices has these benefits:
 - It builds a mother's confidence.
 - It encourages her to continue those good practices.
 - It makes it easier for her to accept suggestions later.
- In some situations it can be difficult to recognise what a mother is doing right. But any mother whose child is living must be doing some things right, whatever her socioeconomic status or education.

Read out the following scenario: *Imagine a mother who has brought her 3-month-old baby to be weighed. The baby is exclusively breastfed. His growth chart shows that he has gained a little weight over the last month. However, his growth line is not following the reference curves. It is rising too slowly. This shows that the baby's growth is slow.*

Ask: What would you say to the mother to help build her confidence?

Allow several participants to give suggestions.

A correct response would be similar to: 'Your baby gained weight last month just on your breastmilk.'

Skill 3. Give practical help

Explain that sometimes giving practical help is better than saying anything. For example:

- When a mother feels tired or dirty or uncomfortable.

- When she has had a lot of information already.
- When she has a clear practical problem.

Ask: What kind of practical help might you offer?

Participants should mention:

- Help her to feel comfortable or give her a bed to rest on, if appropriate.
- Hold the baby yourself while she gets comfortable, or washes, or goes to the toilet.
- It also includes practical help with feeding, such as helping a mother with positioning and attachment, expressing breastmilk, relieving engorgement, or preparing complementary foods.

Ask participants to imagine the follow scenario: *A mother is lying in bed soon after delivery. She looks miserable and depressed. She is saying to the health worker: 'No, I haven't breastfed him yet. My breasts are empty and it is too painful to sit up.'*

Ask: What would you say to this mother? Allow participants to discuss.

Explain that the appropriate response would be to offer practical help, by making the mother comfortable before she helps her to breastfeed. Of course it is important for the baby to breastfeed soon. But it is more likely to be successful if the mother feels comfortable. Emphasise that the mother can also breastfeed while lying down, as we reviewed in the session on positioning and attachment.

Skill 4. Give the key messages

Explain the following:

- Mothers often need information about feeding. It is important to share your knowledge with them. It may also be important to correct mistaken ideas. However, sometimes health workers know so much information that they think they need to tell it all to the mother.
- It is a skill to be able to listen to the mother and choose just two or three pieces of the most important information to give at this time.
- Try to give information that is relevant and important to her situation now. Tell her things that she can use today, not in a few weeks' time.
- Explaining the reason for difficulty is often the most relevant information when it helps a mother to understand what is happening.
- Try to give only one or two pieces of information at a time, especially if a mother is tired, and has already received a lot of information.
- Give information in a positive way, so that it does not sound critical, or make the mother think that she has been doing something wrong. This is especially important if you want to correct a mistaken idea.
 - For example, instead of saying 'Thin porridge is not good for your baby,' you could say: 'Thick foods help the baby to grow.'
- Before you give information to a mother, build her confidence. Accept what she says, and praise what she does well. You do not need to give new information or to correct a mistaken idea immediately.

Ask participants to imagine the following scenario: *A baby is 3 months old. His mother has recently started giving some formula feeds in a bottle in addition to breastfeeding. The baby has developed diarrhoea. The mother is saying to the health worker: 'He has started to have loose stools. Should I stop breastfeeding?'*

Ask: What would you say to this mother?

Allow participants to discuss.

Explain that the appropriate response would be to be supportive of the mother. They could say something like, 'It is good that you asked before deciding. Diarrhoea usually stops sooner if you continue to breastfeed and stop giving formula.'

Skill 5. Use simple language

Explain the skill:

- Health workers learn about diseases and treatments using technical or scientific terms.
- When these terms become familiar, it is easy to forget that people who are not health workers may not understand them.
- It is important to use simple, familiar terms, to explain things to mothers.

Explain that we will now see a demonstration. Ask the two participants whom you have prepared to give Demonstration 3 to read the words of the mother and health worker. Discuss briefly what the participants have observed after each section.

Demonstration 3: Using technical language

Health worker: 'Good morning (name). What can I do for you today?'

Mother: 'Can you tell me what foods to give my baby, now that she is 6 months old?'

Health worker: 'I'm glad that you asked. Well now, the situation is this. Most children need more nutrients than breastmilk alone when they are 6 months old because breastmilk has less than 1 milligram of absorbable iron and breastmilk has about 450 calories, so it provides less than the 700 calories that are needed. The vitamin A needs are higher than what is provided by breastmilk and also the zinc and other micronutrients. However, if you add foods that aren't prepared in a clean way it can increase the risk of diarrhoea, and if you give too many poor-quality foods the child won't get enough calories to grow well.'

Ask: What did you observe?

Comment: The health worker is providing too much information. It is not relevant to the mother at this time. She is using words that are unlikely to be familiar.

Explain, now we will see another mother receiving information in a different way. Again, listen for the skills listed. Ask the two participants whom you have prepared to give Demonstration 4 to read the words of the mother and health worker.

Demonstration 4: Using simple language

Health worker: 'Good morning Me. How can I help you?'

Mother: 'Can you tell me what foods to give my baby, now that she is 6 months old?'

Health worker: 'You are wondering about what is best for your baby. I'm glad you have come to talk about it. It is usually a good idea to start with a little porridge to get him used to the taste of different foods. Just two spoons twice a day to start with.'

Ask: What did you observe this time?

Comment: The health worker explains about starting complementary foods in a simple way.

Skill 6. Make one or two suggestions, not commands

Explain the skill:

- You may decide that it would help a mother if she does something differently; for example, if she feeds the baby more often, or holds him in a different way. However, you must be careful not to tell or command her to do something. This does not help her to feel confident.

- When you counsel a mother, you suggest what she could do. Then she can decide if she will try it or not. This leaves her feeling in control, and helps her to feel confident.

Ask participants to imagine the following scenario: *Makatleho breastfeeds only four times a day, and she is gaining weight too slowly. Her mother thinks that she does not have enough breastmilk.*

Ask: What would you say to this mother?

Allow participants to discuss.

Explain that the appropriate response would be to suggest that it might help if you feed Makatleho more often. Another way to make a suggestion is to ask a question, for example: 'Have you thought of feeding her more often? Sometimes that helps.'

Review the six skills and ask participants if they have any questions:

- Accept what a mother thinks and feels.
- Recognise and praise what a mother and baby are doing right.
- Give practical help.
- Give the key information.
- Use simple language.
- Make one or two suggestions, not commands.

Session 10: Taking a feeding history

Learning objectives

After completing this session participants will be able to:

- Take a feeding history of an infant 0 to 6 months.
- Demonstrate appropriate use of the Guide for Evaluating Infant Feeding, 0–6 Months.

Preparation

- Ask for two volunteers to role play a health worker taking a feeding history from a mother.
- Copies of the Guide for Evaluating Infant Feeding, 0–6 Months for each participant.

Suggested time: 40 minutes

Session guide

Introduction

Share the following information:

- We have discussed how to evaluate infant growth using the growth curve. When an infant is not growing well, we need to find the reason why very quickly to help the baby grow well again.
- If an infant is growing well, it is important to continue asking the mother questions about how the baby is eating, to reinforce the positive practices of the mother, so the baby stays healthy.
- A mother should discuss feeding her baby with a health worker at least once a month when she brings her baby to be weighed.

Ask: Why is it important to evaluate the feeding of a baby so often?

Wait for some responses and complete them with the following information:

- Mothers benefit from regular, positive reinforcement of appropriate feeding practices for their babies.
- Problems linked to feeding practices can be identified early before causing malnutrition, growth problems, and other illnesses.
- Mothers may need help to understand the amount of food their babies need and how often they should feed them.
- Breastfeeding mothers need to be reminded to breastfeed them exclusively.
- Mothers who breastfeed may need assistance and support to resist family or community pressure to introduce other foods besides breastmilk during the first 6 months after birth.
- HIV-positive mothers who choose to give their babies infant formula may need assistance in preparing it well.
- HIV-positive mothers who choose to give their babies infant formula may need support to resist community pressure to breastfeed their babies.

Emphasise the following points:

- Poor feeding techniques often lead to growth problems. There are a number of practices that influence the quality of an infant's feeding.
- The Guide for Evaluating Infant Feeding, 0–6 Months is a tool that can help you to help a mother with all of these practices.

Review of counselling techniques

Explain that before looking at the guide, we are first going to review the counselling techniques that we have used so far during the course.

Ask: What are the techniques that will help us to have a good meeting with a mother?
Await several responses and complete these responses with the following information.

<p>Effective nonverbal communication techniques</p> <ul style="list-style-type: none"> • Maintain visual contact. • Stay attentive. • Be confident. • Take your time. • Keep a suitable attitude. 	<p>Listening and learning techniques</p> <ul style="list-style-type: none"> • Greet the woman in a gentle and friendly manner. • Use the name of mother and baby if appropriate. • Ask open questions. • React simply when showing your interest. • Paraphrase or restate what the mother says. • Show that you understand what she feels. • Avoid judgemental words.
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There is guidance you can follow to ensure that your evaluation addresses the situation of each mother and her infant. The table below provides general ideas on how to proceed with an evaluation.

Steps for conducting an infant feeding evaluation	
GREET	The mother gently and in a friendly manner. (Call the mother and baby by their names if appropriate.)
EXPLAIN	<p>Why you want to ask her questions about the feeding of her infant.</p> <p>For example:</p> <ul style="list-style-type: none"> • <i>Your infant is here today for its regular monitoring visit or to receive its vaccines at 10 weeks. I can see from its growth curve that it is growing well. I would like to ask some questions about the baby's feeding and to talk with you a little about how you plan to feed it in the coming months.</i> • <i>Your baby is here today because she has diarrhoea. I can see on the basis of her growth curve that she has not gained sufficient weight the past month. I would like to ask you some questions about how you are feeding her. I hope that together we will be able to help your daughter start to grow well again.</i> • <i>Your baby is here today because he has a fever. Part of my exam will be to ask you some questions about his feeding. What I learn about how he is eating will help me better counsel you regarding his health.</i>

ASK	Try to ask questions that will give you the most information. Use the guide for choosing questions to ask.
BE CAREFUL	Not to appear too critical and not to pass judgement.
TAKE	<p>The time to discuss the most difficult and sensitive questions.</p> <p>For example:</p> <ul style="list-style-type: none"> • <i>What does the father say about the infant? Its mother? The mother-in-law?</i> • <i>Is the mother happy to have a baby now?</i> • <i>Is she pleased with the sex of the infant?</i> <p>Certain mothers say things spontaneously. Others speak when you emphasise things and show that you understand them. Yet others take some time. If a mother does not speak easily, wait a bit and ask the question later or on another day, perhaps in a more private place.</p>
PRAISE	The mother that she has done well.
SUGGEST	One or two things that the mother can do to resolve the problems at hand.
PLAN	The next meeting with the mother and baby, or refer the mother to other services if they are needed.

Pass out copies of the Guide for Evaluating Infant Feeding, 0–6 Months and call attention to the following:

- Notice that the guide asks you to pose questions about the feeding of the baby as well as about the mother’s situation.
- Notice also that the guide provides you with questions to ask at each visit, but also questions to ask only if you see that the infant’s growth is not optimal.
- Note that it is not necessary to pose all the questions in the guide at each visit. The guide is simply a tool to assist you in remembering questions that could be important for better understanding of infant feeding.
- Ask participants to review the guide. Give some minutes to each participant for reading the sections of the guide. When they have finished reading all sections, ask if they have questions or comments to share with the group.

Guide for Evaluating Infant Feeding, 0–6 Months

Each time a mother visits, ask these questions about infant feeding:

- Do you have any concerns about feeding the infant? If so, what are they?
- What does the infant eat or drink? (Answers include breastmilk, infant formula, other foods, and milks and liquids including water.)

If the answer is breastmilk, then ask:	If the answer is formula, then ask:	If the answer is other foods, then ask:
<ul style="list-style-type: none"> • How many times during the day does the infant breastfeed? • How many times during the night does the infant breastfeed? • How long does each breastfeed last? • Does the infant eat or drink anything other than breastmilk? • Does the infant take water? • Are there other persons besides you who feed the baby? If so, what do they give the baby? • Do they use a baby bottle or a cup? 	<ul style="list-style-type: none"> • What formula does the infant drink? • What do you use to feed the infant—a baby bottle or a cup? • How many times does the infant drink during the day? • How many times does the infant drink during the night? • How much does the infant drink at each meal? • Does the infant eat or drink anything other than formula? • Does the infant take water? • Does anyone else feed the baby? 	<ul style="list-style-type: none"> • Why do you give this food? • Do you continue to breastfeed? (Can you change and exclusively breastfeed?) • Have you chosen this food for a particular reason? (Can you change and use commercial replacement milk?) • Does the infant take water? • Do you give other liquids (tea, juice, other) to your infant? • When did you start giving other liquids to your infant? • Do you give other foods to your infant? • When did you start giving other foods to your infant? • Why do you give liquid or foods to your infant besides breastmilk/or commercial replacement milk? • Can you nurse the infant more often or increase the amount of milk and not give other liquids or foods before the age of 6 months?

