HIV and Infant Feeding Counselling: A training course
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A training course

Trainer’s Guide
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### Appendices
- Composition of UNICEF’s Micronutrient Supplement for Replacement Feeding
- Feeding Options cards
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Total time for Sessions 1-16: 17 hours 45 minutes
Additional time may be needed for opening and closing sessions.
INTRODUCTION

Why this course is needed

HIV infection among children is increasing, and in some countries is now one of the main causes of childhood death. In 90% of cases, children acquire the infection from their mothers, before or during, or after delivery through breastfeeding. This is called mother-to-child transmission (MTCT), or vertical transmission. Avoiding breastfeeding is one of the ways to reduce the risk of MTCT of HIV.

Recent research has shown more precisely the time at which HIV is passed from a mother to her infant. However, there are still many uncertainties, one of the most important being the extent to which the quality of breastfeeding, whether exclusive or mixed, and the condition of the breasts, affects the risk of transmission.

Great efforts have been made in recent years to promote breastfeeding by all mothers. There are considerable risks associated with not breastfeeding, particularly in resource-poor settings. This has resulted in both policy makers and health workers being reluctant to suggest that a woman feed her infant in any other way. Accordingly, it has been difficult for health workers to advise HIV-positive women how best to feed their infants. It is perhaps even more difficult for a mother and her family to decide what is best, and women need accurate information and counselling to enable them to decide.

In 1997, WHO, UNICEF and UNAIDS issued a joint policy statement, indicating that HIV-positive women should be enabled to make a fully informed decision about feeding their infants, and supported to employ the method of their choice. By 1998, it was known that the use of anti-retroviral drugs could substantially reduce the risk of mother-to-child transmission before and during delivery, and it became more urgent to find ways to reduce the risk of post-natal transmission through breastfeeding. Guidelines developed in 1998 set out several feeding options to suggest to HIV-positive women, including breastfeeding in the usual way, breastfeeding exclusively and stopping early, and the use of replacement feeds such as commercial or home prepared formula. The guidelines also emphasised the need to protect, promote and support breastfeeding for those who are HIV-negative or untested, and to prevent any spillover of artificial feeding to infants of uninfected mothers.

There is now an urgent need to train health workers in MCH and primary care settings, to counsel women about infant feeding, according to these guidelines. The concept of ‘counselling’ is new to some people, and the word can be difficult to translate. Some languages use the same word as ‘advising’. However, counselling means more than simple advising. Often, when you advise people, you tell them what you think they should do. When you counsel a mother, you listen to her, and to try to understand how she feels. You help her to decide what is best for her, and you help her to develop confidence.
Infant feeding counsellors are needed, who have the skills to enable HIV-positive mothers to make a fully informed decision of infant feeding method; to support them in their decisions; and to counsel mothers who are HIV negative or of unknown HIV status about breastfeeding. *HIV and Infant Feeding Counselling: A training course (HIVC)* has been developed in response to this need. The materials are designed to make it possible for trainers with limited experience of teaching the subject to conduct up-to-date and effective courses.

**The objectives of this course are:**

To provide knowledge and skills for health workers who work with mothers and babies, to enable them to:

- counsel women who are HIV-positive about infant feeding decisions;
- assist all women to feed their infants as effectively and safely as possible in their circumstances;
- refer women and their children for further HIV services and care as necessary;
- participate in local discussions on HIV and infant feeding policy;
- prevent spillover of artificial feeding, and erosion of breastfeeding, among women who are not HIV infected.

This course does NOT prepare people to conduct full voluntary confidential counselling and HIV testing – which includes pre-test and post-test counselling for HIV, and follow-up support for general living with HIV. This course covers only aspects specifically related to infant feeding.

**Before you hold this course:**

Course trainers and participants are expected already to have a basic knowledge of breastfeeding counselling, as in the *Breastfeeding Counselling: A Training Course (BFC)* or an equivalent level of knowledge and skills. Those who are not familiar with breastfeeding counselling will need to acquire this knowledge first. Trainers for the *HIV and Infant Feeding Counselling (HIVC)* course need to do the complete BFC course, if possible as a trainer.

Participants who have had some training on breastfeeding, but not on breastfeeding counselling, or who took part in a breastfeeding counselling course some time ago, can take a *Breastfeeding Counselling Update*, which should include the following sessions from the *Breastfeeding Counselling- A Training Course*:

- Session 1 Why breastfeeding is important (if needed))
- Session 3 How breastfeeding works
- Session 5 Observing a breastfeed
- Session 6 Listening and Learning
- Session 7 Listening and Learning exercises
- Session 8 Health care practices (if needed)
- Session 9 Clinical Practice 1
- Session 10 Positioning a Baby at the Breast
- Session 11 Building confidence and giving support
These Breastfeeding Counselling Update sessions should take about 16 hours and can be conducted during 2-3 days prior to the HIV and Infant Feeding Counselling course.

THE COURSE AND THE MATERIALS

Structure of the course

The course is divided into 16 sessions, using a variety of teaching methods, including lectures, demonstrations, and work in smaller groups with discussion, reading, practical work and exercises. The course can be used as a 3-day course of approximately six contact hours each day.

Order of sessions

The sessions are in a suggested sequence (see Contents list, and Example of a Timetable on Section 6 in the Director’s Guide), but the order may need to be adapted to suit local facilities. However, the overview of HIV and transmission needs to take place at the start of the course, and theoretical information on the infant feeding options needs to be given before the counselling skills can be practised.

Course materials

Director’s Guide

The Director’s Guide contains all the information that the course Director needs to plan and prepare for a course, and to select trainers and participants, starting several months before the actual training. It contains lists of the materials and equipment needed, examples of timetables, and copies of the forms that need to be photocopied before a course. It also describes the Director’s role during the course itself.

The Trainer's Guide

The Trainer's Guide contains what you, the trainer, need in order to lead participants through the course. The guide contains the information that you need, detailed instructions on how to teach each session, the exercises that participants will do, together with answers, and the summary sheets, forms, checklists and stories used during the practical sessions of the course. This is your most essential tool as a trainer on the course. Write your name on it as soon as you get it, and use it at all times. Add notes to it as you work. These notes will help you in future courses.

Overhead transparencies

Overhead transparencies are provided for many sessions. The figures for the overhead transparencies are also available in the form of a flipchart, which you can use to show to participants if an overhead projector is not available.
Participants' Manual

A copy is provided for each participant. This contains:
- Summaries of information and Overhead transparencies
- Copies of Worksheets and Checklists from the practical sessions
- Texts for the Demonstrations that participants help with
- Exercises which participants will do during the course (without answers)

The manual can be used for reference after the course, so it is not essential for participants to take detailed notes.

Feeding Options cards

These cards can assist the health worker to explain information to the mother. They are mostly in pictorial form. Wording can be added in a local language if needed.

Training aids

You will need a flipchart, blackboard and chalk, or white board and suitable markers, for most sessions, and a means of fixing flipchart pages to the wall or notice board - such as masking tape.

You will need a doll and model breast for demonstrating positioning for breastfeeding. The doll can also be used as a general prop in demonstrations.

HOW TO MAKE A MODEL DOLL

1. Find any large fruit or vegetable or make a bundle of waste material; a towel or other strong thick cloth; and some rubber bands or string.
2. Put the fruit, vegetable or bundle in the middle of the cloth, and tie the cloth around it to form the baby's 'neck' and 'head'.
3. Bunch the free part of the cloth together to form the baby's legs and arms, and tie them into shape.
4. If the cloth is rather thin, you may like to stuff some other cloth or cotton wool inside to give the doll more of a 'body'.

HOW TO MAKE A MODEL BREAST

A model breast can be made from a pair of skin-coloured socks, stockings or tights, an old T-shirt or a piece of material, cotton wool or foam rubber.
1. To make the 'nipple' - In the middle of the piece of cloth, or heel of the sock, use a needle and thread make a small circle of 'running stitches'. Put a piece of material, cotton wool or foam into the middle of the circle. Pull the thread sufficiently to make a small nipple shape of the cloth.
2. To make the 'breast' – mould the cloth into a rounded shape with the 'nipple' in the centre. Fill the cloth with foam rubber, cotton wool, other material or old stockings. Sew the back of the 'breast' to prevent the filling coming out.
3. To make the areola – colour the area around the nipple with a pen or paint.
Resource Materials

The following are provided as part of the course materials for each participant:

- **HIV and Infant Feeding - guidelines for decision-makers.**
  WHO/FRH/NUT/CHD/98.1; UNAIDS/98.3; UNICEF/PD/NUT/(J)98-1

- **HIV and Infant Feeding - a guide for health care managers and supervisors.**
  WHO/FRH/NUT/CHD/98.2; UNAIDS/98.4; UNICEF/PD/NUT/(J)98-2

- **HIV and Infant Feeding - a review of HIV transmission through breastfeeding.**
  WHO/FRH/NUT/CHD/98.3; UNAIDS/98.5; UNICEF/PD/NUT/(J)98-3

As a trainer, you may find the following reference materials useful to answer questions and provide additional information:

**Available from departments of WHO, Avenue Appia, 1211 Geneva 27, Switzerland:**

Department of Child and Adolescent Health and Development (CAH): <cah@who.int>

- **Breastfeeding Counselling: A training course.** WHO/CDR/93.4; UNICEF/NUT/93.2


- **Evidence for the Ten Steps to Successful Breastfeeding**
  WHO/CHD/98.9

- **Relactation - a review of experience and recommendations for practice.**
  WHO/CHS/CAH/98.14

- **Mastitis: causes and management**
  WHO/FCH/CAH/00.13

Department of Nutrition for Health and Development (NHD) <nhd@who.int>

- **Complementary Feeding of Young Children in Developing Countries: a review of current scientific knowledge.** WHO/NUT/98.1

- **Complementary feeding: family foods for breastfed children**
  WHO/NHD/001 & WHO/FCH/CAH/00.6

Department of Food Safety (FOS) <fos@who.int>

- Adams M, & Motarjemi, Y. **Basic Food Safety for Health Workers.**
  WHO/SDE/PHE/FOS/99.1

HIS (HIV/AIDS/STI)

- **Source book for HIV/AIDS counselling training,**
  WHO/GPA/TCO/HCO/HCS/94.9

- **Counselling for HIV/AIDS: a key to caring,**
  WHO/GPA/TCO/HCS/95.15

- **HIV in pregnancy: A Review**
  WHO/CHS/ RHR/99.15; UNAIDS 99.35

Available from UNAIDS Information Centre, 20 Avenue Appia, 1211 Geneva 27, Switzerland <unaid@unaid.org>

- **UNAIDS ‘Best Practice’ Series,**
  UNAIDS/99.44E

- **Counselling and Voluntary HIV testing for pregnant women in high HIV prevalence countries: elements and issues.**
  UNAIDS/99.40E

Available from UNICEF, Nutrition Section, 3 United Nations Plaza, New York NY 10017, USA <wdemos@unicef.org>

- **Engle P. The Care Initiative: assessment, analysis and action to improve care for nutrition.**
- Armstrong, HC. Techniques of Feeding Infants: the case for cup feeding. 

**Available from Teaching Aids At Low Cost, PO Box 49, St Albans, Herts AL1 5TX, UK, Fax: +44-1727-846852 < taczuk@btinternet.com >**

- Savage-King, F. *Helping Mothers to Breastfeed* (Revised Edition, African Medical and Research Foundation, 1992, or an adapted version.)

### TEACHING THE COURSE

This section explains the teaching methodology used in the course. You should read it before you start conducting sessions.

Both HIV and breastfeeding are very emotive topics. Be aware that participants may have strong feelings about this topic. Help the group to accept that there will be strong feelings and that there is a need to respect them all, without judgement.

It is possible that some participants are themselves living with HIV, or have close family or friends who are living with HIV. Avoid comments that could sound critical of people with HIV.

**Forming groups**

Working in groups makes it possible for teaching to be more interactive and participatory, and it gives everybody more time to ask questions. Quieter participants have more chance to contribute.

As soon as possible after the introductory session, the Course Director and the trainers decide how the groups will be composed. Sometimes it is a good idea to make one participant who knows the others in the class responsible for arranging the groups.

Each group should have at least one person who can speak the local language, and at least one woman. It may be appropriate to balance professional groupings and geographic area. For the group work on preparation of feeds, it may be useful if one member of each group is living locally.

Write the names of the trainer and participants in each group on a flipchart or board, and post it up where both trainers and participants can check which group they belong.

**Ask participants to sit with their groups for all sessions, so that they can quickly turn and work with the group, without losing time rearranging their seats.**

The exercises are designed for groups of four people with a trainer. If there is a different number in the groups, small changes may have to be made to ensure that each participant has a turn to practise the skill in the group.
Motivating participants

- Encourage interaction
During the first day or two, interact at least once with every participant, and encourage them to interact with you. This will help them to overcome their shyness, and they will be more likely to interact with you for the remainder of the course.

Make an effort to learn participants' names early in the course, and use their names whenever it is appropriate. Use names when you ask participants to speak, or to answer questions, or when you refer to their comments, or thank them.

Be readily available at all times. Remain in the room, and look approachable. For example, do not read magazines or talk constantly with other trainers. Talk to participants rather than trainers during tea breaks, and be available after a session has finished.

Get to know the participants who will be in your group, and encourage them to come and talk to you at any time, to ask questions, or to discuss any difficulties, or even to tell you that they are interested and enjoying themselves.