Ask the mother questions about her situation:

- How old are you?
- What is the status of your health?
- How did your pregnancy go?
- How did your delivery go?
- Are you feeding your infant the way you planned before its birth?
- If you breastfeed, do you have problems with your breasts?
- Have you received help in feeding your infant?
- Is this your first infant? If no, how many children do you have?
- How did you feed your other children? Is this way agreeable to you?
- What do other persons in your household think of the way that you feed your infant?
- Do you use family planning, or do you plan to use it?

Ask questions about any infant growth or health problems:

- During a whole day, how many times does the infant urinate (day or night)?
- During a whole day, how many times does the infant have a bowel movement (day or night)? What is the consistency of its stools?
- Has the infant had a recent illness? (Examples are malaria, diarrhoea, and respiratory infection.) Has the infant seen a doctor or taken medicines?
- How did you feed your infant during and after his illness?

Explain that you will show how to use the Guide for Evaluating Infant Feeding, 0–6 Months. Ask participants already prepared to read the words of the health agent and the mother. Circulate the growth chart for Mampho among the participants during the demonstration.

Demonstration 1. Evaluating the feeding of Mampho

<i>Nurse:</i>	‘Good morning, I am the nurse, Limpho. May I ask your name and your baby’s name?’
<i>Mother:</i>	‘Good morning, Nurse. I am Mathabo and this is my daughter Mampho.’
<i>Nurse:</i>	‘She is cute—how old is she?’
<i>Mother:</i>	‘She is three and a half months now.’
<i>Nurse:</i>	‘Okay—and she’s interested in what’s going on, right? Tell me, what milk have you been giving her up to now?’
<i>Mother:</i>	‘Well, I started by breastfeeding, but she was so hungry that I never seemed to have enough milk, so I had to add milk from a baby bottle, too.’
<i>Nurse:</i>	‘My dear, that can be really disturbing when an infant is always hungry. So did you start feeding with a baby bottle? What did you give her?’
<i>Mother:</i>	‘Well, I put some milk in the bottle.’
<i>Nurse:</i>	‘When did she start to eat these meals?’
<i>Mother:</i>	‘When she was about 2 months old.’
<i>Nurse:</i>	‘About 2 months old. How many bottles did you give her a day?’
<i>Mother:</i>	‘Oh, usually two—I prepare one in the morning and one in the evening, and she drinks each time she wants to—each bottle lasts a long time.’
<i>Nurse:</i>	‘So she drinks from the bottle gradually? What sort of milk do you use?’
<i>Mother:</i>	‘Yes—Well, if I have formula, I use it. If not, I simply use cow’s milk, adding some water or milk with sugar because it’s less expensive. She really likes milk with sugar!’

<i>Nurse:</i>	'Formula is very expensive, isn't it? Tell me more about breastfeeding. How often doe she take the breast now?'
<i>Mother:</i>	'Oh, she eats when she wants to. Very often at night, four or five times. During the day, I don't count. She likes being comfortable.'
<i>Nurse:</i>	'She nurses at night?'
<i>Mother:</i>	'Yes, she sleeps with me.'
<i>Nurse:</i>	'Oh, it's easier that way, right? Have you had any other difficulties with breastfeeding beside the fear that you don't have enough milk?'
<i>Mother:</i>	'No, it hasn't been difficult at all.'
<i>Nurse:</i>	'Have you given her anything else? Food or drinks?'
<i>Mother:</i>	'No—I am not going to breastfeed her much longer. She is perfectly happy to take bottles.'
<i>Nurse:</i>	'Can you tell me how you clean the bottles?'
<i>Mother:</i>	'I just rinse them with hot water. If I have soap, I use it. Otherwise, just water.'
<i>Nurse:</i>	'Okay, now can you tell me how Mampho is doing? Does she have a growth curve? May I see it? (The mother gives her the health card). Thanks, I'll look at it... She weighed 3.5kg when born, 5.5kg when she was 2 months, and now she weighs 6.0kg. You can see that she gained weight quickly during the first 2 months but a bit more slowly since then. Can you tell me what illnesses she has had?'
<i>Mother:</i>	'Yes – she had diarrhoea twice last month, but she seems better. Her stools have become normal now.'
<i>Nurse:</i>	'How old are you?'
<i>Mother:</i>	'I'm 22.'
<i>Nurse:</i>	'How is your health? How are your breasts?'
<i>Mother:</i>	'I am well—my breasts have no problems.'
<i>Nurse:</i>	'May I ask if you think that you are pregnant right now? Have you thought about family planning?'
<i>Mother:</i>	'No—I have not thought about it—I was thinking that I could not get pregnant if I was breastfeeding.'
<i>Nurse:</i>	'In fact, it's possible to become pregnant if you also give other foods. We will talk about that later if you want. Is Mampho your first baby?'
<i>Mother:</i>	'Yes. I don't want another right now.'
<i>Nurse:</i>	'Tell me, how are things going at home now? Are you working outside of the home?'
<i>Mother:</i>	'No—right now I am at home with Mampho. I could look for work later when Mampho is bigger.'
<i>Nurse:</i>	'Who else at home helps you?'
<i>Mother:</i>	'My husband works as a taxi driver, so he is not home very much. Mampho's grandmother is with me during the day. She loves Mampho very much, and thinks that she is very thirsty and needs to be given water. Sometimes when she is watching her she gives her water and the milk from the bottle.'

Discuss the demonstration. Ask the group what they think of the technique of using the job aid. Ask the following questions:

- *Did Nurse Lympho use her competencies in listening and learning to get information? Can you give examples? (Encourage participants to give specific examples.)*
- *What examples of empathy did the health agent use? (Examples of empathy are: 'Well, that can be disturbing when an infant is always hungry,' and 'It is worrisome when your breasts are flabby after delivery, isn't it?')*
- *Did Nurse Lympho ask questions from all sections of the Guide for Evaluating Infant Feeding, 0–6 Months?*
- *Did she leave out important questions?*
- *Did the fact that she asked questions from each section of the guide help her understand the difficulties?*
- *What were the difficulties of feeding in this situation? These include:*
 - *The perceived insufficiency of milk at 2 months that led to starting complementary feeding with a bottle.*
 - *The addition of other milks and water in the baby bottle.*
 - *The use of unmodified cow's milk with sugar if there was no powdered milk.*
 - *Inappropriate washing of bottles.*
 - *Two episodes of diarrhoea*
 - *Insufficient growth since 2 months of age.*
 - *No assistance with initial breastfeeding.*
 - *Introduction of water before 6 months are completed.*
 - *The nature of the father's work.*
 - *The lack of knowledge of Mampho's mother and grandmother.*

Session 11: Breastfeeding difficulties

Learning objectives

After completing this session participants will be able to:

- Identify the causes of, and help mothers with, the following difficulties:
 - 'Not enough milk.'
 - A crying baby.
 - Breast refusal.

Materials and preparation:

- Flip chart and markers.

Suggested time: 45 minutes

Session guide

Ask: What are common breastfeeding difficulties that women experience?

Write them on a flip chart. (If participants mention mastitis, cracked nipples, plugged ducts, or engorgement, explain that we will talk about breast conditions later in the workshop.)

Explain that there are many reasons why mothers stop breastfeeding or start to give other foods and liquids before a child completes 6 months, even if they decided during pregnancy to breastfeed exclusively. When helping mothers with difficulties you will need to use all the skills you have learnt so far. IYCF counsellors and community health workers have important roles to support mothers through these difficulties, as mothers may not visit a health facility to seek help.

Explain that we are going to look at three common difficulties women face:

1. 'Not enough milk.'
2. A crying baby.
3. Breast refusal.

Trainer's note: If another common difficulty (that is not a breast condition) was mentioned, another group could address it.

Divide participants into three groups and assign one topic to each group. Ask each group to discuss the symptoms, causes, counselling approaches, and ways to address and prevent the difficulty assigned.

After 15 minutes, ask for a representative from each group to present on their topic. After each group presents, ask whether other participants have anything to add. Answer questions, correct misinformation, and add information that was not discussed.

Facilitate discussion in plenary with the following questions:

- *What other breastfeeding difficulties do women in your community experience?*
- *What breastfeeding resources are available in the community?*
- *Where and to whom can referrals be made to help women with breastfeeding?*

Trainer's notes

Insufficient milk

- The problem of 'not enough milk' may arise before breastfeeding has been established, in the first few days after delivery. Then the mother needs help to establish breastfeeding.
- The problem may arise after breastfeeding has been established, after the baby is about 1 month of age. Then the mother needs help to maintain breastmilk production. She should be counselled to breastfeed more often.
- Some mothers worry that they do not have milk at a certain time of day, usually in the evening.
- The causes of the problem and the needs of mothers in these different situations are sometimes different. It is important to be aware of this. However, the same principles of management apply to all situations.

Stool frequency

The stool frequency of infants is very variable. A baby may not pass a stool for several days, and this is quite normal. However, when the baby does pass a stool, it is usually large and semi-liquid. Small dry stools may be a sign that a baby is not getting enough milk. It is also normal for a baby to pass eight or more semi-liquid stools in a day. If the baby has diarrhoea, the stools are watery.

Unreliable signs of 'not enough milk'

Participants may have suggested some of the following signs that make a mother think that she does not have enough milk. They are all unreliable and do not indicate that her baby is not getting enough:

- Baby sucks fingers.
- Baby sleeps longer after bottle feed.
- Baby's abdomen not rounded after feeds.
- Breasts not full immediately after delivery.
- Breasts softer than before.
- Breastmilk not dripping out
- Not feeling her oxytocin reflex.
- Family members ask if she has enough milk.
- Health worker said that she does not have enough milk.
- She was told that she is too young or too old to breastfeed.
- She was told that the baby is too small or too big to breastfeed.
- Poor previous experience of breastfeeding.
- Breastmilk looks thin.

Guidelines, not rules

Using weight gain and urine output as reliable signs as to whether or not a baby is getting enough breastmilk are guidelines, not rules. They can help you to diagnose and correct a clinical breastfeeding problem. However, do not apply them rigidly to all mothers—especially if there is no problem. Experience will guide you.

Weight changes in newborn babies

A newborn baby may lose a little weight in the first few days of life. He should regain his birth weight by the age of 2 weeks. If babies demand feeding from the first day, they start gaining weight more quickly than babies who delay. A baby who weighs less than his birth weight at 2 weeks of age is not gaining enough weight.

These notes may help you explain why a baby is not getting enough milk.

Breastfeeding factors

Delayed start: If a baby does not start to breastfeed on the first day, his mother's breastmilk may take longer to come in, and he may take longer to start gaining weight.

Infrequent feeds: Breastfeeding less than eight times a day in the first 4 weeks, or less than five to six times a day at an older age, is a common reason why a baby does not get enough milk. Sometimes a mother does not respond to her baby when he cries, or she may miss feeds, because she is too busy or at work. Some babies are content and do not show that they are hungry often enough. In this case, a mother should not wait for her baby to demand a feed, but should wake him to breastfeed every 3 to 4 hours.

No night feeds: If a mother stops night breastfeeds before her baby is ready, her milk supply may decrease.

Short feeds: Breastfeeds may be too short or hurried, so that the baby does not get enough fat-rich hindmilk. Sometimes a mother takes her baby off her breast after only a minute or two. This may be because the baby pauses, and his mother decides that he has finished. Or she may be in a hurry, or she may believe that her baby should stop in order to suckle from the other breast. Sometimes a baby stops suckling too quickly; for example if he is too hot, because he is wrapped in too many blankets.

Poor attachment: If a baby suckles ineffectively, he may not get enough milk.

Bottles and pacifiers: A baby who feeds from a bottle or who sucks on a pacifier may suckle less at the breast, so the breastmilk supply decreases.

Complementary foods: A baby who has complementary foods (artificial milks, solids, or drinks including plain water), before 6 months suckles less at the breast, so the breastmilk supply decreases.

Psychological factors of the mother:

Lack of confidence: Mothers who are very young, or who lack support from family and friends, often lack confidence. Mothers may lose confidence because their baby's behaviour worries them. Lack of confidence may lead a mother to give unnecessary supplements.