- Reinforce participants' efforts
Take care not to seem threatening. These techniques may help:
  - be careful not to use facial expressions or comments that could make participants feel ridiculed;
  - sit or bend down to be on the same level as a participant to whom you are talking;
  - do not be in a hurry, whether you are asking or answering questions;
  - show interest in what participants say. For example, say: “That is an interesting question/suggestion.”

Praise, or thank participants who make an effort. For example when they:
  - try hard;
  - ask for an explanation of a confusing point;
  - do a good job on an exercise;
  - participate in group discussion;
  - help other participants (without distracting them by talking about something irrelevant).

You may notice that many of the counselling skills taught during the course are also important for communicating with participants. In particular you will find it helpful to use appropriate non-verbal communication, to ask open questions, to praise them and help them to feel confident in their work with mothers and babies.
• *Be aware of language difficulties*

Try to identify participants who have difficulty understanding or speaking the language in which the course is conducted. Speak slowly and clearly so that you can be more easily understood. Encourage participants in their efforts to communicate. If necessary, speak with a participant in her own language (or ask someone else to do so for you) to clarify a difficult point.

Discuss with the Course Director any language problems that seriously hinder the ability of a participant to understand the material. It may be possible to arrange help for the participant, or for her to do some of the exercises in a different way.

**Using your Trainer's Guide**

**Before you lead any session:**

- Look at your guide and read the ‘Objectives’ and the ‘Outline’, to find out what kind of session it will be, and what your responsibilities are.
- Read the ‘Before the session’ box at the beginning of the text, so that you know what you have to do in advance to prepare for the session, and what training aids (and other kind of help) you need.
- Read through the text for the session, so that you are clear what you will have to do. The text includes detailed point by point instruction about how to conduct the session.
- Consider splitting the session between two or more trainers, particularly if the session is long.

**Before you lead Session 10:**

Be sure you take time to collect all the materials listed on pages 141-143, and have practised the whole session.

**When you lead a session:**

Keep your Trainer’s Guide with you and use it all the time. You do not need to try to memorise what you have to do. It is extremely difficult to do so. Use the Guide as your session notes, and follow it carefully.

The Course Director may explain at the beginning of the course that using the Trainer’s Guide is the correct method for this kind of teaching, in the same way that participants need to use their manual. You may wish to copy the necessary pages of the guide, to use as your notes during the session. This will not be so bulky as carrying the whole guide.

Remember that even the authors of the materials find it necessary to follow the Guide when they teach the course. If they do not, they find it difficult to keep to the planned sequence of teaching, and they miss out important steps.
Preparing to give a presentation

- *Study the material*
Before you give one of the lecture presentations, read the notes through carefully, and study the overheads that go with it.
You do not have to give the lecture exactly as it is written. It is preferable not to read it out, though this is acceptable if you feel that there is no other way you can do it. However, it is important that you are thoroughly familiar with the contents of the lecture, and with the order of ideas in the presentation. This is necessary even if you are an experienced trainer, and knowledgeable about infant feeding.
Go through the text, mark it and add your own notes to remind you about points to emphasise, or points of special local importance. Try to think of your own stories, and ways to present the information naturally in your own way.

Read the Footnote sections. They give extra information about topics that are covered only briefly in the main text. You should not present them with the main presentation, but they may help to answer questions that arise in the course of discussion.

- *Prepare your overheads and flipcharts*
Make sure that you have all the overheads for the session, and arrange them in the correct order. If flipcharts need to be written beforehand, do this in plenty of time.
During the session, another trainer can write items on the flipchart, thus allowing you to keep eye contact with the participants.

Shortly before the session, make sure that the audience will be able to see the images - that the room is dark enough, that the screen is well placed, and that the chairs are arranged appropriately. You do not have to accept the arrangements from the previous session - it can be an advantage to move an audience around, and present material in a new way. It may help to keep their attention.

Giving a lecture

- *Talk in a natural and lively way*
  - Present the information as in a conversation, instead of reading it.
  - Speak clearly and try to vary the pitch and pace of your voice.
  - Move around the room, and use natural hand gestures.

- *Explain the overheads carefully*
Remember that overheads do not do the teaching for you. They are * aids to help you to teach and to help participants to learn. Do not expect participants to learn from them without your help.

Explain to the audience exactly what each overhead shows, and tell them clearly the main points that they should learn from it. As you explain the information in the text, point out on the overhead where it shows what you are talking about, by either pointing to the screen, or pointing out the place on the overhead itself on the projector. Do not assume that they automatically see what you want them to look at.
Remember to face the audience as you explain - do not keep looking at the screen yourself. Do not turn your back on the audience for more than a short time. Keep looking at them, and maintain eye contact, so that they feel that you are talking to them personally.

Be careful not to block participants' view of the screen. Either stand to the side, or sit down, and check that they can see clearly. Look out for participants bending to see the screen or demonstration because you are in the way. Stop and adjust your position before you continue.

When you are familiar with the material, and you have taught it a few times, you will be able to explain in your own way. You will be able to make it appropriate for the participants, and answer their questions in the way that is most helpful for them.

• **Involve the audience**

You will have to give much of the information in lecture form. This is necessary to cover enough material in the limited time available.

It is also helpful during lectures and other sessions to ask questions, to check that participants understand, and to keep them thinking. This interactive technique helps to keep participants interested and involved, and is usually a more effective way of learning. Ask open questions, (which you have learned about in sessions on counselling skills) so that participants have to give an answer that is more than a “yes” or “no”.

A number of questions are indicated in the text. The questions are asked in a way so that participants should be able to decide the answer either by looking at the figure which is displayed, or from their own experience, or from what has been covered previously in the course, without requiring new information that they may not have. Sometimes you may want to give participants a hint to help them to answer. Sometimes asking the question again, in another way, can help. However, do not help them or give them the answer too quickly. It is important to wait, and to give them a genuine chance to think of the answer themselves.

Ask participants to keep their manuals closed while answering discussion questions so that they think about possible answers rather than read the information from their manual.

On the other hand, do not get involved in discussions which are distracting, and which waste a lot of time. Encourage participants to make a few suggestions; discuss their suggestions; and then continue with the session. You do not have to wait until they have given all the answers listed in the text. Notes are included with many of the questions to guide you.
Acknowledge all participants' responses, to encourage them to try again. Comment briefly on their answer, or say “Thank you”, or “Yes”. If participants give an incorrect answer, do not say “No - that is wrong!” or some may hesitate to make other suggestions. Accept all answers, and say something non-committal, such as “That is an interesting idea” or “I haven't heard that one before”. Ask them to say more to clarify the idea, or say, “What does anyone else think?” or ask for other suggestions. Make participants feel that it is good to make a suggestion, even if it is not the “correct” answer.

When someone answers correctly, ‘hold onto’ their answer; expand it if necessary, and make sure that everyone else has understood.

Do not let several participants talk at once. If this occurs, stop the talkers, and given them an order to speak in. For example, say “Let's hear Mary's comment first, then Anastasia's, then Siti's”. People will usually not interrupt if they know that they will have a turn to talk.

Do not let the same one or two people answer all the questions. If a talkative participant tries to answer several questions, ask her to wait for a minute, or move away and focus attention on others. Try to encourage quieter participants to talk. Name someone who has not spoken to answer, or walk towards someone to bring attention toward her, and make her feel that she is being asked to talk.

Thank participants whose answers are short and to the point.

**Preparing to give a demonstration**

The sessions include a number of short demonstrations of counselling techniques, and other skills. There are special instructions on how to prepare Session 10, (pages 138-141).

- **Study the instructions and collect the equipment**
  Some time before you give the demonstration, read through the instructions carefully, so that you are familiar with them and you do not forget any important steps. This is necessary even if you have already seen someone else give the demonstration. Make sure that you have the equipment that you need.

- **Prepare your assistant**
  You may need someone to help you to give the demonstration, for example, someone to pretend to be a mother. It is usually a good idea to ask a participant to help you. This can be a good learning experience for her. It increases her involvement, and helps her to learn about teaching methods. Ask for help the day before a demonstration, so that helpers have time to prepare themselves and discuss what you want them to do.

If you feel that participants are not ready to do counselling skills demonstrations themselves, do the demonstrations yourself with another trainer. This helps participants to understand what playing the part is about, and they can see that making mistakes does not matter, so they may feel more confident to try themselves next time.
Practise the demonstration

Practise giving the demonstration, by yourself, with your assistant, or with another trainer, so that you know how long it takes, what can go wrong, and if there is anything else that you need, such as an extra table or chairs. This will make the demonstration much more convincing, and it is a good idea even if you have done it before.

It is particularly important to practise the demonstrations from Session 10, ‘Preparation of Milk Feeds – measuring amounts’, as there are many parts to these demonstrations. You should prepare for and practise this before the course starts.

Giving the demonstration

- Make sure that all the equipment is ready and together, and prepare the place where you will give the demonstration. Arrange tables and chairs as you will need them.
- Make sure that you can use a board or flipchart to write things on, or an overhead projector if you need to show a transparency as part of the demonstration, without having to rearrange everything.
- Demonstrate slowly, step-by-step, and make sure that the audience is able to see what you do. If necessary, ask them to move closer to you so that they can all see and hear clearly; or you can move closer to them, going to each part of the audience in turn.
- As you give the demonstration, take every opportunity to let participants handle and examine the equipment that you use, and themselves practise what you demonstrate. They will learn more if they try things out, than if they just see you doing them.

At the end of a lecture or demonstration

Leave time for participants to ask questions, and do your best to answer them. You do not need to know the answer to every question. Other participants may be able to offer information or you can refer them to a local source of further information.

Ask participants to find the summary notes for the session in their manuals. Ask them to read the notes later on the same day. Tell them about any recommended reading from the reference material.
Conducting discussions

Some discussions consist of simple questions that you ask the group, encouraging participants to suggest answers, and to give their ideas, in a way similar to that described for asking questions in lectures. It may help to write the main question and the main points of answers on a flipchart.

Do not let a few talkative participants dominate the discussion. Encourage everyone to participate. If necessary, ask individuals in the group by name to suggest answers in turn. Encourage quieter members to say what they think, before you allow the talkative ones to speak.

To keep participants discussing the questions, from time to time summarise what has been said and restate the question in another way. When participants give an incomplete answer, ask them to try to clarify and complete what they are trying to say. Add any necessary explanation, and make sure that it is clear to all participants.

Give participants time to ask their own questions. Answer the questions willingly. In general, encourage participants to ask at the time that they have a question, and not to hold it for a later time. However, if they ask too many questions, and it interferes with the session, you may have to ask them to wait.

Reading in groups

In some sessions, you ask participants to read a section of text aloud. Each participant takes it in turn to read one sentence or section of the text. You can discuss the ideas and ask questions after each point.

Facilitating individual written exercises

Make sure participants have found the correct page in their manual. Explain that they should read the questions and write the answers in their manuals. They should use pencil so they can change their answer if needed.

Try to arrange for participants to sit a little away from each other, so they do not see or hear other people’s answers. Circulate, looking over their shoulders to see how they are getting on. Talk to each participant individually, and as confidentially as possible. Try not to let other participants overhear what you are saying. Compare their answers with the suggested answers in your guide. Praise them if they have a good answer. If an answer is incorrect, do not make them feel ridiculed. Ask them if they have any other ideas, and give them a chance to correct the answer. If they cannot do so, help them to decide the correct answer, and explain how they went wrong. Try not to give the answer too easily.

If a question causes difficulty for several participants, discuss it afterwards with the group together. At the end of the time, if there are unfinished questions in the exercise, suggest they finish them in their own time and ask a trainer later if they do not understand any of the answers.
Conducting small group sessions

The sessions in which participants practise their counselling skills are conducted in small groups with 4 participants and one trainer.

Each trainer has a set of story cards. For these sessions, select the most appropriate stories, and give one to each participant before the session so that they have time to study it. They should not show it to their colleagues.

During the session, participants work in pairs within the group to practise using the counselling skills. One of the pair plays the mother, following the story on her card. The other plays the counsellor. This is called ‘pair practice’. The other two members of the group may form another pair, or may be observers.

You follow from the Trainer's Guide, which contains both the story and short comments to help you to guide the participants and make sure that they learn what is intended. Guide the group to discuss the practice, and help the counsellor to improve her skills. More detailed instructions are given in the notes for the session.

<table>
<thead>
<tr>
<th>WHAT THE SIGNS USED IN THE GUIDE INDICATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ an instruction to you, the trainer;</td>
</tr>
<tr>
<td>■ what you, the trainer, say to the participants;</td>
</tr>
<tr>
<td>◩ that you ask participants for their help;</td>
</tr>
<tr>
<td>◊ a section that participants read out;</td>
</tr>
<tr>
<td>➜ that you write on the flipchart or overhead.</td>
</tr>
</tbody>
</table>

Further information – these sections give extra information on topics in the text. You should not present them with the main presentation but they may help you to answer questions that arise in the course of the discussion.

Checklist of training skills

At the end of this Guide, inside the back cover, is a summary CHECKLIST OF TRAINING SKILLS. The Course Director may decide to demonstrate these skills at the time of preparing the trainers before a course, or you may be asked to study them for yourself. Refer to the list from time to time to remind you how to make your session effective.
Session 1

Overview of HIV and Infant Feeding

Objectives:
At the end of this session, participants should be able to:
- Outline how HIV can and cannot be transmitted to a baby and factors that influence mother-to-child transmission;
- Describe the main points of the UNAIDS/WHO/UNICEF policy statement on HIV and Infant Feeding

Outline

| I. | Introduce the session | 7 minutes |
| II. | Review the risk of mother-to-child transmission of HIV | 20 minutes |
| III. | Explain factors which affect mother-to-child transmission | 10 minutes |
| IV. | Describe the risks of not breastfeeding | 5 minutes |
| V. | Outline the Policy Statement | 15 minutes |
| VI. | Summarize the session | 3 minutes |

Before the session

You will need:
Overheads 1/1, 1/2, 1/3, 1/4, 1/5, 1/6, 1/7
Feeding Options card 1: “20 mothers and babies”

Fix with tape a blank transparency on Overheads 1/3 and 1/4. During the session, mark this blank transparency, as if you were marking Overheads 1/3 and 1/4. Use three different colour water-soluble markers to do this.

Review HIV and Infant Feeding - Guidelines for decision-makers. Mark the sections of the Policy Statement on pages 20-21 that will be read out during Section V of this session. Do not read out all the sections of the Policy Statement.

Make sure that each participant has a copy of the three documents: HIV and Infant Feeding - Guidelines for decision-maker; A guide for health care managers and supervisors; and A review of HIV transmission through breastfeeding.

Find out the local prevalence of HIV infection among women of childbearing age (15-54 years) and among women receiving antenatal care in the area, if known.

Familiarise yourself with the national policies and guidelines on infant feeding with HIV/AIDS, if they exist.
I. **Introduce the session**  
7 minutes

- Make these points:

  - A very sad aspect of the HIV/AIDS epidemic is the number of young children who are dying from the infection. Most of these children become infected through their mothers. A woman is usually infected by her sexual partner, who is often the child’s father.

  - 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. One way is for them to avoid breastfeeding.

  - This course is about how you as a health worker can help a woman to make the difficult decision about the best way to feed her baby in her particular circumstances.

- In this session we will look at:
  - how mother-to-child transmission of HIV occurs, and the factors which affect it;
  - the risks of not breastfeeding;
  - policy statements relating to HIV and Infant Feeding.

- First let us remind ourselves about what the terms HIV and AIDS stand for.

- Show **Overhead 1/1 - Defining HIV and AIDS** and read out the definitions.

---

**Defining HIV and AIDS**

**HIV** - Human Immunodeficiency Virus is a virus that destroys parts of the body’s immune system

**AIDS** - Acquired Immuno-Deficiency Syndrome is the final stage of the disease caused by HIV
Make these points:

- A person infected with HIV feels well at first. He or she may remain healthy for many years and their 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 they are destroyed, the body becomes less able to fight infections and the person becomes ill and after a time develops AIDS. Eventually he or she dies.

- A special blood test can be done to see if a person has HIV antibodies in their blood. A positive test means that the person is infected with the HIV. This is called HIV-positive or seropositive.

- Once a person has the virus in their body, he or she can give the virus to other people.

- HIV is passed from an infected man or woman to another person through:¹
  - 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 during pregnancy, at the time of birth or through breastfeeding. This is called mother-to-child transmission or MTCT.²

Show Overhead 1/2 - Mother-to-Child-Transmission of HIV and read it out:

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¹HIV can also be transmitted through homosexual intercourse, sharing of needles for drug abuse or tattoos and through skin cutting or piercing. It cannot be transmitted through hugging and kissing a baby.

²MTCT is sometimes called Vertical Transmission.
Most children who get HIV are infected through their mother

– during pregnancy across the placenta
– at the time of labour and birth through blood and secretions
– through breastfeeding.

This is called mother-to-child transmission of HIV or MTCT.
II. Review the risk of mother-to-child transmission of HIV  

- Make these points:
  
- Let us now consider how often mother-to-child transmission of HIV occurs and how many mothers and babies are likely to be affected.

- Show Overhead 1/3 - 100 mothers and babies and mark as indicated

- This overhead shows 100 mothers and babies. For this example, let us assume that the prevalence of HIV infection among women is 20%

  *Ask: How many of these women are likely to be HIV-positive?*
  
  20% of 100 is 20. So 20 of these women are likely to be HIV-positive. The other 80 will probably be HIV-negative.

- Mark 20 women (not their babies) with an H. Make the mark on the blank transparency that you have fixed on Overhead 1/3. Use a water-soluble marker.

- The mother-to-child-transmission rate during pregnancy and delivery is about 20-25%. We will use 25% for this example.

  *Ask: How many of these infants were infected before or during delivery?*
  
  25% of 20 is 5. So about 5 of the infants of the HIV-positive mothers are likely to be infected during pregnancy or delivery.

- Mark with a circle 5 of the babies of the HIV-positive mothers. Use a different colour marker.
Now let us think about how many babies could be infected by breastfeeding.

The transmission rate through breastfeeding is about 15% of the infants who are breastfed by mothers who are HIV-positive.³

*Ask: So, assuming all these babies are breastfed, how many will be infected this way?*

15% of 20 is 3. So about 3 of the infants of the HIV-positive mothers are likely to be infected by breastfeeding.

- Mark with a triangle of a different colour 3 more babies of the HIV-positive mothers. These should be babies who were not marked for transmission during pregnancy or delivery.

- Make these points:

  - In a group of 100 mothers in an area with a 20% prevalence of HIV infection among mothers, only about 3 babies are likely to be infected with HIV through breastfeeding.
  - So, 97% of the babies would not get HIV this way, and they would be better to breastfeed.

- Remove the overhead cover sheet and leave the 100 unmarked symbols.

*Ask: Can we predict which babies will be infected?*

We cannot predict which individual babies will be infected.

**KEY POINT:**

- So, if a mother does not know her HIV status, she should be encouraged to breastfeed.

- When you are explaining the risk of transmission to an individual mother it may be easier to use a card with 20 women.

- Show Feeding Options card 1: “20 mothers and babies”

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³HIV transmission through breastfeeding by mothers who are HIV-positive ranges from 7-22% in different settings, so 15% is taken as an average.
Show **Overhead 1/4 – 20 mothers and babies**, and make the points which follow.

- This overhead shows only 20 mothers. This is the same as the card that we suggest you use for talking to mothers.4
- In this example, all the mothers have been tested and found to be HIV-positive.
- Mark all the mothers with an H. Make the marks on the blank transparency that is fixed to Overhead 1/4. Use a water-soluble marker.
- As we said earlier, the transmission rate during pregnancy and delivery is about 25%.

  *Ask: How many of these babies were probably infected during pregnancy or delivery?*
  
  25% of 20 is 5, so five infants.

- Mark five of the infants on Overhead 1/4.
- The transmission rate through breastfeeding is about 15%.

  *Ask: How many will be infected through breastfeeding, if they all breastfeed?*
  
  15% of 20 is 3, so 3 infants.

- Mark three different infants with a different colour.
- Make this point:
  
  - So, even among women who know they are HIV-positive, only a small number of their infants are likely to be infected through breastfeeding. Women need to know that most babies will not be infected in this way.

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4 These cards will be given out later in the course.
III. Explain factors which affect mother-to-child transmission 10 minutes

☐ Make these points:

- We used the figures of 25% for transmission rates of HIV during pregnancy and birth and 15% for the rate during breastfeeding. These sound very exact figures, but they are only estimates. Different studies have found different rates of mother-to-child transmission. Several factors affect these rates, and understanding them may help us to find ways to reduce transmission.

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

☐ Show Overhead 1/5 - Factors which affect Mother-to-Child Transmission of HIV and read it out:

<table>
<thead>
<tr>
<th>Factors which affect Mother-to-Child Transmission of HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent infection with HIV</td>
</tr>
<tr>
<td>Severity of HIV infection</td>
</tr>
<tr>
<td>Infection with sexually transmitted diseases</td>
</tr>
<tr>
<td>Obstetric procedures</td>
</tr>
<tr>
<td>Duration of breastfeeding</td>
</tr>
<tr>
<td>Exclusive breastfeeding or mixed feeding</td>
</tr>
<tr>
<td>Condition of the breasts</td>
</tr>
<tr>
<td>Condition of the baby’s mouth</td>
</tr>
</tbody>
</table>

舢 Ask participants to open their manuals to page 6, and to find the section FACTORS WHICH AFFECT MTCT OF HIV. Ask participants to read out each point in turn.

○ 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 men need to know that unprotected extramarital sex exposes them to infection with HIV. They may then infect their wives, and their baby too will be at high risk, if the infection occurs during pregnancy or while breastfeeding.

○ Severity of HIV infection
If the mother is ill with HIV related disease or AIDS, she has more virus in her body and transmission to the baby is more likely.
○ **Infection with sexually transmitted diseases (STDs)**
A woman with any STD during pregnancy may be more likely to transmit HIV to her child at the time of delivery. Early diagnosis and treatment of STDs can help prevent mother-to-child transmission.

○ **Obstetric procedures**
It has been shown that using invasive procedures during delivery, such as artificial rupture of membranes and episiotomy, increases the rate of transmission to the child. Probably this is because the child is more exposed to the mother’s blood. Restricting the use of these procedures can reduce the risk of transmission.

○ **Duration of breastfeeding**
The virus can be transmitted at any time during breastfeeding. Babies of HIV-positive mothers who breastfeed for two years or more are more likely to become infected with HIV than babies who stop breastfeeding after a few months.6

○ **Exclusive breastfeeding or mixed feeding**
Exclusive breastfeeding means that the infant has only breastmilk and no other food or drinks at all, including water.7 There is some evidence that the risk of transmission is greater if an infant is given any other foods or drinks at the same time as breastfeeding. The risk is probably less if breastfeeding is exclusive. Many infants, even if breastfed, are given something else from an early age, such as water, tea, milk or dilute cereals. These other drinks may cause diarrhoea and damage the gut, which might make it easier for the virus to enter the baby’s body. Exclusive breastfeeding is recommended for at least four and if possible six months.8

○ **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.

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5 Invasive procedures include amniocentesis, cordiocentesis or taking a sample from the placenta; artificial rupture of the membranes (ARM); episiotomy; blood transfusions or inserting a foetal scalp electrode. ARM and episiotomy are not necessary as a routine. Caesarean section has been shown to reduce the risk of HIV transmission, as it avoids the risk associated with vaginal delivery. However, it can only be considered in situations where caesarean section is easily available and free of operative and post-operative risks.

6 The risk of transmission may be greater in the first few months after delivery, but transmission is known to occur throughout the whole breastfeeding period.

7 Vitamin drops and medicines may also be given if indicated.

8 Complementary foods should be introduced before 6 months of age only if an infant is not gaining weight adequately, or shows signs of hunger despite adequate breastfeeding. Complementary feeding is discussed in Session 9.
Make this additional point:

- 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. We will return to this idea in Session 3, “Integrated Care for the HIV-positive Woman and her Baby.”

- 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.

Explain briefly about ARVs:

- You will have heard of Antiretroviral drugs (ARVs). These are used to reduce the amount of HIV in the body. Some names that you may have heard of are AZT (azidothymidine) and ZDV (zidovudine), which are two names for the same drug, and nevirapine.

- It has been shown that if ARVs are given 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 different short ARV regimens, which can be used in different ways.

- Some countries are developing initiatives to provide one of these drug regimes to women who are HIV-positive.9

- In some regimens, the baby is given one of the ARVs for a short time. However, we do not yet know how effective they are in preventing transmission through breastfeeding.

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9 Prevention of mother to child transmission, or PMTCT initiatives include provision of Voluntary Counselling and Testing (VCT, see Session 2), appropriate maternity care, drugs before and during delivery, and infant feeding counselling, which may or may not include provision of subsidised formula. Detailed plans vary in different countries. When a project is being started and tried out in one area, it may be called a pilot site.
IV. Describe the risks of NOT breastfeeding 5 minutes

☐ Make these points:

- Infants who do not breastfeed are at increased risk of gastroenteritis, respiratory and other infections.

- In many situations, the risk of illness and death from not breastfeeding is greater than the risk of HIV infection through breastfeeding.

☐ Show Overhead 1/6 - Risk of death from diarrhoea with different milks and make these points:

<table>
<thead>
<tr>
<th>Risk of death from diarrhoea with different milks</th>
<th>1/6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast only</td>
<td>1</td>
</tr>
<tr>
<td>Breast &amp; cow's milk</td>
<td>3.4</td>
</tr>
<tr>
<td>Breast &amp; formula</td>
<td>4.5</td>
</tr>
<tr>
<td>Cow's milk only</td>
<td>11.6</td>
</tr>
<tr>
<td>Formula only</td>
<td>16.3</td>
</tr>
<tr>
<td>Formula only (age less than 2 months)</td>
<td>23</td>
</tr>
</tbody>
</table>

This overhead shows the risk of death from diarrhoea of a group of Brazilian infants, according to how they were fed.

Ask: Which group of infants is at greatest risk of death? Wait for a few replies, then continue.

- The infants who received no breastmilk at all were at much higher risk\(^{10}\) of dying from diarrhoea than those whose were given only breastmilk. In the first two months the risk was very high. The same researchers also found an increased risk of death from pneumonia among infants who were not breastfed.

- There is a risk also of malnutrition and poor growth if the breastmilk substitutes are not adequate. Not breastfeeding has risks and disadvantages for the child, the mother and the family. The value of breastfeeding is discussed further in Session 4.

\(^{10}\) Fourteen times the risk - average between 11.6 for cow's milk only and 16.3 for formula only.
V. Outline the Policy Statement 15 minutes

- Introduce the set of documents on HIV and Infant Feeding: (the Guidelines for decision-makers, a Guide for Health Care Managers and Supervisors, and a Review of HIV Transmission through Breastfeeding).