Worry or stress: If a mother is worried or stressed or in pain, her oxytocin reflex may temporarily not work well.

Dislike of breastfeeding, rejection of the baby, and tiredness: In these situations, a mother may have difficulty in responding to her baby. She may not hold him close enough to attach well; she may breastfeed infrequently, or for a short time. She may give her baby a pacifier when he cries instead of breastfeeding him.

Physical condition of the mother:

Contraceptive pill: Contraceptive pills, which contain estrogens, may reduce the secretion of breastmilk. However, progesterone-only pills and Depo-Provera should not reduce the breastmilk supply.

Diuretics: Diuretics may reduce the breastmilk supply. Diuretics increase the amount of urine that is excreted. They include caffeine (coffee, tea) and alcohol.

Pregnancy: If a mother becomes pregnant again, she may notice a decrease in her breastmilk supply because of hormonal changes associated with pregnancy.

Severe malnutrition: Severely malnourished women may produce less milk. However, a woman who is mildly or moderately undernourished continues to produce milk at the expense of her own tissues, provided her baby suckles often enough.

Alcohol and smoking: Drinking alcohol and smoking cigarettes can reduce the amount of breastmilk that is produced by a mother. Drinking alcohol decreases prolactin yield, blocks release of oxytocin, and can result in a reduction in milk. Drinking large amounts of alcohol can also affect the infant and is associated with deep sleep, drowsiness, decrease in linear growth, and abnormal weight gain. Studies have shown that smoking can reduce the prolactin levels in breastfeeding mothers and interfere with the 'let-down' (or oxytocin) reflex. If a mother smokes she should not do so when feeding the baby. Smoking also significantly increases the infant's risk of respiratory illness.¹

Other very rare conditions:

Retained piece of placenta: This is RARE. A small piece of placenta remains in the uterus, and makes hormones, which prevent milk production. The woman bleeds more than usual after delivery, her uterus does not decrease in size, and her milk does not 'come in.'

Poor breast development: This is VERY RARE. Occasionally a woman's breasts do not develop and increase in size during pregnancy, and she does not produce much milk. If the mother noticed an increase in the size of her breasts during pregnancy, then poor breast development is not her problem. It is not necessary to ask about this routinely. Ask only if there is a problem.

Baby's condition

Illness: A baby who is ill and unable to suckle strongly does not get enough breastmilk. If this continues, his mother's milk supply will decrease.

Abnormality: A baby who has a congenital problem, such as a heart abnormality, may fail to gain weight. This is partly because he takes less breastmilk, and partly because of other effects of the condition. Babies with a deformity such as a cleft palate, or with a neurological problem, or mental handicap, often have difficulty in suckling effectively, especially in the first few weeks. Occasionally you may not be able to find the cause of a poor milk supply, or the milk supply does not improve (the baby does not gain weight) even though you have done everything you can to help the mother. Then you may need to look for one of the less common causes, and help or refer the mother accordingly.

Occasionally you may need to help a mother to find a suitable complement for her baby. Encourage her to:

- Continue breastfeeding as much as possible.
- Give only the amount of complement that her baby needs for adequate growth.
- Give the complement by cup.
- Give the complement only once or twice a day, so that her baby suckles often at the breast.

Remember that the need for complements before 6 months of age should be RARE. A woman should be tested for HIV before suggesting a complement. If she is positive, giving

¹ La Leche League International. The Womanly Art of Breastfeeding. Schaumburg, Illinois: Penguin; 1991. Riordan J, Auerbach K (eds). Breastfeeding and Human Lactation. Sudbury, MA: Jones and Bartlett Publishers; 1999.

breastmilk and a complement should be strongly discouraged as this can significantly increase the risk of transmission to the baby.

Crying

A baby who is 'crying too much' may really be crying more than other babies, or his family may be less tolerant of the crying, or less skilled at comforting the baby. Families' responses to crying are different in different societies. So also are the ways in which parents handle children. For example, in societies where babies are carried around more, they cry less. If babies sleep with their mothers they are less likely to cry at night. Yet babies themselves vary a lot in how much they cry. So it is impossible to say that some patterns are 'normal' and some are not.

Allergies: Babies can become allergic to the protein in some foods in their mother's diet. Cow's milk, soy, egg, and peanuts can all cause this problem. Babies may become allergic to cow's milk protein after only one or two prelacteal feeds of formula.

Drugs that a mother takes: Caffeine in coffee, tea, and colas can pass into breastmilk and upset a baby. If a mother smokes cigarettes or takes other drugs, her baby is more likely to cry than other babies. If someone else in the family smokes, that also can affect the baby.

Breast refusal

These notes will help you to explain the reasons why babies may refuse the breast.

Is the baby ill, in pain, or sedated?

- Illness: The baby may attach to the breast, but suckles less than before.
- Pain: Pressure on a bruise from forceps or vacuum extraction. The baby cries and fights as his mother tries to breastfeed him.
- Blocked nose: Sore mouth, thrush (Candida infection), teething of an older baby. The baby suckles a few times, and then stops and cries.
- Sedation: A baby may be sleepy because of drugs that his mother was given during labour or drugs that she is taking for psychiatric treatment.

Is there a difficulty with the breastfeeding technique?

Sometimes breastfeeding has become unpleasant or frustrating for a baby. Possible causes:

- Feeding from a bottle, or sucking on a pacifier (dummy).
- Not getting much milk, because of poor attachment or engorgement.
- Pressure on the back of the baby's head, by his mother or a helper positioning him roughly, with poor technique. The pressure makes him want to 'fight.'
- His mother holding or shaking the breast, which interferes with attachment.
- Restriction of breastfeeds; for example, breastfeeding only at certain times.
- Early difficulty co-ordinating suckling. (Some babies take longer than others to learn to suckle effectively).

Refusal of one breast only:

Sometimes a baby refuses one breast, but not the other. This is because the problem affects one side more than the other.

Has a change upset the baby?

Babies have strong feelings, and if they are upset they may refuse to breastfeed. They may not cry, but simply refuse to suckle. This is commonest when a baby is aged 3 to 12 months. He suddenly refuses several breastfeeds. This behaviour is sometimes called a 'nursing strike.' Possible causes include:

- Separation from his mother; for example when she starts a job.
- A new caregiver or too many caregivers.

- A change in the family routine—for example, moving house, visiting relatives.
- Illness of his mother, or a breast infection.
- His mother menstruating.
- A change in his mother's smell; for example, different soap or different food.

It may look like refusal but is not refusal

Sometimes a baby behaves in a way which makes his mother think that he is refusing to breastfeed. However, he is not really refusing.

- When a newborn baby 'roots' for the breast, he moves his head from side to side as if he is saying 'no.' However, this is normal behaviour.
- Between 4 and 8 months of age, babies are easily distracted; for example, when they hear a noise, they may suddenly stop suckling. It is a sign that they are alert.
- After the age of 1 year, a baby may wean himself. This is usually gradual.

Management of breast refusal:

If a baby is refusing to breastfeed:

1. Treat or remove the cause if possible.
2. Help the mother and baby to enjoy breastfeeding again.

Step 1. Treat or remove the cause if possible:

- *For illness:* Treat infections with appropriate antimicrobials and other therapy. Refer if necessary. If a baby is unable to suckle, he may need special care in hospital. Help his mother to express her breastmilk to feed to him by cup or by tube, until he is able to breastfeed again.
- *For pain:* For a bruise: help the mother to find a way to hold the baby without pressing on a painful place.
- *For thrush:* Treat with nystatin.
- *For teething:* Encourage her to be patient and to keep offering him her breast.
- *For a blocked nose:* Explain how she can clear it. Suggest short feeds, more often than usual for a few days.
- *For sedation:* If the mother is on regular medication, try to find an alternative.
- *Breastfeeding technique:* Discuss the reason for the difficulty with the mother. When her baby is willing to breastfeed again, you can help her more with her technique.
- *Changes which upset a baby:* Discuss the need to reduce separation and changes if possible. Suggest that she stops using the new soap, perfume, or food.
- *Apparent refusal:*
 - *If it is rooting:* Explain that this is normal. She can hold her baby at her breast to explore her nipple. Help her to hold him closer, so that it is easier for him to attach.
 - *If it is distraction:* Suggest that she try to feed him somewhere quieter for a while. The problem usually passes.
 - *If it is self-weaning:* suggest that she:
 - Makes sure that the child eats enough family food.
 - Gives him plenty of extra attention in other ways.
 - Continues to sleep with him because night feeds may continue.

Step 2. Help the mother and baby to enjoy breastfeeding again:

This is difficult and can be hard work. You cannot force a baby to breastfeed. The mother needs help to feel happy with her baby and to enjoy breastfeeding. They have to learn to enjoy close contact again. She needs you to build her confidence, and to give her support. Help the mother to do these things:

- Keep her baby close to her all the time.
 - She should care for her baby herself as much of the time as possible.

- Ask grandmothers and other helpers to help in other ways, such as doing the housework, and caring for older children.
- She should hold her baby often, and give plenty of skin-to-skin contact at times other than feeding times.
- She should sleep with him.
- If the mother is employed, she should take leave from her employment—sick leave if necessary.
- It may help if you discuss the situation with the baby's father, grandparents, and other helpful people.
- Offer her breast whenever her baby is willing to suckle.
 - She should not hurry to breastfeed again, but offer the breast if her baby does show an interest.
 - He may be more willing to suckle when he is sleepy or after a cup feed, than when he is very hungry. She can offer her breast in different positions.
 - If she feels her ejection reflex working, she can offer her breast then.
- Help her baby to breastfeed in these ways:
 - Express a little milk into her baby's mouth.
 - Position him well, so that it is easy for him to attach to the breast.
 - She should avoid pressing the back of his head, or shaking her breast.
- Feed her baby by cup until he is breastfeeding again.
 - She can express her breastmilk and feed it to her baby from a cup (or cup and spoon). If necessary, use artificial feeds, and feed them by cup.
 - She should avoid using bottles, teats, and pacifiers (dummies) of any sort.

Session 12: Expressing breastmilk

Learning objectives

After completing this session participants will be able to:

- List the situations when expressing breastmilk is useful.
- Explain how to stimulate the oxytocin reflex and demonstrate by rubbing a mother's back.
- Demonstrate how to select and prepare a container for expressed breastmilk.
- Describe how to store breastmilk.
- Explain to a mother the steps of expressing breastmilk by hand.

Preparation

- Make sure that **Slides 12/1 through 12/2** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Obtain some examples of suitable containers to collect expressed breastmilk, which would be available to ordinary mothers (for example, cups and jars).
- Samples of any breast pumps that are available in the area, from hospitals, or from shops. (If none are available or used, do not give this demonstration.)
- Ask a participant to help you to demonstrate back massage to stimulate the oxytocin reflex. Explain what you want her to do.

Suggested time: 45 minutes

Session guide

Ask: Do you know women who express their breastmilk? What are some reasons why women would express their breastmilk?

Write participants' ideas on a board. Try to develop a list with most of the ideas below. After a few minutes, if participants cannot think of any more, complete the list for them.

Expressing milk is useful to:

- Leave breastmilk for a baby when his mother goes out or goes to work.
- Feed a low-birthweight baby who cannot breastfeed.
- Feed a sick baby, who cannot suckle enough.
- Keep up the supply of breastmilk when a mother or a baby is ill.
- Prevent leaking when a mother is away from her baby.
- Help a baby to attach to a full breast.
- Help with breast health conditions, e.g., engorgement (see Session 15).
- Facilitate the transition to another method of feeding or to heat-treat breastmilk (see sessions on HIV and infant feeding).

Explain the following:

- There are many situations in which expressing breastmilk is useful and important to enable a mother to initiate or to continue breastfeeding.
- All mothers should learn how to express their milk, so that they know what to do if the need arises. Certainly all those who care for breastfeeding mothers should be able to teach mothers how to express their milk.
- Breastmilk can be stored for about 8 hours at room temperature or up to 24 hours in a refrigerator. Store expressed breastmilk in the coolest part of the home and away from any heat source.

Ask: Why is it helpful to stimulate a mother's oxytocin reflex before she expresses milk?

Wait for a few replies and then encourage participants to remember what they learnt about how breastfeeding works. Give them a minute to think and make a few suggestions, then continue.

- It is important that the oxytocin reflex works to make the milk flow from her breasts.
- The oxytocin reflex may not work as well when a mother expresses as it does when a baby suckles. A mother needs to know how to help her oxytocin reflex, or she may find it difficult to express her milk.

Ask: What ways can you think of to stimulate the oxytocin reflex?