- You have three documents in the grey pack called HIV and Infant Feeding. These were developed jointly by WHO, UNICEF and UNAIDS.
  - The document with the green circle called A review of HIV transmission through breastfeeding, is a review of the information that we have from research about mother-to-child transmission through breastfeeding.
  - The document with the yellow circle is a Guide for health care managers and supervisors.
  - The document with the purple circle is Guidelines for decision-makers.

- Turn to page 20 in the document with the purple circle, Guidelines for decision-makers.

- This is a statement developed to assist policy-makers in formulation of policies on HIV and Infant Feeding, and the rest of the guidelines are based on this statement. Please read the complete statement later. For now, we will discuss some of the main points that it covers.

- The policy statement starts with three points:
  - The Human Rights perspective;
  - Preventing HIV infection in women;
  - The health of mothers and children.

- Ask participants to turn to page 8 of their manuals, where they will find these three points discussed.

Point 1: The human rights perspective

- Ask a participant to read out the text of THE HUMAN RIGHTS PERSPECTIVE:

  Participant reads:
  “All women and men, irrespective of their HIV status, have the right to determine the course of their reproductive life and health, and to have access to information and services that allow them to protect their own and their family’s health. Where the welfare of children are concerned, decisions should be made that are in keeping with children’s best interests.”

- Make these explanatory points:

  - This means that women have the right to information and help to decide how to feed their infants.

  - Children have the right to the highest standard of health possible and for their parents to be fully informed about infant feeding options.
Whatever feeding decision a mother makes, health care workers must support her in carrying out that decision.

**Point 2: Preventing HIV infection in women**

Ask a participant to read out the text for PREVENTING HIV INFECTION IN WOMEN:

Participant reads:
“The vast majority of HIV-infected children have been infected through their mothers, most of whom have been infected through unprotected heterosexual intercourse. High priority therefore, now and in the long term, should be given to policies and programmes aimed at reducing women’s vulnerability to HIV infection, especially their social and economic vulnerability – through improving their status in society. Immediate practical measures should include ensuring access to information about HIV/AIDS and its prevention, promotion of safer sex including the use of condoms, and adequate treatment of sexually transmitted disease which significantly increase the risk of HIV transmission.”

☐ Make this explanatory point:

- Most HIV infected women get the virus from a male sex partner. So, it is very important to prevent this primary infection of both women and men. If a mother is not infected then her baby cannot get infected.

**Point 3: The health of mothers and children**

Ask a participant to read out the text of THE HEALTH OF MOTHERS AND CHILDREN:

Participant reads:
“Overall, breastfeeding provides substantial benefits to both children and mothers. It significantly improves child survival by protecting against diarrhoeal diseases, pneumonia and other potentially fatal infections, while it enhances quality of life through its nutritional and psychosocial benefits. In contrast, artificial feeding increases risks to child health and contributes to child mortality. Breastfeeding contributes to maternal health in various ways including prolonging the interval between births, and helping to protect against ovarian and breast cancers.”

☐ Continue with this point:

- The policy statement makes it quite clear that breastfeeding continues to be important even with a high prevalence of HIV. On page 21, it says:
Policy of supporting breastfeeding

“As a general principle, in all populations, irrespective of HIV infection rates, breastfeeding should continue to be protected, promoted and supported.”

HIV and Infant Feeding: a policy statement, developed collaboratively by UNAIDS, WHO and UNICEF, 1997

If there is a national policy on Infant Feeding and HIV/AIDS available, summarise it briefly.

VI. Summarize the session 3 minutes

Make these points:

- In this session, we discussed:
- About 15% of babies born to HIV-positive women will become HIV-positive through breastfeeding. To reduce this risk, mothers may choose to breastfeed exclusively and stop early, or to avoid breastfeeding altogether.
- However, 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.
- Mother-to-child transmission of HIV is affected by a number of factors. Knowledge of these factors suggests various ways in which the risk could be reduced, even without the knowledge of a woman’s HIV status.
- Breastfeeding should continue to be protected, promoted and supported in all populations.
Session 2

Counselling for HIV Testing and for Infant Feeding Decisions

Objectives:

At the end of this session, participants should be able to:
- Describe voluntary confidential counselling and HIV testing and how it is conducted;
- List infant feeding options.

Outline:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Total time – 90 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduce the session</td>
<td>2 minutes</td>
</tr>
<tr>
<td>II. Define counselling</td>
<td>13 minutes</td>
</tr>
<tr>
<td>III. Describe counselling stages in relation to HIV</td>
<td>20 minutes</td>
</tr>
<tr>
<td>IV. Describe Voluntary Confidential Counselling and Testing (VCT)</td>
<td>35 minutes</td>
</tr>
<tr>
<td>V. Outline counselling for infant feeding decisions</td>
<td>15 minutes</td>
</tr>
<tr>
<td>VI. Summarize the session</td>
<td>5 minutes</td>
</tr>
</tbody>
</table>

Before the session

You will need:
Overheads 2/1, 2/2, 2/3, 2/4, 2/5, 2/6

Familiarise yourself with information on and availability of VCT and associated services in the country and locality. Prepare a list of referral addresses that could be given to participants if necessary.

Ask participants to assist with the Demonstrations:
4 participants for Demonstration 2/1
2 participants for Demonstration 2/2
2 participants for Demonstration 2/3 (one person from Demonstration 2/2 and one new)
They should read the instructions in their manual and practise.
I. Introduce the session 2 minutes

Make these points:

- In this session we will:
  - discuss counselling related to HIV testing and making infant feeding decisions;
  - outline infant feeding options to discuss with a mother.

- As infant feeding counsellors, you will not be expected to give general counselling for HIV unless you have special training to do this. If you have not been trained, you need to know where to refer women for this service.¹

II. Define counselling 13 minutes

Ask: What do we do when we counsel someone?
Wait for a few responses, then continue. Ask participants to keep their manuals closed at this time.

- Counselling is a helping relationship. It is usually one-to-one communication specific to the needs of the individual. When you counsel a mother, you
  - listen to her,
  - help her to understand the choices that she has to make,
  - help her to decide what to do, and
  - help her to develop confidence to carry out her decision.

- Counselling means more than advising. Often, when you advise someone, you tell him or her what you think they should do.

- Counselling also means more than education and providing information. Providing information may be part of counselling, but not the only part.

- A counsellor does NOT make a decision for a woman, or to push her towards a particular course of action, or enforce a health policy.

- Counsellors need to accept that a woman may find it difficult to make a decision. She may change her mind and need to discuss other options. The counsellor needs to support and assist a woman through this process.

- Remember that a counsellor cannot take away all a woman's worries, and is not responsible for a woman's decisions.

Demonstrate informing, advising and counselling.

¹ Provide copies of the referral address list, if needed.
In the examples that follow, the mother already knows that she is HIV-positive. A health worker is talking to her about infant feeding.

Ask three participants to play the parts of the health workers. Another participant plays the part of the pregnant woman, but she does not need to say anything. Let each “Health Worker” in turn read out her example. After each example is a question to use for discussion, before reading the next example.

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**Demonstration 2/1: Informing, advising or counselling**

**Health worker 1:**
You heard the talk last week on the risks of your baby getting HIV from breastfeeding, so what have you decided to do?

*Ask: What is this health worker doing?*
She is assuming that the woman is able to make a decision because information was provided. The mother may not have understood the talk and may have questions to discuss. Education or information was provided but this may not be sufficient to make an informed decision.

**Health worker 2:**
(Mother's name) I think it would be best for you to use infant formula to feed your baby in case you pass on the HIV.

*Ask: What is this health worker doing?*
She is telling the mother what she should do. She is advising her. The health worker is not finding out:
- if the mother wants to do this,
- if she is able to carry out this instruction, or
- if she has questions.

**Health worker 3:**
(Mother's name), what thoughts have you had on how you will feed your baby? Would you like to discuss some of the possible ways?

*Ask: What is this health worker doing?*
She is helping the mother to consider her options and decide what will be the most suitable decision for her.

□ Thank the participants and ask them to return to their seats.
III. Describe counselling stages in relation to HIV 20 minutes

- Make these points:

  - HIV counselling in the context of this course can be divided into 4 stages:
    - Pre-test counselling: before having a test
    - Post-test counselling: after testing including a discussion of the results
    - On-going counselling following a positive result: long term
    - Infant feeding counselling: specific to decisions on feeding

- It is helpful to encourage couples to be counselled together if they can accept this. Counselling can help men to understand the importance of using safer sex practices to prevent their partners and babies becoming infected, especially during pregnancy and breastfeeding.

**Stage 1. Pre-test Counselling**

- Two things may happen before testing:
  - First, health workers can provide general information about HIV and testing through group education to antenatal women and the general community.
  - Second, they can refer a woman (and if possible her partner) for pre-test counselling if she (or they) decides to have the test.

*Ask: What do you think needs to happen in pre-test counselling?*  
Wait for a few responses, then continue.

- In pre-test counselling itself, a woman (ideally with her partner) has an individual discussion with a counsellor.

- The counsellor first finds out what the woman or couple already knows about HIV, and why they have come for counselling. Then the counsellor explains more about the HIV test and the possible implications of knowing her or their HIV status. This counselling should enable them to make an informed decision to take or not to take the test.

- Pre-test counselling prepares a person who is going to be tested for the result. This is important, because when someone receives a positive result, they are often too upset to take in any new information or to decide what they should do or whom to tell about it.

- Pre-test counselling is also an important opportunity for prevention among people who later learn that their result is negative. They think carefully about how to change their behaviour if it may put them at risk of HIV.
Ask: *What are the possible advantages of having an HIV test?*

- Write the participants' replies on the flipchart. The list may include these points below as well as others. Include on the flipchart any points that participants did not mention.

Advantages of having HIV test may include:
- If negative, peace of mind
- Protect self, plan activities and life
- Assist in decisions about childbearing
- Assist in decision about infant feeding
- Better able to plan for the future
- Prepare spouse, other family
- Clinical confirmation of suspected HIV
- Increase motivation to use safer sex to reduce risk of transmission to partner and baby
- Helps get access to antiretroviral and other treatment
- Early entry into care and welfare services, if available
- Better care from health workers
- Reduce anxiety of not knowing if infected

☐ Continue:

- Some people may be worried or too frightened to have an HIV test.

*Ask: Why do people worry about having a test for HIV?*

- Write the participants' replies on the flipchart. The replies may include some of these points:
  - Fear that a positive test result could result in blame, abandonment, rejection, isolation, abuse, or loss of job.
  - Fear of a partner or child getting HIV
  - Anxiety about whom to tell of the result, how to tell them and worry that other people could find out.
  - Worry about current and future health and about health care costs
  - Anger at the partner.

- This fear, anxiety and anger that we discussed can prevent a woman from using the help and services available to her. Post-test counselling may help her to find and to use the services. It may also help her (and her partner) to cope with denial, suicidal thoughts, depression and irrational decisions people sometimes make such as selling all their possessions or running away.

**Stage 2: Post-test Counselling**

- In post-test counselling a woman, or a couple, and a counsellor discuss the HIV test result. The counsellor provides appropriate information, support and referral. The content of post-test counselling depends on the test result.
If the test result is negative, the counsellor will discuss how the woman/couple could reduce her/their exposure to HIV infection and adopt safer sex practices. The “window period” should also be explained\(^2\) and the woman/couple may wish to consider a repeat test after 6 weeks to 3 months. The counsellor should reassure the woman that if she remains uninfected with HIV, then breastfeeding is the safest and best way to feed her baby.

If the test result is positive, the counsellor will help the woman/couple to understand what a positive HIV test means, and to discuss her /their thoughts and worries about the disease.

Arrangements for post-test HIV counselling should be made at the time a blood sample is taken for testing. Some women only need one post-test counselling session, others need on-going counselling.

The health worker who sees a woman for infant feeding counselling or general health care, must be aware of the possible concerns the woman may have and refer the woman back to the HIV counsellor for further counselling as needed.

Stage 3: On-going Counselling

After receiving her test result, an HIV-positive woman will usually require on-going or follow-up counselling to discuss questions and difficulties she has not been able to resolve. She will need help to cope with her situation, to obtain more information and to make decisions about all aspects of her life.

If possible refer a woman to someone trained in HIV counselling. There may be a local voluntary HIV counselling and support group, or a religious leader with appropriate training. If possible, offer a woman a choice of counsellors.

Ongoing counselling may be easier to provide if the woman or couple consents to meet with a small group of other HIV-positive people privately – this is known as shared confidentiality.

Stage 4: Infant feeding Counselling

Most women are not ready to discuss infant feeding options at their first post-test counselling session. They will need to be referred specifically for that later. The infant feeding counsellor may be a different person from the person who gives general counselling.

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\(^2\)Infection with HIV does not show up immediately in the person's blood. There may be a period of time - 6 weeks to 3 months, during which a newly infected person remains HIV-negative on the test, because antibodies have not yet formed. This period of time is called the “window-period”.
IV. Describe Voluntary Confidential Counselling and Testing (VCT)  35 minutes

- Write V C T down the side of a board or flipchart. Write the word “Voluntary” next to the V. Do not write anything next to the C and T yet.

**Point 1: Voluntary**

*Ask: What do we mean by voluntary?*

- Men and women must not be forced to take a test. A test should only be done with informed consent.

- *Informed* means that the person understands the meaning of HIV infection and is fully aware of the possible advantages and disadvantages of HIV testing. These need to be explained in pretest counselling in a way that she or he can understand.

- *Consent* means giving clear agreement to HIV testing in a situation free of pressure. The woman must feel that her decision either way will be respected.

_ask the two participants whom you have prepared to give Demonstration 2/2. One plays the health worker and one plays Mrs. A. After the demonstration, discuss the questions listed._

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**Demonstration 2/2: No voluntary informed consent**

▢ (Trainer) Read out this introduction:

Mrs A is at her first visit to the antenatal clinic. Her husband has been very sick for a few months. Mrs A thinks that he may have AIDS and she is worried that she may be infected too. She wants to know how to get formula for her baby as she thinks that it will be safer than breastfeeding.

**Health Worker:** Good morning Mrs A. I am Susie. How can I help you today?

**Mrs A:** Good morning. I am really worried because my husband is ill – he has been sick for a long time now. I don’t know what the illness is, but it might be HIV so I think that I had better give my baby formula.

**Health Worker:** You are worried that you may have HIV? Well, don’t worry, a blood test will tell if you are infected. I will get the syringe now.

**Mrs A:** I don't want the blood test.

**Health Worker:** Don't be silly, why not?

**Mrs A:** I don't want to know if I have it.

**Health Worker:** If you are infected, you may pass it on to your baby.

**Mrs A:** I'm not sick so maybe my baby won't be either. I don't want the test.

**Health Worker:** If you have HIV, then you can get the formula for your baby. If you aren't tested then you can't get it.

**Mrs A:** If I get tested other people may find out. I can't be tested.

**Health Worker:** Look, I'll just take the blood now and we can worry about the result when it comes.
Ask: *What is happening here?*  
The mother is being pushed and threatened into being tested.

Ask: *Is this voluntary and with informed consent?*  
No, it is pressure to be tested with no information being given.

😊 The participant who played Mrs A in Demonstration 2/2 continues for Demonstration 2/3. Ask a different participant whom you prepared for the part of the health worker.

After the demonstration, discuss the questions listed. This is the same situation as the previous scene, but with a different response from the health worker.

**Demonstration 2/3: Yes, voluntary informed consent**

☐ (Trainer) Read out this introduction:

Mrs A is at her first visit to the antenatal clinic. Her husband has been very sick for a few months. Mrs A thinks that he may have AIDS and she is worried that she may be infected too. She wants to know how to get formula for her baby as she thinks that it will be safer than breastfeeding.

**Health Worker:** Good morning Mrs A. I am Nira. How can I help you today?

**Mrs A:** Good morning. I am really worried because my husband is ill – he has been sick for a long time now. I don't know what the illness is, but it might be HIV so I think that I had better give my baby formula.

**Health Worker:** You are worried that you may have HIV?

**Mrs A:** Yes. I am so frightened for the baby.

**Health Worker:** Yes, of course. Well, first we can talk about HIV generally, and what it might mean, and the possible risk to you and your baby.

Then we can discuss the test, and what happens if you have one. Would that help?

**Mrs A:** I don't want the blood test.

**Health Worker:** That's all right. If you don't want the test, it is your choice. Before you decide about the test, can we talk a little?

**Mrs A:** Well, ok.

☐ Explain to participants: The counselling session would proceed with information being discussed and the mother's questions being answered. We resume the demonstration at the closing stage.
Health Worker: We have talked about a few things today, (mother's name). Do you want to decide about a test now, or do you want to go home and think about what we have discussed?

Mrs A: You told me a lot of things I didn't know. I want to think about them.

Health Worker: You may want to talk it over with your husband. The test can be done any day that I'm here.

Mrs A: Thank you.

Health Worker: You can come back to talk with me again whether you decide to have the test or not.

Mrs A: Can I? That might be helpful.

Ask: What is happening here?
The mother is being offered counselling in a calm and unhurried way.

Ask: Is this voluntary and with informed consent?
Yes, the mother is free to decide to have the test or not and she has information.

☐ Thank participants for their help and they can return to their seats.

Point 2: Confidentiality

➔ Write the word “Confidential” next to the letter “C” on the flipchart, and also the word “Counselling”.

Ask: What do we mean by confidential?
Wait for a few replies then continue.

■ When we keep information confidential it means that we do not tell anyone else. A counsellor does not tell anyone else a person’s test result, or what is said during discussions.

■ Counselling is only likely to be effective if the woman trusts the counsellor to keep the discussion and her HIV status confidential. She may fear discrimination, blame and rejection, if people find out that she is HIV positive.

■ It is also necessary to consider what should be written down on a person’s medical card and to discuss it with them. They may worry that other people will see what is written about them.

■ To ensure confidentiality it is necessary to have privacy.

Ask: How can privacy be provided for counselling?
Wait for a few replies, then continue.

- Privacy for counselling means providing a room or other space where other people cannot see or overhear. It is also important not to identify that the room is for HIV counselling, for example, there should not be a sign that says “HIV counselling room”.

- If it is not possible to have a separate room, then a screen in the corner of a clinic away from where people wait may be able to provide sufficient privacy.

- The woman being counselled should be encouraged to include her partner, a relative or friend in all or part of the counselling sessions. The counsellor may suggest that she include someone, however it is the women’s decision whether she does or not.

☐ Show **Overhead 2/1 - Confidentiality**

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*Ask: How would these women feel talking to the HIV counsellor at the desk?*

Wait for a few replies, then continue.
Show Overhead 2/2 – Confidentiality

Confidentiality

Ask: And this woman - how would she feel?
Wait for a few replies, then continue.

Point 3: The HIV testing process

- Write “TESTING” opposite the T of VCT on the flipchart and make these points:

  - When we have an infection, our body makes antibodies to fight the infection. After we recover, the antibodies stay in our blood to protect us against another infection. With HIV, the protection is not complete. The infection continues even though there are antibodies in the blood.

  - HIV tests detect antibodies to HIV in a person's blood. A positive result shows that the person is infected with HIV but does not show how long they have been infected.

  - It is important for testing to be available to women who wish to be tested, so that they can make decisions about pregnancy, childbirth and breastfeeding.
Further information:  
- Simple/rapid tests:
  - can be done individually at the antenatal clinic or VCT center
  - are quick with preliminary results available in a few minutes
  - use less skilled staff and need little laboratory equipment
- ELISA testing:
  - is done in batches of blood samples
  - is slower and can take a few days to 2 weeks to get the test result back
  - needs specially trained staff and to be carried out in a centralised laboratory.
- Simple rapid tests may be expensive if they are used for large numbers. Batch tests using the ELISA method may be cheaper if a number of blood samples are tested at the same time.
- However, people may be more likely to wait the short time for the results of the rapid test than to return a week or two later for the results of the ELISA test.
- Although either of these two HIV antibody-testing strategies is very reliable, all positive results must be confirmed using an additional test.

Testing of infants

☐ Show Overhead 2/3 - Testing for HIV antibodies in children and make these points:

![Testing for HIV antibodies in children](image)

Antibodies from mother  Antibodies may be from mother  After 18 months, child's own antibodies

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Further information on testing strategies is available from UNAIDS.
**A mother’s antibodies pass into her baby before birth.** If a mother is HIV-positive her newborn baby tests positive because he has his mother's antibodies in his blood. The test cannot tell if the baby is infected with his own HIV infection or not in the first few months.

**The mother’s antibodies start to disappear from the baby after 6 months of age.** However the mother’s antibodies may remain up to 18 months. If a child has a positive test before 18 months, you cannot be sure what it means.

**If a test is positive after 18 months of age, then it means that the child is infected as he only has his own antibodies at this stage.**

**It is possible to test for the virus itself in babies from the age of about 2 weeks.** However these tests are expensive and not generally available.

☐ Ask participants if they have any questions, and try to answer them. When these points are clear, make the following additional point:

**When you counsel a mother who is HIV-positive soon after her baby is born, you need to counsel her about the chance of the baby becoming infected through breastfeeding – even though you do not know if the baby is already infected or not.**

**Further information:**
Why do you counsel the HIV-positive mother about breastfeeding without knowing about the baby’s status? Only a small percentage of infants are infected with HIV at birth. It is not possible from ordinary tests to know which infants are infected, and at present we do not have specific treatment to offer them. If an infant is uninfected, then it may be possible to reduce the risk of both HIV and other illnesses by appropriate infant feeding counselling. So the best thing is to offer this help to all HIV-positive mothers and their infants.

**When testing is not available**

☐ Make these points:

**HIV testing may not be available everywhere.** A woman may be aware that HIV can pass to her baby, and worry about this, in particular about the possibility of transmission through breastfeeding.

**However, if a woman does not know her HIV status, it is usually safer for her baby if she breastfeeds.** Babies who do not breastfeed are at greater risk of illness.

**When you counsel a woman who does not know her HIV status about infant feeding, she may need reassurance that breastfeeding is the safest option for her baby.** An exception could be if she has definite clinical AIDS.

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4There are some illnesses that are very closely associated with HIV, such as Kaposi’s sarcoma and pneumocystis pneumonia. Other illnesses such as herpes zoster and tuberculosis are commonly associated with HIV but also occur in people who are not infected. It is therefore difficult to make a definite diagnosis of HIV without HIV testing. If a woman has AIDS related illness, and after counselling to encourage her to be tested, she is still unwilling, she could be referred to a doctor for assessment of the likelihood that she has HIV infection, before making a decision about infant feeding.
V. Outline counselling for infant feeding decisions 15 minutes

☐ Show the Overhead 2/4 - Counselling for infant feeding decisions and point out on it the following steps:

- Woman/couple in contact with the health services
- Educate on HIV and VCT and refer for VCT
- Not tested
- Does not collect the test result
- Collects the test result
- Previous positive HIV test
- Unknown HIV status
- Tested Negative
- Tested Positive
- Counsel and Encourage breastfeeding
- Counsel on infant feeding Discuss all options

- So far we have discussed these steps:
  - a woman or couple receive information about HIV infection and about voluntary confidential counselling and testing;
  - she may then choose to be tested and learn that she has an HIV-positive result;
  - or she may know that she is HIV-positive from a previous time.

This woman needs counselling to help her to decide how best to feed her baby.

- After receiving information on HIV and VCT, a woman
  - may not want to be tested or testing may not be available;
  - may be tested but does not return for the result;
  - may be tested and found to be negative.

This woman who is HIV-negative or of unknown status, needs counselling, encouragement and support to breastfeed and counselling about how to stay HIV-negative.

- A woman may believe that she is HIV-positive despite a negative test and reassurances that it is unlikely that she is positive. She needs counselling to discuss her worries and generally should be encouraged to breastfeed.

Ask: When could or does infant feeding counselling take place?

Encourage participants to think about times when women may want to talk about infant feeding.
Infant feeding counselling may be needed:
- before a woman is pregnant,
- during her pregnancy,
- soon after her baby is born,
- when her baby is older, or
- when a woman fosters a baby whose mother is very sick or has died.

If a woman is worried about whether or not to breastfeed, she should be encouraged to have an HIV test before making a decision.

Women who give birth at home may be offered VCT when they are in contact with the health service. Traditional birth attendants can provide women with information and encourage them to think about testing.

As her baby gets older or if her situation changes, an HIV-positive mother may need on-going infant feeding counselling. She may want to change her method of feeding and to discuss this with the infant feeding counsellor.

Each woman's situation is different, so health workers need to be able to discuss all the various feeding options.

Show **Overhead 2/5 Infant feeding options** and point out the options:

```
Infant feeding options

Following VCT and acceptance of an HIV-positive test result

Feeding options discussed

Exclusive and continued breastfeeding

Replacement feeding:
- Home-prepared formula
- Commercial formula

Modified breastfeeding:
- Stop breastfeeding early
- Express and heat treat breastmilk

Breastfeeding by an HIV-negative woman

Adequate complementary foods from about 6 months of age will be needed for all children
```
The infant feeding options to be discussed with women who are HIV-positive are:
- Exclusive and continued breastfeeding
- Modified breastfeeding including:
  - Stopping early with a change to another form of feeding,
  - Expression and heat-treatment of her own breastmilk
- Breastfeeding from an HIV-negative woman or using breastmilk from a milk bank
- Replacement feeding either with home-prepared formula or with commercial formula
- Adequate complementary foods from about 6 months of age will be needed in all cases.

Show **Overhead 2/6 - Replacement feeding** and read definition to participants.

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**Replacement feeding**

is the process of feeding a child who is
- not receiving any breastmilk,
- with a diet that provides all the nutrients the child needs,
- until the child is fully fed on family foods.

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In the following sessions, we will discuss these infant feeding options in detail and the skills needed to counsel women about infant feeding decisions.
VI. **Summarize the session**

5 minutes

☐ Make these points:

- In this session, we discussed:

- Counselling about HIV includes pre-test and post-test counselling, on-going counselling and infant feeding counselling.

- Pre-test counselling involves discussion of the risk of exposure to HIV, the implications of knowing one's HIV status, and making an informed decision to take or not take the test. Counselling and testing should be voluntary and confidential.

- Post-test counselling may involve one or many sessions depending on the result.

- If the result is negative, the counsellor discusses how to avoid HIV infection and encourages breastfeeding.

- If the result is positive, the counsellor discusses the woman’s worries and provides information, support, and referral to other services that she may need such as medical care, follow-up care for her baby and community support services. This counselling may be on-going.

- All women who are HIV-positive need infant feeding counselling, to discuss breastfeeding and other feeding options, and to decide what is best for them in their situation.