Wait for a few replies. Participants should mention all of the following. Present them if they do not.

Help the mother psychologically:

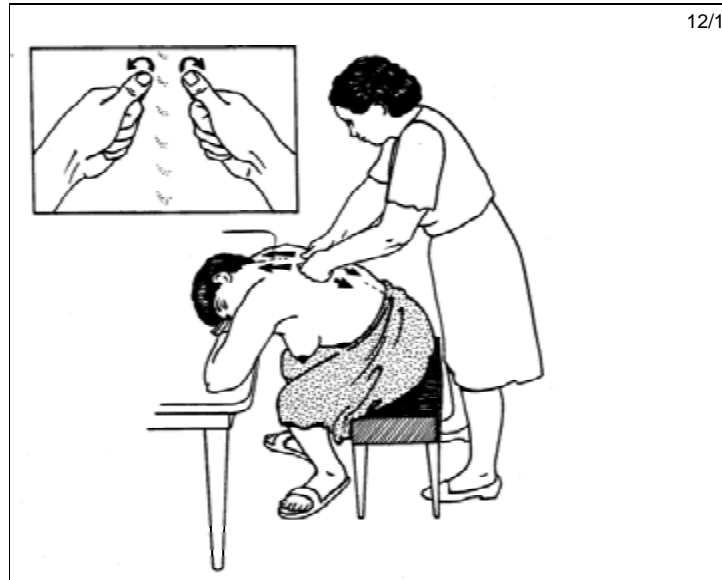
- Build her confidence.
- Try to reduce any sources of pain or anxiety.
- Help her to have good thoughts and feelings about the baby.

Help the mother practically. Help or advise her to:

- Sit quietly and privately or with a supportive friend. Some mothers can't express easily in a group of other mothers who are also expressing for their babies.
- Hold her baby with skin-to-skin contact if possible. She can hold her baby on her lap while she expresses. If this is not possible, she can look at the baby. If this is not possible, sometimes even looking at a photograph of her baby helps.
- Warm her breasts. For example, she can apply a warm compress, or warm water, or have a warm shower. Warn her that she should test the temperature to avoid burning herself.
- Stimulate her nipples. She can gently pull or roll her nipples with her fingers.
- Massage or stroke her breasts lightly. Some women find that it helps if they stroke the breast gently with finger tips. Some women find that it helps to gently roll their closed fist over the breast towards the nipple.
- Ask a helper to rub her back.

Demonstration 1: How to rub a mother's back to stimulate the oxytocin reflex
Show Slide 12/1, which illustrates the technique. Ask a participant to help you.

Slide 12/1. A helper rubbing a mother's back



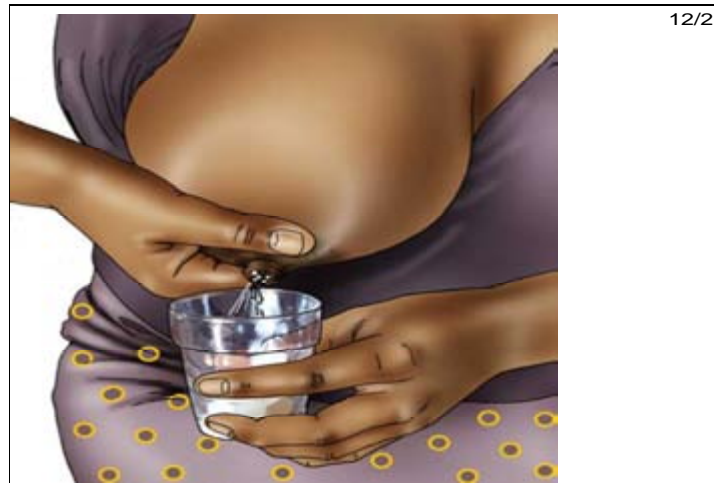
- She should sit at the table resting her head on her arms, as relaxed as possible.
- She remains clothed, but you should explain that with a mother it is important for her breasts and her back to be naked.
- Make sure that the chair is far enough away from the table for her breasts to hang free.
- Explain what you will do, and ask her permission to do it.
- Rub both sides of her spine with your thumbs, making small circular movements, from her neck to her shoulder blades.

Ask her how she feels, and if it makes her feel relaxed. Then, ask participants to work in pairs and briefly practise the technique of rubbing a mother's back.

Make these points:

- Hand expression is the most useful way to express milk. It needs no appliance, so a woman can do it anywhere, at any time.
- A woman should express her own breastmilk. The breasts are easily hurt if another person tries.
- If you are showing a woman how to express, show her on your own body as much as possible, while she copies you. If you need to touch her to show her exactly where to press her breast, be very gentle.

Show **Slide 12/2. How to express breastmilk.**



Explain the following:

- Place finger and thumb on each side of the areola and press inwards towards the chest wall.
- Press behind the nipple and areola between your finger and thumb.
- Press from the sides to empty all segments.

Demonstration 2: How to express breastmilk

Explain how to prepare a container for the expressed breastmilk.

- Show participants some of the containers to hold the expressed breastmilk that you have collected. Go through the following points:
 - Choose a cup, glass, jug, or jar with a wide mouth.
 - Wash the cup in soap and water. (She can do this the day before).
 - Pour boiling water into the cup, and leave it for a few minutes. Boiling water will kill most of the germs.
 - When ready to express milk, pour the water out of the cup.

Give the demonstration of how to express breastmilk by hand.

- Demonstrate as much as possible on your own body. If you prefer not to use your own body, use a model breast, or practise on the soft part of your arm or cheek. You can draw a nipple and areola on your arm.

Explain that health workers should teach a mother to do this herself. Do not express her milk for her. Touch her only to show her what to do, and be gentle.

Review the following steps for a mother expressing breastmilk:

- Wash her hands thoroughly.
- Sit or stand comfortably, and hold the container near her breast.
- Put her thumb on her breast ABOVE the nipple and areola, and her first finger on the breast BELOW the nipple and areola, opposite the thumb. She supports the breast with her other fingers (see Slide 13/2).
- Press her thumb and first finger slightly inwards towards the chest wall. She should avoid pressing too far or she may block the milk ducts.
- Press her breast behind the nipple and areola between her finger and thumb. She should press on the larger ducts beneath the areola. Sometimes in a lactating breast it is possible to feel the ducts. They are like pods, or peanuts. If she can feel them, she can press on them.

- Press and release, press and release. This should not hurt—if it hurts, the technique is wrong.
- At first no milk may come, but after pressing a few times, milk starts to drip out. It may flow in streams if the oxytocin reflex is active.
- Press the areola in the same way from the SIDES, to make sure that milk is expressed from all segments of the breast.
- Avoid rubbing or sliding her fingers along the skin. The movement of the fingers should be more like rolling.
- Avoid squeezing the nipple itself. Pressing or pulling the nipple cannot express the milk. It is the same as the baby sucking only the nipple.
- Express one breast for at least 3–5 minutes until the flow slows; then express the other side; and then repeat both sides. She can use either hand for either breast, and change when they tire.
- Explain that to express breastmilk adequately takes 20–30 minutes, especially in the first few days when only a little milk may be produced. It is important not to try to express in a shorter time.

Ask: How often should a mother express her breastmilk?

Wait for a few replies and then continue.

Explain that it depends on the reason for expressing the milk, but usually as often as the baby would breastfeed.

- She should express as much as she can as often as her baby would breastfeed. This should be at least every 3 hours, including during the night. If she expresses only a few times, or if there are long intervals between expressions, she may not be able to produce enough milk.
- To establish lactation, to feed a low-birthweight or sick newborn: She should start to express milk on the first day, as soon as possible after delivery. She may only express a few drops of colostrum at first, but it helps breastmilk production to begin, in the same way that a baby suckling soon after delivery helps breastmilk production to begin.
- To keep up her milk supply to feed a sick baby: She should express at least every 3 hours.
- To build up her milk supply, if it seems to be decreasing after a few weeks: Express very often for a few days (every 2 hours or even every hour), and at least every 3 hours during the night.
- To leave milk for a baby while she is out at work: Express as much as possible before she goes to work, to leave for her baby. It is also very important to express while at work to help keep up her supply.
- To relieve symptoms, such as engorgement, or leaking at work: Express only as much as is necessary.

Ask participants to practise the technique. Ask them to practise the rolling action of the fingers on a model breast or on their arms. Ask them to make sure that they avoid pinching. Ask them to practise on their own bodies privately later.

Ask participants if they have any questions, and try to answer them.

Remind participants that:

- Hand expression is the most useful way to express breastmilk. It is less likely to carry infection than a pump, and is available to every woman at any time. It is important for women to learn to express their milk by hand, and not to think that a pump is necessary.
- To express milk effectively, it is helpful to stimulate the oxytocin reflex and to use a good technique.

Session 13: Cup feeding

Learning objectives

After completing this session participants will be able to:

- List the advantages of cup feeding.
- Estimate the amount of milk to give to a baby according to weight.
- Demonstrate how to cup-feed safely.

Preparation

- A small cup, which holds approximately 60 ml of water.
- A cloth.
- A doll.
- Flip chart.
- Markers.
- For the demonstration, see if you can find a mother and baby who would be willing to assist in the demonstration. If this is not possible, participants can also practice this skill at their next site visit.

Suggested time: 30 minutes

Session guide

Ask: Why are cups safer and better than bottles for feeding a baby?

Wait for a few replies and then continue. Make the points which have not been mentioned.

- Cups are easy to clean with soap and water, if boiling is not possible.
- Cups are less likely than bottles to be carried around for a long time. Bottles that are carried around give bacteria time to breed.
- Cup-feeding is associated with less risk of diarrhoea, ear infections, and tooth decay.
- A cup cannot be left beside a baby, for the baby to feed himself. The person who feeds a baby by cup has to hold the baby and look at him, and give him some of the contact that he needs.
- A cup does not interfere with suckling at the breast.
- A cup enables a baby to control his own intake.

Demonstration: Cup-feeding

Follow these steps for the demonstration:

- Put some water into one of the small cups. Use approximately 60 ml of water, to demonstrate the typical volume of milk used for one feed for a young baby.
- Hold a doll on your lap, closely, with it sitting upright or semi-upright. Explain that a baby should not lie down too much.
- Hold the small cup or glass to the doll's lips. Tip it so that the water just reaches the lips. Point out that the edges of the cup touch the outer part of the baby's upper lip, and the cup rests lightly on his lower lip. This is normal when a person drinks.
- *Explain that at this point, a real baby becomes quite alert, and opens his mouth and eyes. He makes movements with his mouth and face, and he starts to take the milk into his mouth with his tongue. Babies older than about 36 weeks gestation will try to suck.*
- Some milk may spill from the baby's mouth. You may want to put a cloth on the baby's front to protect his clothes. Spilling is commoner with babies of more than about 36 weeks gestation, and less common with smaller babies.
- You should not pour the milk into a baby's mouth—just hold the cup to his lips.

- *Explain that when a baby has had enough, he closes his mouth and will not take any more this feed. If he has not taken the calculated amount, he may take more next time, or he may need feeds more often. Measure his intake over 24 hours, not just at each feed.*
- Demonstrate with a doll what happens when you try to feed a baby with a spoon. You need to hold the cup and the spoon, or you need to put the cup down and take milk from it. The procedure is more awkward.

The following list is a reference for the participants.

HOW TO FEED A BABY BY CUP

- Wash your hands.
- Hold the baby sitting upright or semi-upright on your lap.
- Place the estimated amount of milk for one feed into the cup.
- Hold the small cup of milk to the baby's lips.
- Tip the cup so that the milk just reaches the baby's lips.
- The cup rests lightly on the baby's lower lip, and the edges of the cup touch the outer part of the baby's upper lip.
- The baby becomes alert, and opens his mouth and eyes.
- A low-birthweight baby starts to take the milk into his mouth with his tongue.
- A full term or older baby sucks the milk, spilling some of it.
- **DO NOT POUR** the milk into the baby's mouth. Just hold the cup to his lips and let him take it himself.
- When the baby has had enough, he closes his mouth and will not take any more. If he has not taken the calculated amount, he may take more next time, or you may need to feed him more often.
- Measure his intake over 24 hours—not just at each feed.

Session 14: Breast conditions

Learning objectives

After completing this session participants will be able to recognise and manage these common breast conditions:

- Flat and inverted nipples.
- Engorgement.
- Blocked duct and mastitis.
- Sore nipples and nipple fissure.

Preparation:

- Make sure that **Slides 14/1 through 14/11** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Syringe, 20 ml, with the adaptor end of the barrel removed.
- Breast model.