- Women who are HIV-negative or of unknown HIV status need counselling about their concerns and encouragement to breastfeed.
Session 3

Integrated Care for the HIV-positive Woman and her Baby

Objectives:

At the end of this session, participants should be able to:

– Outline how HIV information and infant feeding counselling can be integrated into maternal and child health services;
– Discuss how the Baby Friendly Hospital Initiative (BFHI) is important in areas with high HIV prevalence.

Outline: 

<table>
<thead>
<tr>
<th>Total time - 60 minutes</th>
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<tbody>
<tr>
<td>I. Introduce the session 2 minutes</td>
</tr>
<tr>
<td>II. Discuss integration of Prevention of Mother-to-Child Transmission of HIV into Maternal Child Health care 20 minutes</td>
</tr>
<tr>
<td>III. Facilitate Exercise 3.1 (groups) 35 minutes</td>
</tr>
<tr>
<td>IV. Summarize the session (groups) 3 minutes</td>
</tr>
</tbody>
</table>

Before the session

You will need:

Overhead: 3/1

HIV and Infant Feeding – a guide for health care managers and supervisors

Participants will also need to refer to their copies

ulfill

Ask 2 participants to help with Demonstration 3/1

Prepare question cards for this demonstration. Give one question to each of the 2 participants who will help. Write on one card:

Question 1: “Will all babies get HIV from breastfeeding?”

And on the other card:

Question 2: “If a woman thinks she may have HIV, but isn’t sure, would she be better to formula feed just in case?”

Tell participants which groups they belong to and ask them to sit in their groups from this session on.

Prepare trainers to lead small group discussions, Exercise 3.1
I. Introduce the session 2 minutes

☐ Make these points:

- In this session we discuss:
  - integration of Prevention of Mother-to-Child Transmission (PMTCT) of HIV into Maternal and Child Health care (MCH).
  - the continuing importance of the Baby Friendly Hospital Initiative (BFHI).

- Interventions are only likely to be effective where basic MCH care is available for all women, regardless of their HIV status. Before interventions to prevent MTCT are introduced, it may be necessary to strengthen other aspects of maternal and child health care.

- Integrating HIV care in both in-patient and out-patient care has many benefits. It can help to promote openness about the problem of HIV. If health care workers can discuss HIV openly, it enables them to give better quality HIV services.

- When HIV is treated as a secret, which cannot be discussed at all, it increases fear and stigma. Integration, openness, and talking about HIV can help to reduce fear and stigma, and discrimination against HIV-infected mothers and children.

II. Discuss integration of Prevention of Mother-to-Child Transmission of HIV into Maternal Child Health care 20 minutes

☐ Make these points:

- In Session 2 we discussed how important it is for voluntary counselling and HIV testing to be available for people who want to be tested. Women who are HIV-positive can be offered help both for their own condition, and to reduce the risk of mother-to-child transmission (MTCT). Maternal and Child Health services (MCH) are a good place to offer VCT and encourage women to be tested.

- Some interventions to reduce MTCT are only advisable for women who have been tested and who know that they are HIV-positive. These include giving antiretroviral drugs in pregnancy and at delivery and avoiding breastfeeding.

- However there are some practices which help to reduce MTCT which can safely be provided for all women, and which do not require testing or identification of HIV-positive women. These practices include:
  - preventing, diagnosing and treating sexually transmitted diseases,
  - counselling both partners about the particular importance of safer sexual practices during pregnancy and breastfeeding,
  - restricting the use of invasive obstetric procedures, such as routine episiotomy and artificial rupture of membranes, and
  - counselling women about exclusive breastfeeding, and helping them to use a good breastfeeding technique.
Let us now consider all the parts of MCH care in which practices to prevent MTCT need to be integrated.

Show Overhead 3/1 Where prevention of MTCT of HIV needs to be integrated into MCH care and read it out:

<table>
<thead>
<tr>
<th>Where prevention of MTCT of HIV needs to be integrated into MCH care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health education activities</td>
</tr>
<tr>
<td>Treatment of sexually transmitted diseases</td>
</tr>
<tr>
<td>Family planning services</td>
</tr>
<tr>
<td>Antenatal care</td>
</tr>
<tr>
<td>Delivery and postpartum care</td>
</tr>
<tr>
<td>On-going health and nutrition care for children</td>
</tr>
</tbody>
</table>

Leave Overhead 3/1 showing.

Discuss each of these aspects of MCH one by one. Identify practices that are necessary for all mothers, and those that help to prevent HIV or MTCT of HIV. Encourage participants to contribute their ideas after each question, but do not allow so much discussion that it makes the session too slow. Ask participants to keep their manuals closed at this time.

Ask: What needs to happen in health education?

Wait for a few replies, then continue.

- Health education should:
  - provide information on HIV transmission;
  - encourage safer sex practices, and facilitate access to condoms;
  - promote voluntary counselling and HIV testing.

- Health education is important for primary prevention of HIV among men and women. It is the most important way to prevent infection of their children.

- Prevention is particularly important for young women, as well as for women and their sexual partners during pregnancy and during lactation.
Ask: Why is treatment of sexually transmitted diseases important for HIV?

Wait for a few replies, then continue.

- Early diagnosis and treatment of sexually transmitted diseases, including screening for syphilis, is an important way to prevent transmission of HIV between adults, and may reduce MTCT of HIV. It may be necessary before, during or after pregnancy.

Ask: Why are family planning services important for HIV?

Wait for a few replies, then continue.

- Family planning services are an important way to provide condoms, for both HIV-negative and HIV positive men and women.
- HIV-positive women need help to prevent unwanted pregnancies, and their needs should be addressed alongside women who are HIV-negative. HIV-positive men also need help to avoid fatherhood.
- With HIV-positive women who have chosen not to breastfeed, suitable family planning methods need to be discussed early. They are likely to conceive sooner without the family spacing effect of breastfeeding.

Ask: What can be included about HIV during antenatal care?

Wait for a few replies, then continue.

- Routine antenatal care should include nutrition supplementation as needed with iron, folic acid and, in some areas Vitamin A.
- Group education about HIV can be given, including the importance of staying HIV-negative. Individual counselling and referral for VCT can be offered for those who wish.
- Information about the importance of exclusive breastfeeding, and about good breastfeeding technique to prevent nipple damage and mastitis can be given to all mothers.
- Individual infant feeding counselling can be offered for women who are worried about their HIV status or who know that they are HIV-positive.
- In some situations, woman may be offered antiretroviral drugs to take at the end of pregnancy and at the time of delivery.

☐ Turn off the projector for a few minutes, and give Demonstration 3/1. A different trainer can give this talk to provide variety.

😊 Ask the two participants whom you have prepared to ask the questions from their cards.

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1 As said in Session 2, people who have other STDs are at higher risk of HIV infection.
Demonstration 3/1: Antenatal class information

For the next few minutes, we will pretend that you are a group of women attending a talk at an antenatal clinic. Some of you have cards with questions to ask after the talk. The health worker has already talked about HIV in general and is now talking about transmission from mother to child. As you listen, decide what are the main messages in the talk. We will discuss them afterwards.

Give the following talk as if to a group of women at an antenatal clinic:

Well, now to continue, we have talked about the ways in which people can get HIV, and how they can avoid infection. It is especially important to avoid HIV while you are pregnant and during the breastfeeding period for the baby's health.

You may have heard that mothers can pass HIV to their babies before they are born or while breastfeeding. This is true, but only if the mother has HIV in her own blood.

Most women do not have the HIV in their blood, but some do. A special blood test can tell a person if they have HIV.

A test can be done here at the clinic, or in the hospital in town, or at the counselling centre in the city. The result is given only to that person and it is not told to anyone else. No-one has to be tested if they do not want to be.

If you would like to know more about the special blood test, tell the midwife when you see her. She can arrange for you to have more information before you decide about having the test. You can bring your husband or someone close with you to discuss the testing.

If a mother has HIV, she will want to think about how to feed her baby. We discuss the choices with the mother privately so that she can decide the best way for her.

Now would you like to ask me some questions?

Participant 1 asks Question 1 from her card:
Will all babies get HIV from breastfeeding?

Health Worker answers:
No, not all babies will get HIV through breastfeeding. If you have 7 mothers who are HIV positive, and breastfeeding, only one of their babies is likely get HIV this way.

Participant 2 asks Question 2 from her card:
If a woman thinks she might have HIV, but isn't sure, would she be better to formula feed just in case?
Health Worker answers:
As you know, using other forms of milk can cause illness in babies. If a mother does not know for sure that she has HIV, her baby is best protected by exclusive breastfeeding – which means only breastfeeding and not giving anything else, even water. If she is worried, we would encourage her to think about being tested.

Those are important questions. If you have more questions, you can come and talk to me later.

☐ Thank participants for being the antenatal class.

Ask: What were the main messages in this antenatal talk?
- Write participants’ answers on a flipchart. Write one or two words only, not the whole sentence. They should include these ideas:

- The main messages were:
  - It is especially important to avoid HIV while pregnant or breastfeeding
  - Only about 1 baby in 7 is likely to get HIV through breastfeeding
  - Consider a blood test to find out if you have HIV
  - Confidential counselling and testing are available (specify where)
  - Individual counselling about feeding a baby is available (specify where)
  - If you are HIV-negative or you have not had a test, your baby's health is protected best by exclusive breastfeeding.

- General information sessions do not need to discuss the details of other ways of feeding. If a woman asks about other options, of course it is necessary to tell her what they are, including mentioning some of the difficulties. But details about how to use other options should preferably be discussed individually with those mothers to whom they are relevant.

☐ Now turn the projector on, show Overhead 3/1 again, and discuss the last two points on the list.

Ask: What can be done to prevent MTCT of HIV during delivery?
Wait for a few replies, then continue.

- During delivery, all women need:
  - a skilled attendant present;
  - minimal use of invasive procedures, such as episiotomy\(^2\).

\(^2\)Invasive procedures include amniocentesis, cordiocentesis or taking a sample from the placenta; artificial rupture of the membranes; episiotomy; blood transfusions.
Further Information

Another precaution that is important during delivery is to follow Universal Precautions for preventing transmission of HIV. Universal precautions mean a set of simple guidelines applicable in all health care settings, including the home, to prevent the transmission of blood-borne infections. The guidelines include: taking care to prevent injuries when using, handling, cleaning or disposing of sharp instruments; avoiding re-capping, breaking or bending of used needles; disposing of sharp items in puncture-proof containers; using protective barriers (gloves, eye glasses, waterproof aprons and footwear) to prevent exposure to blood and other potentially infective body fluids; washing immediately skin surfaces which are contaminated with blood or other potentially infective body fluids. It is important also to know that using universal precautions protects the health worker who cares for the woman, so they do not need to fear or discriminate against women with HIV.

The use of vaginal cleansing with an antiseptic solution is being researched in some places to reduce MTCT.

Ask: What is needed postpartum?

Wait for a few replies, then continue.

- After giving birth, all women need general postpartum care.
  - Women who are HIV-positive and choose not to breastfeed, need support for replacement feeding from birth. They may need help with breast care until their milk production stops. We discuss this further in Session 4 “Breastmilk options”.
  - They need family planning advice early.
  - Women who are HIV-negative or untested, need support for the prevention of HIV, and support to breastfeed exclusively, with a good technique.
  - A woman who has an HIV test after delivery also needs counselling before and after the test. If positive, she needs time to discuss and consider her infant feeding options, even though she may have already started to breastfeed in the usual way.

Ask: What on-going health and nutrition care is needed for children?

Wait for a few replies, then continue.

- All children need their growth to be monitored, and help up to at least 2 years of age to ensure that their nutrition is adequate. They need treatment if they are ill. We discuss further details about how this relates to children of HIV-positive mothers in Session 16, “Follow-up care of children of HIV-positive mothers.”

Conclude with this point:

- You can see that integrated care can:
  - enable HIV-positive mothers to receive care in a way that may help to reduce fear and stigma,
  - help to prevent HIV and promote breastfeeding among other women.
III. Facilitate Exercise 3.1  

☐ Make these points:

- The Baby Friendly Hospital Initiative is a worldwide project launched in 1991 by the World Health Organisation and UNICEF. It recognises that good maternity care is important to promote breastfeeding. The *Ten Steps to Successful Breastfeeding* are a summary of supportive practices.

- Some people are confused about whether the BFHI should continue where there is a high prevalence of HIV, but in fact, the BFHI is more important than ever in these areas.

- Many of the practices encouraged by the BFHI and the *Ten Steps to Successful Breastfeeding* benefit all mothers and babies, whether they breastfeed or not. And it is important to support breastfeeding for women who are HIV-negative or of unknown HIV status.

☐ Explain what to do:

- We will now discuss the *Ten Steps* in turn and consider how each applies where many mothers may be HIV infected. You will discuss the Steps in your groups with a trainer.

- Try to move quickly through the discussion and do not use time discussing areas that are in agreement. Keep your manuals closed during this discussion.

☐ Ensure that participants are sitting together in their groups and that trainers understand the exercise:

Trainers all join their groups of four participants. Using pages 53-55 the trainer reads out each step, ask the question which follows, and leads the following discussion. The notes give some other points to help the discussion. The trainer explains those points that participants did not mention.

**Participants should keep their manuals closed during this discussion.**

Encourage groups to move quickly. Steps 1, 2, and 3 do not need much discussion. Spend more time discussing the Steps 4, 5, 6, 7, 8, and 9. More details on many of the points will be covered in later sessions. Step 10 can serve as a conclusion emphasising that many mothers need support.

After the allocated time, the trainer in each group summarizes the session as follows on page 56.
Exercise 3.1 Importance of the Baby Friendly Hospital Initiative

NOTES FOR SMALL GROUP DISCUSSION

☐ Read out each of the Ten Steps to Successful Breastfeeding in turn. Then ask the question that follows that Step. Encourage participants to think of some of the points that follow. Explain points that they do not mention.

**Step One: Have a written breastfeeding policy that is routinely communicated to all health care staff.**

**Does the hospital breastfeeding policy need to change?**

No, the policy does not need to be re-written. Additional points can be added:

- where voluntary counselling and testing are available, that this is available to assist women to make their decisions regarding infant feeding;
- that mothers infected with HIV will be supported in their infant feeding decision;
- that most women are not infected and breastfeeding should continue to be promoted, protected and supported.

It is just as important to ensure that the hospital does not receive free supplies of formula from manufacturers, or give mothers free samples, or allow any promotion of formula, even if some mothers are giving replacement feeds. We will discuss this again in Session 12.

**Step Two: Train all health care staff in skills necessary to implement this policy.**

**Do health care staff need additional training in how to assist women who are HIV-positive to decide how to feed their infant?**

Even where there is a high prevalence of HIV, staff need to be trained in breastfeeding counselling, to support all women who choose that option.

Also health care staff need at least an awareness of how HIV is transmitted (and how it is not transmitted) and the risk associated with decisions about whether or not to breastfeed.

- Attitudes of staff to HIV may need to be addressed and staff reminded that the mother's decision should be supported.
- Staff needs information on preparation and use of adequate replacement feeding and the skill to teach this to mothers and other caregivers.
- Staff needs to be aware that the use of artificial feeding can spread to women who are not HIV-positive and they need to be aware of how to prevent it.3

**Step Three: Inform all pregnant women about the benefits and management of breastfeeding.**

**What should be included about HIV in antenatal care?**

This was discussed earlier – to provide general information on HIV and breastfeeding, to offer VCT and individual infant feeding counselling.

**Step Four: Help mothers to initiate breastfeeding within a half-hour of birth.**

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3 This spread of artificial feeding is called “spillover”. It is discussed later in Session 12.
Should mothers who are HIV-positive have early skin-to-skin contact if they are not breastfeeding?

Yes, cuddling the baby cannot transmit HIV. Mothers who have chosen not to breastfeed need encouragement to hold, cuddle and have physical contact with their babies from birth onwards. This helps a mother to feel close and affectionate toward her baby.

- Mothers who are HIV-positive and who have decided to breastfeed, should be assisted to put the baby to the breast soon after delivery in the usual way.

Step Five: Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.

How does this Step apply to a mother who is HIV-positive?

If she has decided to breastfeed, she needs assistance and support to establish breastfeeding, to use a good technique to prevent nipple damage and mastitis, and to breastfeed exclusively. Participants have learned this from Breastfeeding Counselling: A training course. In addition, they should be aware that:

- Breastmilk is particularly valuable for sick or low birth weight infants. Expressing and heat treating breastmilk is an option for HIV-positive mothers and they will need help to do this.
- If a mother has decided to use a wet nurse who is HIV-negative, also discuss breastfeeding with the wet nurse and help her to get started or to relactate.
- Mothers who choose not to breastfeed need to discuss what alternative milk they will use, and how they will prepare it and give it to the baby. Instruction should be given privately and confidentially to avoid stigmatising the mother and to avoid adverse influence on breastfeeding mothers.
- Mothers who have decided not to breastfeed may need help with breast care while waiting for their milk production to cease.

Step Six: Give newborn infants no food or drink other than breastmilk, unless medically indicated.

How does this Step apply to a mother who is HIV-positive?

- If a mother has been counselled, tested and found to be HIV-positive and has decided not to breastfeed, this is an acceptable medical reason for giving her newborn infant other milks in place of breastmilk.
- Even if many mothers are giving replacement feeds, this does not prevent a hospital from being designated as baby-friendly, if those mothers have all been counselled and offered testing and made a genuine choice.
- If a mother chooses to breastfeed she needs help to do so exclusively.
**Step Seven: Practise rooming-in. Allow mothers and infants to remain together 24 hours a day.**

*How does rooming-in apply to an HIV-positive mother?*

- All healthy babies benefit from being near their mother, rooming-in or bedding-in.
- Mothers who are HIV-positive do not need to be separated from their babies. General mother-to-child contact does not transmit HIV.
- Mothers who are not breastfeeding need to have plenty of physical contact with their infants as this helps bonding.
- Mothers who are not breastfeeding need to have responsibility for preparing feeds and cup feeding their infant while in hospital. The staff can assist them, so they learn to prepare every feed consistently.

**Step Eight: Encourage breastfeeding on demand.**

*How does this Step apply?*

- Babies differ in their hunger. Their individual needs should be respected and responded to for both breastfed and artificially fed infants.

**Step Nine: Give infants no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.**

*How does this Step apply?*

- Teats, bottles and pacifiers can carry infection and are not needed, even for the non-breastfeeding infant.
- Cup feeding is recommended, as a cup is easier to clean and also ensures that the baby is held and looked at while feeding. It takes no longer than bottle feeding.4
- If a hungry baby is given a pacifier instead of a feed, he may not grow well.
- Babies can be encouraged to suck on the mother’s clean finger or other body areas other than the nipple, if not breastfeeding.

**Step Ten: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic.**

*How does this Step apply?*

- Many mothers need support regardless of their feeding method. Mothers with HIV who are not breastfeeding in a community where most mothers breastfeed may need extra support from a group specially concerned with HIV.

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4 Cup feeding is discussed in detail in Session 8.
V. Summarize the session

3 minutes

☐ Conclude with these points:

- In this session, we discussed:
  - Practices to prevent MTCT of HIV can be part of general MCH care. This can help HIV-positive women to receive better care, and can help to increase openness about HIV, and reduce fear and stigma.
  - Some practices which help to prevent MTCT of HIV do not depend on knowing a woman’s HIV status. These can be introduced everywhere.
  - Information about HIV can be included in health education. Voluntary counselling and HIV testing can be encouraged; and infant feeding counselling and support for breastfeeding or alternative methods of feeding can be integrated into existing MCH care.
  - Baby friendly practices improve conditions for all mothers and babies, including those who are not breastfeeding. Efforts to introduce the Baby Friendly Hospital Initiative should be strengthened in areas where HIV is prevalent.
Session 4
Breastmilk Options

Objectives:
At the end of this session, participants should be able to:
– List the advantages of breastfeeding or of using breastmilk;
– Describe good breastfeeding technique;
– Explain the method of stopping breastfeeding early;
– Discuss wet nursing and finding a wet nurse;
– Explain how to heat-treat expressed breastmilk.

Outline:

<table>
<thead>
<tr>
<th>Total time - 90 minutes</th>
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<tbody>
<tr>
<td>I. Introduce the session</td>
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<tr>
<td>II. Review the advantages of breastfeeding</td>
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<tr>
<td>III. Review the management of breastfeeding</td>
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<tr>
<td>IV. Explain about stopping breastfeeding early</td>
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<tr>
<td>V. Discuss breastfeeding by another woman who is HIV-negative</td>
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<tr>
<td>VI. Describe how to heat-treat expressed breastmilk</td>
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<tr>
<td>VII. Summarize the session</td>
</tr>
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</table>

Before the session
You will need:
Overhead 4/1
A doll and a model breast

😊 Ask a participant to assist you with Demonstration 4/1

If this course is given immediately following Breastfeeding counselling: A training course, then one can omit Section III, Review the Management of Breastfeeding.
I. **Introduce the session**

- Make these points:
  
  - All health workers who care for mothers and infants need to know how breastfeeding works, and how to help mothers to breastfeed. They need this competence to help both HIV-negative and HIV-positive mothers.\(^1\)
  
  - We mentioned in Session 2 several breastmilk options that HIV-positive mothers may choose. These include:
    - breastfeeding in the usual way for up to two years or more
    - breastfeeding exclusively and stopping early
    - expressing and heat treating her breastmilk
    - asking an HIV-negative woman to feed the baby (called “wet-nursing”)
  
  - In this session we will discuss how to help a woman to use any of these options, and to do it as safely as possible.

II. **Review the advantages of breastfeeding**

*Ask: Why might a woman who is HIV-positive consider that breastfeeding is her best choice?*

- Ask participants to keep their manuals closed at this time.
  
  - Write participants’ replies on the flipchart. The list may include the points below as well as others. Include on the flipchart any points that participants did not mention.

  - The woman may see advantages to breastfeeding such as:
    - Breastmilk **provides ideal nutrition** for her infant.
    - Breastfeeding **protects against many infections**.
    - Breastfeeding **delays the return of her fertility** helping to space the next pregnancy.
    - Breastfeeding **provides closeness and contact** between her and her baby that helps psychological development.

  - The woman may see disadvantages or risks to not breastfeeding:
    - Her child is likely to get **sick more often**.
    - Preparing and giving alternatives to breastfeeding takes **more time** and is less convenient than breastfeeding.
    - To feed a baby in another way is **expensive**. The family has to buy breastmilk substitutes, fuel and water. This makes it more difficult to buy enough food for other members of the family and pay for health care, which may result in poorer health for the whole family.

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\(^1\)Participants who are not familiar with the basic management of breastfeeding and milk expression need to acquire this knowledge before doing this course.
- A woman who does not breastfeed may be criticised by her family or others in the community and told that she is not a good mother.
- Not breastfeeding may lead to stress in family relationships, particularly between husband and wife.
- In an area where most mothers breastfeed, not breastfeeding may identify a woman as HIV-positive. She may be blamed, avoided or punished by others in her family and community. This is called social stigma.
- A woman who does not breastfeed may feel less close to her infant. She may feel sad and disappointed if she is not able to breastfeed. Breastfeeding is usually a pleasurable experience. Most women grow up expecting to breastfeed and they look forward to it.

If a woman does breastfeed, it is important for her to breastfeed exclusively. She also needs to use a good technique to prevent nipple fissure and mastitis, both of which may increase the risk of HIV transmission.

III. Review the management of breastfeeding

30 minutes

☐ Make these points:

- Production of breastmilk and transfer of the milk from the breast to the baby depends on suckling. To suckle effectively, a baby needs to be well attached to the breast.

☐ Show Overhead 4/1 - Attachment and point out the following signs:

Attachment

| Good attachment | Poor attachment |

[Diagram of good and poor attachment]

If participants have just completed the Breastfeeding counselling course: A training course or equivalent, this section may be omitted.
When you counsel a breastfeeding mother, always observe a breastfeed. If a baby is well attached at the breast you will see:
- more areola above the baby’s mouth than below it;
- his mouth wide open;
- his lower lip turned out;
- his chin touching the breast.

If a baby is well attached, you also notice effective suckling – that is, slow deep sucks, sometimes pausing; and you may hear swallowing.

If a baby is not well attached, the milk does not flow well. The infant may be unsatisfied, or feed too often or for too long, and may fail to gain weight. The mother may believe that she does not have enough milk.

Important causes of poor attachment are a mother being inexperienced, and lacking skilled help; and the baby sucking from a bottle or pacifier.

If a baby is not well attached or not suckling effectively, show the mother how to improve her baby’s position and attachment.

Demonstration 4/1: Helping a mother to position her baby

Ask a participant to be the “mother”, and use a doll for the baby. She sits pretending that she is breastfeeding her baby while you explain the points to look for when helping a mother.

Ask the other participants to turn to page 26 in their manuals, where they will find BOX 4.1 HOW TO HELP A MOTHER TO POSITION HER BABY. Ask them to follow the points while you give the demonstration.

Go through the steps for helping a mother to attach her baby to her breast using the points listed in BOX 4.1.

At the end, thank the participant for assisting with the demonstration.
BOX 4.1
HOW TO HELP A MOTHER TO POSITION HER BABY

- Greet the mother and ask how breastfeeding is going.
- Assess a breastfeed.
- Explain what might help, and ask if she would like you to show her.
- Make sure that she is comfortable and relaxed.
- Sit down yourself in a comfortable, convenient position.
- Explain how to position her baby, and show her if necessary.
- The four key points of positioning are to hold the baby:
  - with his head and body straight;
  - facing the mother’s breast, with his nose opposite her nipple;
  - with his body close to her body;
  - with his whole body supported, not just his neck and shoulders.
- Show her how to support her breast:
  - with her fingers against her chest wall below her breast;
  - with her first finger supporting the breast;
  - with her thumb above.
- Her fingers should not be too near the nipple.
- Explain or show her how to help the baby to attach:
  - touch her baby's lips with her nipple;
  - wait until her baby's mouth is opening wide;
  - move her baby quickly onto her breast, aiming his lower lip below the nipple.
- Notice how she responds and ask her how her baby's suckling feels.
- Look for signs of good attachment.
- If the attachment is not good, try again.
Make these additional points:

- Good breastfeeding technique includes breastfeeding frequently – at least 8 times in 24 hours. Breastfeeding should be on demand, and there should be no restrictions on the frequency or duration of a feed.

- If an infant's weight gain is low at any point in the first six months, first check the attachment, and help the mother to improve it if necessary. Then suggest that she increase the frequency of feeding, and let the baby feed for as long as he/she wants at each feed.

- If she is giving other foods or drinks, and the infant is less than 4 months old, suggest that she decrease and if possible stop them. If she is HIV positive, it is especially important that she avoids giving both breastfeeds and other milks, drinks or foods, as this may increase the risk of HIV transmission.