Suggested time: 50 minutes

Session guide

Show **Slide 14/1**.



Explain that here are some breasts of different shapes and sizes. These breasts are all normal, and they can all produce plenty of milk for a baby—or two or even three babies. Many mothers worry about the size of their breasts. Women with small breasts often worry that they cannot produce enough milk.

Ask: Think back to Session 3 when we looked at the anatomy of the breast. What is it that makes some breasts large and others small?

Wait for a few replies and then explain that differences in the sizes of breasts are mostly due to the amount of fat, and not the amount of tissue that produces milk. It is important to

reassure women that they can produce enough milk, whatever the size of their breasts. The nipples and areolas are different shapes and sizes too.

Ask: Does the size or shape of the nipple affect breastfeeding?

Wait for a few replies and then explain that sometimes the shape makes it difficult for a baby to get well attached to the breast. The mother may need extra help at first to make sure that her baby can suckle effectively. However, babies can breastfeed quite well from breasts of any size, with almost any shape of nipple.

Show **Slide 14/2**.



Ask: What do you think of the nipple in picture 1? (It looks flat.)

Explain that a doctor told this mother that her baby would not be able to suckle from it. She lost confidence that she could breastfeed successfully. However, remember from Session 3 that a baby does not suck from the nipple. He takes the nipple and the breast tissue underlying the areola into his mouth to form a 'teat.'

In Picture 2, the mother is testing her breast to see how easy it is to stretch out the tissues underlying the nipple. This nipple is quite 'protractile,' and it should be easy for her baby to stretch it to form a 'teat' in his mouth. He should be able to suckle from this breast with no difficulty. Nipple protractility (if the nipple can be stretched or lengthened) is more important than the shape of a nipple. Protractility improves during pregnancy, and in the first week or so after a baby is born. So even if a woman's nipples look flat in early pregnancy, her baby may be able to suckle from the breast without difficulty.

Show **Slide 14/3**.



Ask: What do you think of this nipple? Wait for a few replies and then continue.

- The nipple is **inverted**.
- If this woman tests her breast for protractility, her nipple will go in instead of coming out.

Ask: What else do you notice about the breast? Wait for a few replies and then continue.

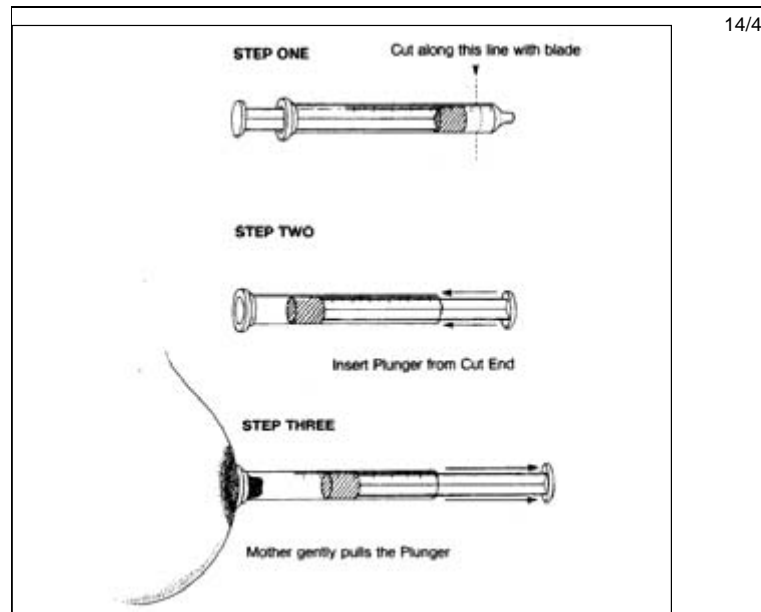
Explain the following: You can see a scar on her breast. This mother had a **breast abscess**. This was probably because her baby did not attach well to the breast and remove the milk effectively. With skilled help, she probably could have breastfed successfully. Fortunately, nipples as difficult as this are rare.

Ask: How can you help a woman with inverted nipples?

Be sure participants mention the following:

- Antenatal treatment is probably not helpful. Most nipples improve around the time of delivery without any treatment. Help is most important soon after delivery when the baby starts breastfeeding.
- It is important to build the mother's confidence. Explain that with patience and persistence she can succeed. Explain that her breasts will become softer in the week or two after delivery, and that the baby suckles from the breast and not from the nipple. Encourage her to give plenty of skin-to-skin contact (we will be discussing this further later in this training).
- If a baby does not attach well by himself, help his mother to position him so that he can attach better. Give her this help early, in the first day, before her breastmilk 'comes in' and her breasts are full. Sometimes putting a baby to the breast in a different position, for example, the underarm position, makes it easier for him to attach.
- If a baby cannot suckle effectively in the first week or two, help his mother to try to express her milk and feed it to her baby by cup. Expressing milk also helps to keep the breasts soft, so that it is easier for the baby to attach. Expressing milk also helps to keep up the supply of milk. She should not use a bottle because that makes it more difficult for her baby to take her breast.

Show **Slide 14/4**.



Explain that the syringe method for treating inverted nipples can be used after a woman gives birth to help a baby to attach to the breast. It is not certain whether it is helpful during antenatal care. Demonstrate using a syringe and a breast model.

- Show participants the 20 ml syringe that you have prepared, and explain how you cut off the adaptor end of the barrel.
- Put the plunger into the cut end of the barrel (that is, the reverse of its usual position).
- Use a model breast, and put the smooth end of the barrel over the nipple. Pull out the plunger to create suction on the nipple.
- Explain that with a real breast, there is an airtight seal, and the nipple is drawn out into the syringe.
- Explain that the mother must use the syringe herself.
- Explain that you would teach her to:
 - Put the smooth end of the syringe over her nipple, as you demonstrated.
 - Gently pull the plunger to maintain steady but gentle pressure.
 - Do this for 30 seconds to 1 minute, several times a day.
 - Push the plunger back to decrease the suction, if she feels pain. This prevents damaging the skin of the nipple and areola.
 - Push the plunger back, to reduce suction, when she removes the syringe from her breast.
 - Use the syringe to make her nipple stand out just before she puts her baby to the breast.

Show **Slide 14/5**.



Ask: What conditions are shown in Picture 1 and Picture 2?
Wait for a few replies.

The woman in Picture 1 has full breasts. This is a few days after delivery, and her milk has 'come in.' Her breasts feel hot, heavy, and hard. However, her milk is flowing well. You can see that milk is dripping from her breasts. This is normal fullness. Sometimes full breasts feel quite lumpy. The only treatment that she needs is for her baby to breastfeed frequently, to remove the milk. The heaviness, hardness, or lumpiness decreases after a feed, and the breasts feel softer and more comfortable. In a few days, her breasts will adjust to the baby's needs, and they will feel less full.

The woman in Picture 2 has engorged breasts. Engorgement means that the breasts are overfull, partly with milk, and partly with increased tissue fluid and blood, which interferes with the flow of milk. The breast in this picture looks shiny, because it is oedematous. Her breasts feel painful, and her milk does not flow well.

Ask: What do you notice about the nipple?
Wait for a few replies.

Explain that it is flat, because the skin is stretched tight. When a nipple is stretched tight and flat like this, it is difficult for a baby to attach to it, and to remove the milk. Sometimes when breasts are engorged, the skin looks red, and the woman has a fever. This may make you think that she has mastitis. However, the fever usually settles in 24 hours. It is important to be clear about the difference between full and engorged breasts. Engorgement is not so easy to treat.

Show Slide 14/6 and ask one participant to read out the points in the column entitled 'Full breasts' and another participant to read out the points in the column entitled 'Engorged breasts.'

Slide 14/6.

14/6

DIFFERENCES BETWEEN FULL AND ENGORGED BREASTS	
Full Breasts	Engorged Breasts
Hot	Painful
Heavy	Oedematous
Hard	Tight, especially nipple
Milk flowing	Shiny
No fever	May look red
	Milk NOT flowing
	May be fever for 24 hours

Ask: What are reasons that breasts may become engorged?

Make the following points if they have not been mentioned by the participants:

- Delay in starting breastfeeding after birth.
- Poor attachment to the breast so breastmilk is not removed effectively.
- Infrequent removal of milk—for example, if breastfeeding is not on demand.
- Restricting the length of breast feeds.

Engorgement can be prevented by letting babies feed as soon as possible after delivery; making sure that the baby is well positioned and attached to the breast; and encouraging unrestricted breastfeeding so that milk does not then build up in the breast.

Ask: Has anyone ever helped a woman with engorged breasts? What did you do?

Allow a couple of participants to share their experiences.

Present the information on **Slide 14/7** and ask participants if they have any questions.

14/7

TREATMENT OF BREAST ENGORGEMENT

- Do not 'rest' the breast. To treat engorgement it is essential to remove milk. If milk is not removed, mastitis may develop, an abscess may form and breast milk production decreases.
- If baby is able to suckle he should feed frequently. This is the best way to remove milk. Help the mother to position her baby, so that he attaches well. Then he suckles effectively, and does not damage the nipple.
- If baby is not able to suckle help his mother to express her milk. Sometimes it is only necessary to express a little milk to make the breast soft enough for the baby to suckle.
- Before feeding or expressing, stimulate the mother's oxytocin reflex. Some things that you can do to help her, or she can do are:
 - put a warm compress on her breasts
 - massage her back and neck
 - massage her breast lightly
 - stimulate her breast and nipple skin
 - help her to relax
 - sometimes a warm shower or bath makes milk flow from the breasts so that they become soft enough for the baby to suckle.
- After a feed, put a cold compress on her breasts. This will help to reduce oedema.
- Build the mother's confidence. Explain that she will soon be able to breastfeed comfortably again.

Make the following points:

- We have just discussed the management of engorgement in a woman who wishes to continue breastfeeding.
- Engorgement may occur in an HIV-positive woman who stops breastfeeding, for example, if replacement feeding becomes acceptable, feasible, affordable, sustainable, and safe (AFASS) when her baby is 6 months or older and she decides to stop breastfeeding.
- When an HIV-positive mother is trying to stop breastfeeding she should only express enough milk to relieve the discomfort and not to increase the milk production.
- Milk may be expressed a few times per day when the breasts are overfull to make the mother comfortable.
- You may have heard of pharmacological treatments to reduce the milk supply. These are not recommended. However, a simple analgesic, for example, ibuprofen, may be used to reduce inflammation and help the discomfort whilst the mother's milk supply is decreasing. If ibuprofen is not available then paracetamol may be used.

Show **Slide 14/8**.



Ask: What do you notice about this breast?

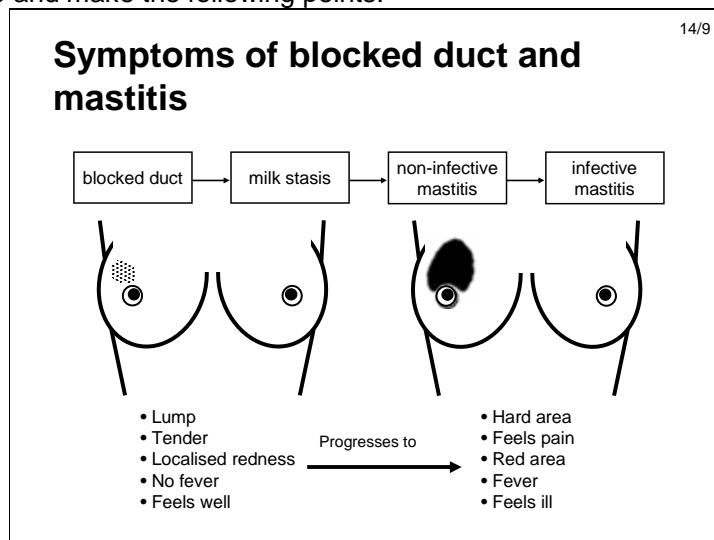
Wait for a few replies. Participants should mention that part of the breast looks red and swollen. There is a fissure on the tip of the nipple.

Ask: What condition is this?

Wait for a few replies and then continue.

- This is **mastitis**.
- The woman has severe pain and a fever and she feels ill. Part of the breast is swollen and hard, with redness of the overlying skin.
- Mastitis is sometimes confused with engorgement.
- However, engorgement affects the whole breast, and often both breasts. Mastitis affects part of the breast, and usually only one breast.
- Mastitis may develop in an engorged breast, or it may follow a condition called blocked duct.

Show **Slide 14/9** and make the following points:



This slide shows how mastitis develops from a blocked duct.

- A blocked duct occurs when the milk is not removed from part of a breast. Sometimes this is because the duct to that part of the breast is blocked by thickened milk.
- The symptoms are a lump that is tender and often redness of the skin over the lump.
- The woman has no fever and feels well.
- When milk stays in part of a breast, because of a blocked duct, or because of engorgement, it is called milk stasis. If the milk is not removed, it can cause inflammation of the breast tissue, which is called non-infective mastitis.
- Sometimes a breast becomes infected with bacteria, and this is called infective mastitis.
- It is not possible to tell from the symptoms alone if mastitis is non-infective or infective.
- If the symptoms are all severe, however, the woman is more likely to need treatment with antibiotics.

Ask: What causes mastitis or a blocked duct?

Encourage participants to discuss, noting their comments on a flip-chart sheet.

Be sure the following are mentioned:

- The main cause of a blocked duct is poor drainage of all or part of a breast.
- Poor drainage of the whole breast may be due to infrequent breastfeeds or ineffective suckling.
 - Infrequent breastfeeds may occur when a mother is very busy, when a baby starts feeding less often, for example, when he starts to sleep through the night, or because of a changed feeding pattern for another reason; for example, the mother returning to work.
 - Ineffective suckling usually occurs when the baby is poorly attached to the breast.
- Poor drainage of part of the breast may be due to ineffective suckling, pressure from tight clothes, especially a bra worn at night, or pressure of the mother's fingers which can block milk flow during a breastfeed.
- Remember that if a baby is poorly attached and positioned and is suckling at the breast, this may cause a nipple fissure which provides a way for bacteria to enter the breast tissue and may lead to mastitis.

Ask: Have you ever treated a woman with mastitis or a blocked duct? What did you do?

Encourage a couple of participants to share their experiences. Present the following information:

- The most important part of treatment is to improve the drainage of milk from the affected part of the breast.
- Look for a cause of poor drainage and correct it. Look for poor attachment, pressure from clothes (particularly a tight bra) and notice what the mother does with her fingers as she breastfeeds. Does she hold the areola and possibly block milk flow?
- Whether or not you find a cause, there are several suggestions to offer to the mother.
 - Breastfeed frequently. The best way is to rest with her baby, so that she can respond to him and feed him whenever he is willing.
 - Gently massage the breast while her baby is suckling. Show her how to massage over the blocked area right down to the nipple. This helps to remove the block from the duct.
 - She may notice that a plug of thick material comes out with her milk. This is safe for the baby to swallow.
 - Apply warm compresses to her breast between feeds.

- Sometimes it is helpful to start the feed on the unaffected breast. This may help if pain seems to be preventing the oxytocin reflex. Change to the affected breast after the reflex starts working. Try feeding the baby in different positions.
- Sometimes a mother is unwilling to feed her baby from the affected breast, especially if it is very painful. In these situations it is necessary to express the milk. If the milk stays in the breast, an abscess is more likely to develop.
- Usually blocked duct or mastitis improves within a day when drainage to that part of the breast improves.
- However, a mother needs additional treatment if there are any of the following:
 - Severe symptoms when you first see her.
 - A fissure through which bacteria may enter.
 - No improvement after 24 hours of improved drainage. (Note: The recommended antibiotics and doses are available in the Trainer's Notes section at the end of this chapter.)

Explain that in a woman who is HIV-infected, mastitis or nipple fissure (especially if bleeding or oozing) may increase the risk of HIV transmission. Therefore, the recommendation to increase the frequency and duration of feeds in mastitis is not appropriate for these women.

Ask: If a woman who is HIV-infected gets mastitis or a fissure, what should she do?

Allow participants to discuss and present the following information:

- If an HIV-infected woman develops mastitis or a fissure she should avoid breastfeeding from the affected side while the condition persists. It is the same if she develops an abscess.
- She must express milk from the affected breast, to ensure adequate removal of milk.
- This is essential to prevent the condition from becoming worse, to help the breast recover, and to maintain milk production. The health worker should help her to ensure that she is able to express milk effectively.
- If only one breast is affected, the infant can feed from the unaffected side, feeding more often and for longer to increase milk production. Most infants get enough milk from one breast. The infant can feed from the affected breast again when it has recovered.
- If both breasts are affected, she will not be able to feed from either side. The mother will need to express her milk from both breasts. Breastfeeding can resume when the breasts have recovered.
- The health worker will need to discuss other feeding options for her to give meanwhile. The mother may decide to heat-treat her expressed milk, or to give commercial formula. The infant should be fed by cup.
- Give antibiotics for 10 to 14 days to avoid relapse. Give pain relief and suggest rest as in the HIV-uninfected woman.
- Sometimes a woman may decide to stop breastfeeding at this time, if she is able to give another form of milk safely. She should continue to express enough milk to allow her breasts to recover and to keep them healthy, until milk production ceases.

Show **Slide 14/10**



Explain that Picture 1 shows a mother's breast, and Picture 2 shows the same mother feeding her baby on the breast.

Ask: What do you notice about her breast?

Wait for a few replies and then explain that there is a fissure, or crack, around the base of the nipple. You may be able to see that the breast is also engorged.

Ask: What do you notice about the baby's position and attachment?

Wait for a few responses and then continue. Encourage participants to think systematically through the four key points of positioning and attachment. Ask participants to turn to their manuals and find the BREASTFEED OBSERVATION JOB AID.

- The baby is poorly positioned.
 - His body is twisted away from his mother so his head and body are not in line.
 - His body is not held close to his mother's.
 - His body is unsupported.
 - He is poorly attached.
 - There is more areola seen above baby's top lip.
 - His mouth is closed, and his lips are pointing forwards.
 - His lower lip is pointing forward.
 - His chin is not touching the breast.

Explain that this poor attachment may have caused both the breast engorgement and the fissure.

- **The most common cause of sore nipples is poor attachment.**
- If a baby is poorly attached, he pulls the nipple in and out as he sucks, and rubs the skin of the breast against his mouth. This is very painful for his mother.
- At first there is no fissure. The nipple may look normal; or it may look squashed with a line across the tip when the baby releases the breast. If the baby continues to suckle in this way, it damages the nipple skin, and causes a fissure.
- If a woman has sore nipples:
 - Suggest to the mother not to wash her breasts more than once a day, and not to use soap or rub hard with a towel. Washing removes natural oils from the skin and makes soreness more likely.

- Suggest to the mother not to use medicated lotions and ointments, because these can irritate the skin, and there is no evidence that they are helpful.
- Suggest that after breastfeeding she rubs a little expressed breast milk over the nipple and areola with her finger. This promotes healing.

Show **Slide 14/11**



Explain that the mother in Slide 14/11 has very sore, itchy nipples.

Ask: What do you see that might explain the soreness?

Wait for a few replies and then present the following:

- There is a shiny red area of skin on the nipple and areola.
- This is a Candida infection, or thrush, which can make the skin sore and itchy. Candida infections often follow the use of antibiotics to treat mastitis, or other infections.
- Some mothers describe burning or stinging which continues after a feed. Sometimes the pain shoots deep into the breast. A mother may say that it feels as though needles are being driven into her breast.
- The skin may look red, shiny, and flaky. The nipple and areola may lose some of their pigmentation. Sometimes the nipple looks normal.
- Suspect Candida if sore nipples persist, even when the baby's attachment is good.
- Check the baby for thrush. He may have white patches inside his cheeks or on his tongue, or he may have a rash on his bottom.
- Treat both mother and baby with nystatin.
- Advise the mother to stop using pacifiers (dummies). Help her to stop using teats and nipple shields.
- In women who are HIV-infected it is particularly important to treat breast thrush and oral thrush in the infant promptly.

Ask participants if they have any questions, and try to answer them.

Trainer's notes

Participants may wish to discuss breast conditions in more detail. Share the following as needed.

Breast shape:

Breast shape and size are partly inherited. Breasts may be long in girls who have had no children and small or flat in women who have breastfed several children. Occasionally a woman's breasts may fail to develop normally, so that they are unable to produce enough milk, but this is very rare.

Management of inverted nipples:

Participants may have heard of different ways to treat inverted nipples, and they may wish to discuss the topic further—especially if they have known of a case that they found difficult to help. These notes may help you to answer questions. However, it is not necessary to give participants this information if they have not heard of these techniques.

Nipple shell

This is a glass or plastic hemisphere, with a hole in the base, to put over a nipple, under the clothes. The nipple is pressed through the hole, to make it stand out more. There is no evidence that these shells help, and they may cause oedema. However, if a mother is worried about inverted nipples, and she has heard of nipple shells and wants to try to use one, let her continue. It may make her feel that she is doing something, and it may help her to feel confident.

Hoffman's exercises

Some women have heard of exercises to stretch nipples. These exercises have not been shown to really help. They are unlikely to make much difference to severely inverted nipples. Nipple exercises can sometimes traumatise the breast, so do not recommend them. However, if a woman has heard about exercises and wishes to do them, let her continue.

Nipple shields

These are teats with a broad plastic or glass base to put over a nipple for a baby to suck through. Mothers sometimes use them if they have conditions such as inverted nipples, or sore nipples. Nipple shields are no longer recommended because they can cause problems and they do not remove the cause of the condition. Nipple shields can reduce the flow of milk; they can cause breast infections, including *Candida*; they can cause 'nipple confusion'; and they may make it more difficult for a baby to learn to suckle directly from the breast. Some mothers find it difficult to stop using them. Nipple shields are not useful except in rare cases for a short time and with careful supervision.

Engorgement:

When breasts are engorged, the milk does not flow well, partly because of the pressure of fluid in the breast, and partly because the oxytocin reflex does not work well.

Non-infective mastitis:

The cause of non-infective mastitis is probably milk under pressure leaking back into the surrounding tissues. The tissues treat the milk as a 'foreign' substance. Also, milk contains substances that can cause inflammation. The result is pain, swelling, and fever, even when there is no bacterial infection. Trauma that damages breast tissue can also cause mastitis. This may also be because milk leaks back into the damaged tissues.

Breast abscess:

An abscess is when a collection of pus forms in part of the breast. The breast develops a painful swelling, which feels full of fluid. An abscess needs surgical incision and drainage. If possible, let the baby continue to feed from the breast. There is no danger to the baby. However, if it is too painful, or if the mother is unwilling, show her how to express her milk,

and let her baby start to feed from it again as soon as the pain is less—usually in 2 to 3 days. Meanwhile, continue to feed from the other breast. Good management of mastitis should prevent the formation of an abscess.

Antibiotic treatment for infective mastitis

The most common bacterium found in breast abscess is *Staphylococcus aureus*. Therefore it is necessary to treat breast infections with a penicillinase-resistant antibiotic such as either flucloxacillin or erythromycin.

Drug	Dose	Instructions
Flucloxacillin	250 mg orally 6 hourly for 7–10 days	Take dose at least 30 minutes before food
Erythromycin	250-500 mg orally 6 hourly for 7–10 days	Take dose 2 hours after food

Alternative antibiotics for treatment of infective mastitis

The following antibiotics can be used if necessary:

- Cloxacillin 250-500 mg 6 hourly for 7-10 days.
- Cephalexin 250-500 mg 6 hourly for 7-10 days.

Treatment of candida of the breast:

- **Nystatin** cream 100,000 IU/g: Apply to nipples four times daily after breastfeeds. Continue to apply for 7 days after lesions have healed.
- **Nystatin** suspension 100,000 IU/ml: Apply 1 ml by dropper to child's mouth four times daily after breastfeeds for 7 days, or as long as the mother is being treated.
- **Stop** using pacifiers, teats, and nipple shields.

Treatment of nipples fissures:

- *Ointments for nipple fissure*: Sometimes a plain cream such as lanolin may help a fissured nipple to heal after the suckling position has been corrected. However, plain creams are often not available, and they are not usually necessary.
- *Clothes*: In warm weather, a cotton bra may be better for fissured nipples than a nylon bra. However, cotton is not essential, and you should not recommend it to a mother who cannot afford it. If necessary, suggest that she leaves her bra off for a day or two.
- *Nipple shields*: These are no longer recommended for the treatment of fissured nipples.

Session 15: Overview of HIV and infant feeding

Learning objectives

After completing this session participants will be able to:

- Explain the risk of mother-to-child transmission (MTCT) of HIV at each stage.
- Describe factors that influence MTCT.
- List approaches that can reduce the risk of MTCT during breastfeeding through safer infant-feeding practices.
- State infant-feeding recommendations for women who are HIV positive, for women who are HIV negative, or women who do not know their status.
- Describe the current situation of HIV and prevention of mother-to-child transmission (PMTCT) in Lesotho.
- Use Counselling Card 1: Risk of mother-to-child-transmission of HIV during a counselling session.

Materials and preparation

- Make sure that **Slides 15/1 through 15/8** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Flip-chart paper.
- Magic markers.
- Tape or other items for affixing papers on walls or chalkboards.
- Make sure that participants have copies of the counselling cards.

Suggested time: 75 minutes

Session guide

Explain the following points:

- Most HIV-infected children become infected through their mothers. MTCT can take place during pregnancy, during labour and delivery, and through breastfeeding.
- The best way to prevent infection of children is to help their fathers and mothers to avoid becoming infected in the first place. Men's responsibility for protecting their families must be emphasised.
- However, many women are already infected, and it is important to try to reduce the risk to their babies. This chapter will focus on reducing the risk during the post-partum period.
- You as a health worker can help an HIV-positive woman decide on the best way to feed her baby in her particular circumstances.

Review the following information with participants:

- HIV, or human immunodeficiency virus, is the virus that causes AIDS.
- AIDS, or acquired immunodeficiency syndrome, is the active pathological condition that follows the earlier, non-symptomatic state of being HIV positive.
- People infected with HIV feel well at first and usually do not know they are infected. They may remain healthy for many years as the body produces antibodies to fight HIV.
- But the antibodies are not very effective. The virus lives inside the immune cells and slowly destroys them.

- When these cells are destroyed, the body becomes less able to fight infections. The person becomes ill and after a time develops AIDS. Eventually he or she dies, unless there are interventions.
- A blood test can be done to see if people have HIV antibodies in their blood. A positive test means that the person is infected with HIV. This is called HIV positive or seropositive.
- Once people have the virus in their body, they can pass the virus to other people.
- HIV is passed from an infected man or woman to another person through:
 - Exchange of HIV-infected body fluids such as semen, vaginal fluid, or blood during unprotected sexual intercourse.
 - HIV-infected blood transfusions or contaminated needles.
- HIV can also pass from an infected woman to her child. This is called MTCT.

Ask: How and when is HIV transmitted from mothers to their children?

Participants should mention:

- During pregnancy across the placenta.
- During labour and delivery through blood and secretions.
- Through breastfeeding.

Ask: How often does mother-to-child transmission of HIV occur? How many mothers and babies are likely to be affected?

Share the following information:

- About 27%¹ of pregnant women in Lesotho are HIV positive. This means that out of 100 women who come in for antenatal care (ANC) services, 27 test positive for HIV.
- Not all babies born to HIV-infected mothers become infected with HIV.

Show **Slide 15/1. Estimated risk and timing of MTCT without interventions**

15/1	
Estimated risk and timing of mother-to-child transmission of HIV without interventions	
Timing of MTCT of HIV	Transmission Rate
• During pregnancy	5-10%
• During labour and delivery	10-15%
• During breastfeeding	5-20%

WHO/UNICEF International Technical Working Group; 2006 Guidelines.²

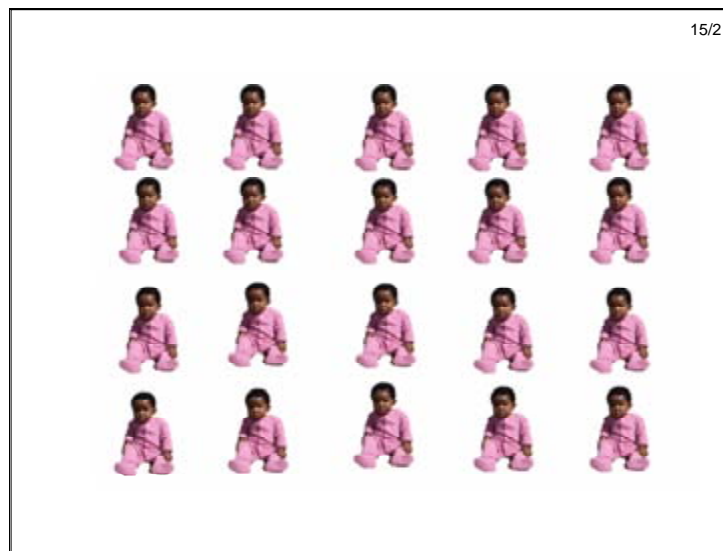
¹ Government of Lesotho Ministry of Health & Social Welfare. PMTCT and Paediatric HIV Scale Up Plan 2007-2011.

² WHO/UNICEF International Technical Working Group; 2006 Guidelines
Infant and Young Child Feeding Curriculum

Explain the following:

- About two-thirds of infants born to HIV-infected mothers will not be infected with HIV, even without interventions such as antiretroviral prophylaxis (ARV) or caesarean section.
- About 15–25% will be infected during pregnancy and birth. About 5–20% of infants born to HIV-infected mothers will get the virus through breastfeeding. The risk continues as long as the mother breastfeeds, and is more or less constant over time.
- Exclusive breastfeeding during the first 6 months of life carries a lower risk of HIV transmission than mixed feeding. Research has shown that the transmission risk at 6 months in exclusively-breastfed babies is lower than in mixed-fed babies.
- The factors that influence the risk of MTCT relate to the virus itself, to the mother herself, to obstetrics, to the foetus, and to the newborn.

Show **Slide 15/2. Estimated rates of MTCT**

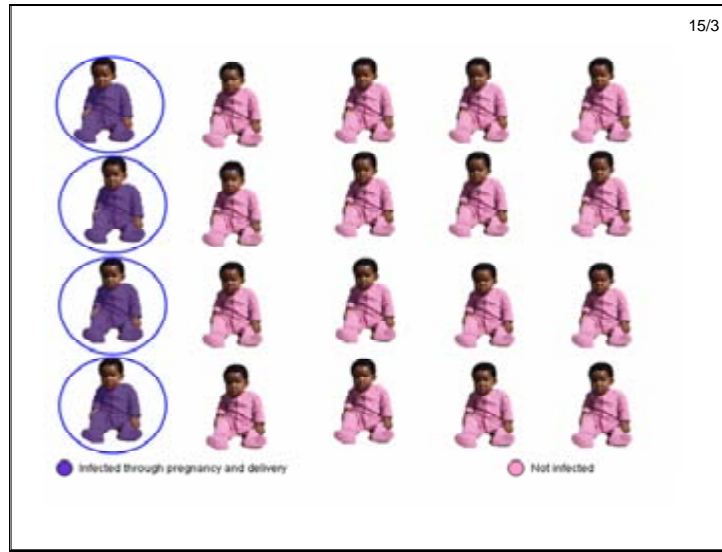


Explain that in this slide you see 20 babies. All these were born to mothers who were tested for HIV and had a positive result.

Ask: The rate of transmission during pregnancy and delivery is around 20% without intervention. How many of these babies would you expect to be infected during pregnancy or delivery?

Wait for a volunteer to give the response and correct as needed. (The response is: 20% of 20 = 4 infants would be infected during pregnancy or delivery.)

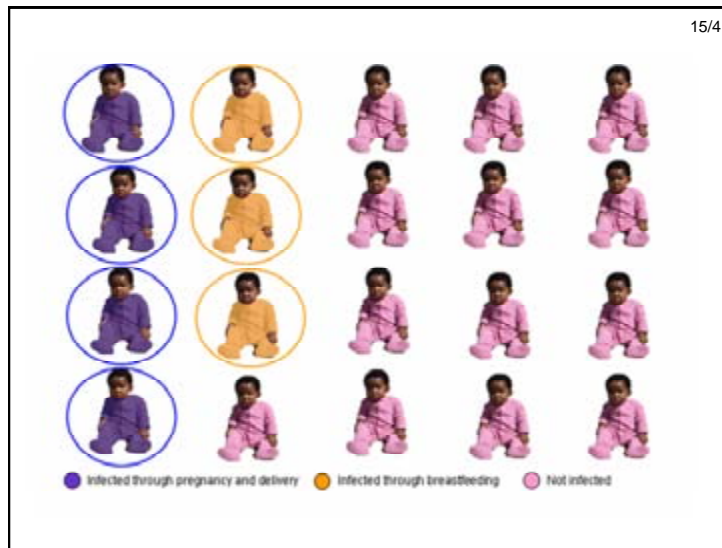
Show **Slide 15/3**.



Ask: *The rate of transmission during breastfeeding can vary from 5–20% depending on how long a mother breastfeeds and whether or not she breastfeeds exclusively. We will use 15% for this example. If these babies are all breastfed, how many will be infected?*

Wait for a volunteer to give the response and correct as needed.
(The response is: 15% of 20 = 3 infants were infected by breastfeeding.)

Show **Slide 15/4**.



Explain that if all HIV-positive mothers were exclusively breastfeeding, the number of infected infants would be less.

Ask: *How many infants who receive no PMTCT intervention will **not** be infected during pregnancy, labour, delivery, or breastfeeding?*

Wait for a volunteer to give the response and correct as needed. (The response is: 65% of 20 = 13 infants will not be infected during pregnancy, labour, delivery, or breastfeeding.)

Ask: *What are some factors that affect mother-to-child transmission of HIV?*
Wait for a few replies and then continue.

Show **Slide 15/5**.

15/5

Factors that affect MTCT

- Recent infection with HIV
- Severity of disease
- Sexually transmitted infections
- Obstetric procedures
- Duration of breastfeeding
- Exclusive breastfeeding or mixed feeding
- Condition of the breasts
- Condition of the baby's mouth

Explain that some of these factors affect transmission of HIV through breastfeeding. Sexually transmitted infections and obstetric procedures only affect transmission during pregnancy or delivery. We will discuss the factors related to HIV transmission through breastfeeding.

- **Recent infection with HIV:** If a woman becomes infected with HIV during pregnancy or while breastfeeding, she has higher levels of virus in her blood, and her infant is more likely to be infected. It is especially important to prevent an HIV-negative woman from becoming infected at this time because then both the woman and her baby are at risk. All sexually active people need to know that unprotected sex exposes them to infection with HIV. They may then infect their partners, and their baby too will be at high risk, if the infection occurs during pregnancy or while breastfeeding. For women who are already infected it is important to protect against re-infection as this can also cause a high viral load, increasing the risk of HIV transmission to the baby.
- **Severity of HIV infection:** If the mother is ill with HIV-related disease or AIDS and is not being treated with drugs for her own health, she has more virus in her body and transmission to the baby is more likely.
- **Duration of breastfeeding:** The virus can be transmitted at any time during breastfeeding. In general, the longer the duration of breastfeeding the greater the risk of transmission.
- **Mixed feeding versus exclusive breastfeeding:** There is evidence that the risk of transmission is greater if an infant is given any other foods or drinks at the same time as breastfeeding in the first 6 months. The risk is less if breastfeeding is exclusive.

Other food or drinks may cause diarrhoea and damage the gut, which might make it easier for the virus to enter the baby's body.

- **Condition of the breasts:** Nipple fissure (particularly if the nipple is bleeding), mastitis, or breast abscess may increase the risk of HIV transmission through breastfeeding. Good breastfeeding technique helps to prevent these conditions, and may also reduce transmission of HIV.
- **Condition of the baby's mouth:** Mouth sores or thrush in the infant may make it easier for the virus to get into the baby through the damaged skin.

Make these additional points:

- This list of factors suggests several strategies that would be useful for all women, whether they are HIV positive or HIV negative. They provide ways to reduce the risk of HIV transmission, which can be adopted for everyone, and they do not depend on knowing women's HIV status.
- Other strategies, such as the avoidance of breastfeeding, can be harmful for babies, so they should only be used if a woman knows that she is HIV positive and has been counselled.

Ask: What are ARVs?

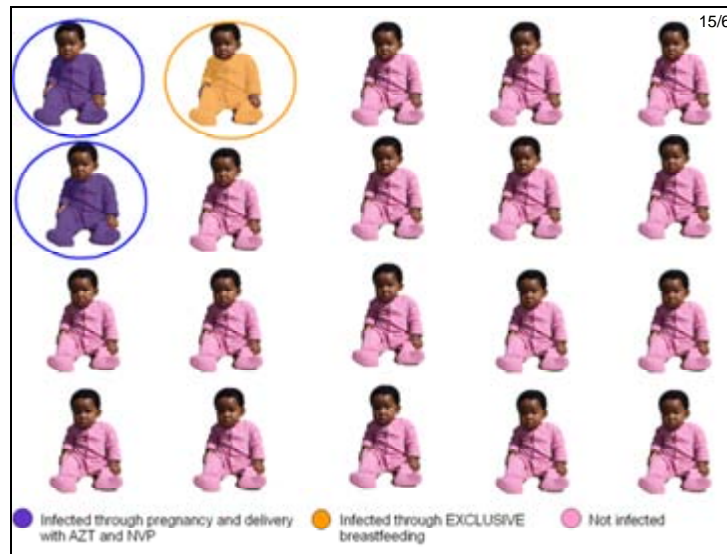
- Response: Antiretroviral drugs. They are used to reduce the amount of HIV in the body.
- Explain that some ARVs you may have heard of are AZT, 3TC (lamivudine), Combivir (3TC + AZT), and Nevirapine (NVP).

Ask: What ARVs are given to HIV-positive pregnant women in Lesotho to prevent MTCT? What ARVs are given to infants? When are they given?

- Women are given AZT, 3TC, and NVP at different times during pregnancy and labour and after delivery depending on when they access services. Infants receive single-dose NVP and AZT for 1 or 4 weeks, depending on the duration of AZT during pregnancy.

Explain the following:

- It has been shown that if a short course of ARV is given to the mother at the end of pregnancy and at the time of delivery, the risk of transmission at that time can be reduced by about half. There are several short ARV regimens, which can be used in different ways. The baby is also given one or more of the ARVs for a short time.
- There are indications that maternal highly active antiretroviral therapy (HAART) for treatment-eligible women may reduce postnatal HIV transmission, based on program data from Botswana, Mozambique, and Uganda; follow-up trial data on the safety and efficacy of this approach, and on infant prophylaxis trials are awaited. However, there are currently no recommendations related to how effective or safe ARVs are in preventing transmission through breastfeeding when given to either the baby or mother over a longer time period.



Explain that this slide shows the risk of transmission is much lower when mothers and infants receive ARV prophylaxis (represented by the purple babies) and when women breastfeed exclusively for the first 6 months (represented by the yellow baby.)

Outline approaches to prevent mother-to-child transmission through breastfeeding

Make these points:

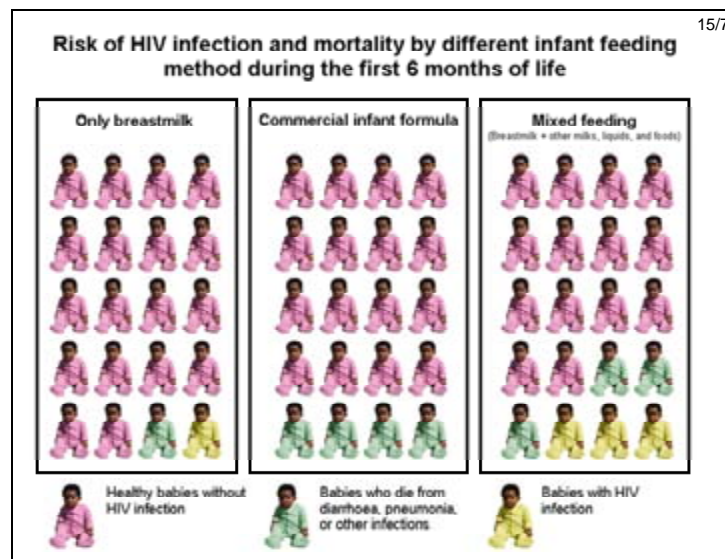
- Reducing HIV transmission to pregnant women, mothers, and their children, including transmission by breastfeeding, should be part of a comprehensive approach both to HIV prevention, care, and support; and to antenatal, perinatal, and postnatal care and support.
- The National IYCF Policy addresses the best interests of the mother and infant as a pair, in view of the critical link between survival of the mother and that of the infant.
- Prevention of HIV transmission during breastfeeding should consider the need to promote breastfeeding in the general population.
- Women who are HIV negative should be encouraged and supported to exclusively breastfeed and remain negative.
- Women of unknown status should be encouraged to be tested. If they are not tested, they should be counselled to exclusively breastfeed.
- We will now look at the situation where a woman has been tested and knows she is HIV positive.

Emphasise the following points:

- An HIV-positive mother has two options for feeding her baby during the first 6 months of life: exclusive breastfeeding or exclusive replacement feeding with commercial infant formula.
- Counsellors should help each mother decide the appropriate feeding option for her individual situation by taking into account the advantages and disadvantages of the two options.
 - There is risk of HIV transmission during breastfeeding, but exclusive breastfeeding increases a baby's chance of survival.

- There is less risk of HIV transmission if the infant does not breastfeed, but the risk of morbidity (especially from diarrhoea) and mortality is much higher among non-breastfed infants.
- If the mother mix-feeds—breastfeeds and gives other foods or liquids, including water—during the first 6 months, this increases the risk of MTCT of HIV.
- Exclusive breastfeeding for up to 6 months decreased the risk of HIV transmission by three to four times compared to non-exclusive breastfeeding in studies in Côte d'Ivoire, South Africa, and Zimbabwe.
- Counsellors should help each mother to evaluate her options and her situation thoroughly and to choose the appropriate feeding option for her situation by taking into account the risks and benefits of each available option.

Show **Slide 15/7**.



Explain the following:

- This slide shows the risks of HIV infection and death to children born to HIV-positive mothers during the first six months of life by different feeding methods. This slide does not consider PMTCT services. In our country, PMTCT services are available, so the number of babies infected would be even less.
- Even among women who know they are HIV positive, most of their infants will not be infected through breastfeeding. There are risks of HIV transmission if a mother who is HIV positive decides to breastfeed her infant. However, there are also risks if a mother decides not to breastfeed. In some situations, the risk of illness and death from not breastfeeding may be greater than the risk of HIV infection through breastfeeding.
- Infants who are not breastfed are at increased risk of gastroenteritis, respiratory infections, and other infections.
- We used the figures of 20% for transmission rates of HIV during pregnancy and delivery and 15% for the rate during breastfeeding for the purposes of the exercise. These sound like very exact figures, but they are only averages from several research studies.

- Rates vary because of differences in population characteristics such as how ill the mothers are, how much virus is in their blood, and how long mothers breastfeed.
- Since several factors affect these rates, understanding them may help us to find ways to reduce transmission.

Ask participants if they have any questions. Show **Slide 15/8. Recommendations for feeding an infant exposed to HIV**

15/8

Recommendations for feeding an infant exposed to HIV

The most appropriate infant-feeding option for an HIV-positive mother should continue to depend on her individual circumstances, health status, and local situation, including health services and counselling and support available.

Exclusive breastfeeding is recommended for HIV-positive women for the first 6 months of life unless replacement feeding with commercial infant formula is acceptable, feasible, affordable, sustainable, and safe (AFASS) for them and their infants.

When replacement feeding is AFASS, avoidance of all breastfeeding by HIV-positive women is recommended.

At 6 months, if replacement feeding is still not AFASS, continuation of breastfeeding with additional 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 breastmilk can be provided.

Present the following information:

- The recommendations on the slide reflect the National IYCF Policy and the most recent recommendations from WHO—based on the HIV and Infant Feeding Update from October 2006.
- For an HIV-positive woman, there are now only two recommended options for how to feed her baby during the first 6 months: Exclusive breastfeeding and exclusive replacement feeding with commercial infant formula.
- The individual infant's risk of HIV infection and death can vary according to the mother/family's circumstances, the health of the mother, and the counselling and support she is able to receive.
- The best feeding choice for a baby and a young child is the one that maximises health, nutrition, growth, and development.
- All HIV-infected mothers should receive counselling, which includes provision of general information about the risks and benefits of various infant-feeding options, and specific guidance in selecting the option most likely to be suitable for their situation.
- Exclusive breastfeeding during the first 6 months is recommended unless replacement feeding (with infant formula) is acceptable, feasible, affordable, sustainable, and safe (AFASS).
- If replacement feeding is not AFASS at 6 months, continued breastfeeding with complementary foods is recommended.
- Between 6 and 24 months, if replacement feeding becomes AFASS, cessation of breastfeeding is recommended.
- Whatever a mother decides, health personnel should monitor all babies exposed to HIV and continue to offer infant-feeding counselling and support, particularly at key moments, and up to 24 months.

- A baby who tests positive in the first 6 months should be exclusively breastfed for the first 6 months. HIV-positive children should continue breastfeeding for as long as possible.
- Among infected infants, studies have shown that continued breastfeeding slows the progression of HIV and decreases the risk of mortality.

Ask participants if they have any questions.

Explain the following:

- Each of the options: exclusive breastfeeding and exclusive replacement feeding, has its own risks. A mother who breastfeeds risks transmitting HIV to her child. Meanwhile, a mother who replacement feeds risks having a child who dies from illness or malnutrition.
- The most dangerous way to feed an infant is mixed feeding (breastmilk plus other foods and liquids) during the first 6 months of life. Mixed feeding during the first 6 months can irritate the mucosal membrane of the intestines, creating entry points for HIV into the infant's body. It can also cause diarrhoea. It is very important for mothers who choose breastfeeding to follow exclusive breastfeeding for the first 6 months, and for those who choose replacement feeding to follow exclusive replacement feeding for the first 6 months.
- In this course, we will learn how to help a mother decide the best way to feed her baby from birth to 2 years—both to reduce the risk of HIV transmission and better guarantee the baby's survival.
- In the upcoming sessions, we will discuss how to counsel a mother on the two infant feeding options for babies exposed to HIV during the first 6 months of life: exclusive breastfeeding and exclusive replacement feeding. Later, we will also discuss feeding options for infants 6 to 24 months of age.

Summarise the session by making the following points:

- Not all infants born to HIV-infected women will be infected with HIV.
- The risk of HIV transmission during breastfeeding can range from 1–20% (depending on breastfeeding practices, duration of breastfeeding, and health of the mother). Exclusive breastfeeding for the first 6 months of life can significantly reduce the risk of HIV transmission through breastfeeding and reduce the risk of infant death from diarrhoea or other infant infections.
- Not breastfeeding has many disadvantages, including risks to the infant's health. Women need access to infant-feeding counselling to help them to decide the best way to feed their child in their situation.
- Mixed feeding should be avoided because it brings both the risks of HIV infection and the risk of diarrhoea and other infectious diseases.
- Breastfeeding should continue to be protected, promoted, and supported in all populations.

Trainer's notes

New evidence on HIV transmission through breastfeeding:

- Exclusive breastfeeding for up to 6 months was associated with a three- to four-fold decreased risk of transmission of HIV compared to non-exclusive breastfeeding in three large cohort studies conducted in Côte d'Ivoire, South Africa and Zimbabwe.
- Low maternal CD4+ count, high viral load in breastmilk and plasma, maternal seroconversion during breastfeeding, and breastfeeding duration were confirmed as important risk factors for postnatal HIV transmission and child mortality.
- There are indications that maternal HAART for treatment-eligible women may reduce postnatal HIV transmission, based on programmatic data from Botswana, Mozambique; and Uganda; follow-up trial data on the safety and efficacy of this approach and on infant prophylaxis trials are awaited.
- Recent studies in South Africa and Zimbabwe have shown that exclusive breastfeeding for the first 6 months can reduce the risk of transmission to a range of 1% to 5%. References: 1) Coovadia HM, Rollins NC, Bland RM, Little K, Coutsooudis A, Bennish ML, Newell ML. Mother-to-child transmission of HIV-1 infection during exclusive breastfeeding in the first 6 months of life: An intervention cohort study. *Lancet*. 2007; 369: 1107–16. 2) Humphrey J, Hargrove JW, Malabad LC, Iliff PJ, Moulton LH, Mutasab K, Zvandasarac P, Nathoo KJ, Mzengeza F, Chidawanyika H, Zijenah LS, Warde BJ, the ZVITAMBO Study Group. "HIV incidence among post-partum women in Zimbabwe: risk factors and the effect of vitamin A supplementation." *AIDS*. 2006, 20:1437–1446. New guidelines are expected related to infant feeding and ARVs.

New evidence on morbidity and mortality:

- In settings where antiretroviral prophylaxis and free infant formula were provided, the combined risk of infection and death by 18 months of age was similar in infants who were replacement-fed from birth and infants breastfed for 3 to 6 months (Botswana and Côte d'Ivoire).
- Early cessation of breastfeeding (before 6 months) was associated with an increased risk of infant morbidity (especially diarrhoea) and mortality in HIV-exposed children in completed studies (Malawi) and ongoing studies (Kenya, Uganda and Zambia).
- Early breastfeeding cessation at 4 months was associated with reduced HIV transmission but also with increased child mortality from 4 to 24 months in preliminary data presented from a randomised trial in Zambia.
- Breastfeeding of HIV-infected infants beyond 6 months was associated with improved survival compared to stopping breastfeeding in preliminary data presented from Botswana and Zambia.