**Preventing and treating mastitis**

Make these points:

- Good breastfeeding technique, with good attachment and frequent removal of milk, helps to prevent nipple fissure and mastitis. To treat these conditions, the usual recommendation is to improve the baby’s attachment, increasing the frequency and duration of feeds.

- However in a woman who is HIV-positive, mastitis or nipple fissure (especially if bleeding or oozing) may increase the risk of HIV transmission.

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

Wait for a few replies, then continue. Ask participants to keep their manuals closed at this time.

- If an HIV-positive 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, by hand or pump or warm bottle technique\(^3\), to ensure adequate removal of milk. This is essential to prevent the condition 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.

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\(^3\) Warm bottle technique is explained in *Breastfeeding Counselling: A training course*, page 112, Participants’ Manual.
Antibiotic treatment will usually be indicated in the woman with HIV.\textsuperscript{4} The chosen antibiotic must be given for an adequate length of time. Ten to fourteen days is now recommended by most authorities to avoid relapse.

Pain should be treated with an analgesic – ibuprofen or paracetamol. The application of warm packs to the breast both relieves pain and helps the milk to flow. Rest is essential, in bed if possible. Ensure that the woman drinks sufficient fluids.

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 home prepared or commercial formula. The infant should be fed by cup.

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.

\textbf{IV. Explain about stopping breastfeeding early} \hspace{1cm} 15 minutes

Make these points:

- We know that HIV can be transmitted at any time during breastfeeding. If a baby becomes infected after about 2-3 months this is called “late postnatal transmission”.

- A mother who is HIV-positive may decide to breastfeed initially and change to another way of feeding when this becomes easier for her. Stopping breastfeeding early reduces the risk of transmission of HIV by reducing the length of time the infant is exposed to the virus in breastmilk.

- The most appropriate time to stop breastfeeding depends on the mother's particular situation, and may be any time between 3 and 6 months. However, about 4 months is often suitable, when it is easier for a child to digest other foods and the risks of using them are less.

\textsuperscript{4} Generally oral antibiotics are used - erythromycin, flucloxacillin, dicloxacillin, amoxacillin, cephalaxin. See \textit{Mastitis: causes and management} WHO/FCH/CAH/00.13 for further information.
Ask: *In what situations might a mother choose to stop breastfeeding early?*

Let participants give their suggestions. Focus on why she would change her feeding decision rather than discussing general problems that cause mothers to stop breastfeeding, such as perceived low milk supply.

- An HIV-positive mother might decide to stop breastfeeding early if she:
  - finds it difficult for social or cultural reasons to avoid breastfeeding completely;
  - can only provide adequate replacement feeds after her infant is a few months old;
  - becomes ill with AIDS while breastfeeding.

- When a mother stops breastfeeding early, she needs counselling about replacement feeding, and support for her decision.

Ask: *What does a mother need to do if she decides to stop breastfeeding early?*

Ask participants to keep their manuals closed at this time.

→ Write participants’ replies on the flipchart. Include the following points if they are not mentioned:

- A mother needs to consider a number of points:
  - She needs to find a **regular supply of another kind of milk** and learn how to prepare it safely. If her infant is less than six months old, she will probably need formula (home-prepared or commercial) for all feeds. Cereals or juices are not usually needed before six months and are not an adequate substitute for breastmilk.
  - She needs to **teach her baby to cup feed**. Introducing cup feeding at a time when her baby is not very hungry may be more acceptable.
  - She needs to ensure **continuing physical contact** with her baby, such as cuddling, carrying, sleeping together, and massage, to replace the contact lost when breastfeeding stops.
  - She needs to **think about family planning** as soon as she starts to introduce any other feeds because her fertility is likely to return when she breastfeeds less.
  - She **needs help and support** to do all these things.
Ask: How can a mother make the change over from breastfeeding to replacement feeding?
Let participants comment.

- She needs to make the change as quickly as possible. It is important that she does not give a mixture of formula and fresh breastmilk feeds, as this might increase the risk of transmission.

- Before she stops breastfeeding, she can express some of her breastmilk, and give it to her baby by cup, so that he gets used to this way of feeding.

- When she stops breastfeeding, she can continue feeding the baby by cup, using home prepared or commercial formula. If she likes she can continue to give some expressed breastmilk, but she needs to heat treat it if she is giving formula at the same time.

Ask: What has to be done to stop the production of milk?
Let participants reply, then continue.

- A woman’s milk dries up naturally if her baby stops suckling, but this takes a week or more. She needs to express enough milk to keep her breasts comfortable and healthy while this happens. If she wishes she can heat treat the milk and feed it to her baby by cup, as well as giving other milk. This may help to accustom her baby to the change.

Further information
Stopping breastfeeding quickly can lead to engorgement and mastitis and if they are not relieved, to an abscess. Breastmilk production is controlled by hormones and also locally within the breast itself. There is a substance in breastmilk that can reduce or inhibit milk production. (called the Feedback Inhibitor of Lactation –FIL) If a lot of milk is left in the breast, this inhibitor stops the cells from secreting any more. This helps protect the breast from the harmful effects of being too full.

Expressing a small amount of milk helps keep the mother comfortable without increasing the production of milk. The mother should express enough milk to keep comfortable. This will be less than the baby takes, so production will decrease, and eventually stop.

Ask participants to turn to their manual, page 28 and read out point by point BOX 4.2 RELIEVING ENGORGEMENT IN A MOTHER WHO IS NOT BREASTFEEDING
BOX 4.2
RELIEVING ENGORGEMENT IN A MOTHER WHO IS NOT BREASTFEEDING

- Support the breasts well to make her more comfortable. (However, do not bind the breasts tightly, as this may increase her discomfort.)

- Apply compresses. Warmth is comfortable for some mothers, while others prefer cold compresses to reduce swelling.

- Express enough milk to relieve discomfort. Expression can be done a few times a day when the breasts are overfull. It does not need to be done if the mother is comfortable. It will be less than her baby would take and will not stimulate increased milk production.

- Relieve pain. An analgesic, such as ibuprofen or paracetamol may be used. Some women use plant products such as teas made from herbs or plants, such as raw cabbage leaves, placed directly on the breast to reduce pain and swelling.

The following are not recommended:
Pharmacological treatments to reduce milk supply. The above methods are considered more effective in the long term.

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5 Aspirin should not be used by breastfeeding women.
6 Pharmacological treatments which have been tried include:
   - Stilboestrol (diethylstilbestrol) - side effects include withdrawal bleeding, and thromboembolism. Contraindicated if woman might be pregnant due to risk of foetal abnormalities.
   - Oestrogen - breast engorgement and pain reduces but these may recur when the drug is discontinued.
   - Bromocriptine - inhibits prolactin secretion. Side effects including maternal deaths, seizures and strokes. Withdrawn from use for postpartum women in many countries.
   - Cabergoline - inhibits prolactin secretion. Considered safer than bromocriptine. Possible side effects include headache, dizziness, hypotension, nose bleed.
V. Discuss breastfeeding by another woman who is HIV-negative 10 minutes

Make these points:

- Asking another woman who is HIV-negative to breastfeed the baby may be an option. When a woman breastfeeds a baby to whom she did not give birth, it is called wet nursing.

- If a woman expresses her milk for another baby, it is called donor breastmilk.

Further information:

Some hospitals may have breastmilk banks for sick or low birth weight infants where the donors are screened for HIV. The milk is also pasteurised. Using donor banked milk is usually a short-term option and another way of feeding will probably need to be discussed with the mother later.

Ask: Is breastfeeding another women’s baby accepted in your area?

Discuss for a minute or two the cultural acceptability of using milk from another mother.

- A woman may breastfeed a close relative’s baby occasionally, or even regularly. For example, a baby may be cared for by an aunt, who has a child of her own, while his mother is out. His mother is delayed returning home and the aunt breastfeeds the baby.

- A woman may breastfeed a baby whose mother has died. A woman who has not breastfeed for a long time may put the baby to her breast, and after some days can produce milk. This is called relactation, and it is possible even for a postmenopausal woman such as a baby's grandmother.

- If a woman is currently breastfeeding one baby, with extra suckling, her milk production can increase enough to feed a second baby. It is important to monitor the growth of both babies during this time to ensure that they are both receiving sufficient milk.

- A woman who is breastfeeding another infant will need to have sufficient rest, food and water for herself. The cost of nourishing her is usually less than the cost of providing replacement feeding for an infant.

Ask: How can a baby's own mother keep her bond with a baby who is breastfed by another woman?

Let participants give their ideas.

- The baby's own mother, if she is able, can provide as much of the other care of the baby as possible - cuddling, changing, washing, and later complementary feeding. This contact helps to build the bond between mother and baby.

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7Relactation is fully discussed in the document *Relactation: a review of experience and recommendations for practice.* WHO/CHS/CAH/98.14
Ask: *What is it necessary to consider when arranging for another woman to breastfeed a baby?*

Wait for a few replies, then continue.

_ask_ Ask participants to open their manuals at page 29 and to read out the points in turn from BOX 4.3 FINDING ANOTHER WOMAN TO BREASTFEED A BABY

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**BOX 4.3**

FINDING ANOTHER WOMAN TO BREASTFEED A BABY

- The reason for asking another woman to breastfeed a baby is to reduce the risk of him or her acquiring HIV. Therefore the other woman needs to be counselled, tested and shown to be HIV-negative.

- The other woman, if sexually active, also needs to be counselled about safer sex practices so that she does not acquire the virus during the breastfeeding period.

- If the baby is already infected with HIV, there is a small possible risk of transmission of the virus from the baby to the wet nurse. If a family is considering the option of wet nursing, both the mother and the wet nurse should be fully informed and counselled about the risk.

- The wet nurse should be available to breastfeed the infant as frequently and for as long as needed.

- The wet nurse also needs access to breastfeeding support and assistance to establish effective breastfeeding, to prevent and to treat conditions such as nipple fissure and mastitis if necessary.

- It is important for the mother to stay close to the baby, and to care for him or her as much as possible herself, so that she bonds with her baby. The baby will bond with the woman who breastfeeds him or her, but can bond to the mother as well in the same way that a baby often bonds closely with a grandmother.

- If a family member can be found to breastfeed the baby, this may make the situation with bonding easier than if someone from outside the family is chosen.
VI. Describe how to heat-treat expressed breastmilk

Make these points

Expressing and heat-treating breast milk is another option to consider:
- if a mother wishes to give her baby her own milk;
- if alternative milks are too expensive or difficult to get;
- for sick or low birth weight infants who are more at risk from artificial feeding and may otherwise require special types of formula.

According to available research, heat treatment destroys HIV in breastmilk making it safe to feed to the woman's own baby. Heat treatment reduces the level of some anti-infective components of breastmilk. However heat-treated breastmilk remains superior to breastmilk substitutes.8

Ask participants to find BOX 4.4 HOW TO EXPRESS BREASTMILK BY HAND on page 30 in their manual.

Make this point:

BOX 4.4 outlines the main points for teaching a mother how to express breastmilk by hand.9 It is easier to teach the mother when the breasts are soft rather than when they are engorged and tender. The mother can stimulate her nipples or massage or stroke her breasts to stimulate the oxytocin reflex before she expresses her milk.

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8 Breastmilk should not be heat-treated unless necessary. Breastmilk from an HIV-negative or untested mother does not need to be heat treated if the milk is for her own baby. Heating reduces the immune components and enzymes in the milk. Infants fed on heat-treated breastmilk do not need extra micronutrients. Do not heat-treat milk just ‘in case’ the mother is HIV-positive.

9 Hand expression is covered in detail in Breastfeeding counselling: A training course, session 20.
BOX 4.4
HOW TO EXPRESS BREASTMILK BY HAND

Teach a mother to do this herself. Do not express her milk for her. Touch her only to show her what to do. Be gentle.

Teach her to:

- 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.
- Press her thumb and first finger slightly inwards towards the chest wall. She should avoid pressing too far because that can block the milk ducts.
- Press her breast behind the nipple and areola between her finger and thumb. She must press on the lactiferous sinuses beneath the areola. Sometimes in a lactating breast it is possible to feel the sinuses. 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: What does a mother need to heat-treat her breastmilk?

Wait for a few replies, then continue.

Ask participants to turn to page 31 of their manual and read out the items needed from BOX 4.5 REQUIREMENTS FOR FEEDING EXPRESSED AND HEAT-TREATED BREASTMILK.

---

**BOX 4.5**

**REQUIREMENTS FOR FEEDING EXPRESSED AND HEAT-TREATED BREASTMILK**

The mother needs:

- **Clean containers** to collect and store the milk. A wide necked jug, jar, bowl or a cup can be used.\(^{10}\) Once expressed, the milk should be stored with a well fitting lid or cover.
- **A small pan** to heat the milk;
- **Fuel** to heat the milk;
- **Water and soap** to clean the equipment;
- **A small cup for feeding the baby.**\(^{11}\)

---

**How a mother can heat-treat her breastmilk**

- Make these additional points:
  
  - If she is in hospital where there is a pasteuriser that can control the temperature, the milk can be heated to 62.5\(^{0}\)C for 30 minutes.
  
  - If she is at home, she can heat her expressed breastmilk to boiling point in a small pan and then allow it to cool.
  
  - Freshly expressed breastmilk can be stored for up to 8 hours at room temperature. It must be covered and kept as cool a place as possible.\(^{12}\) After heat-treating the milk, it should be used very soon (within one hour if it is possible to time it).
  
  - The heat-treated milk will be too hot to use immediately. Remind the mother it will need time to cool before she feeds it to the baby.

---

\(^{10}\) Glass, stainless steel, tin or ceramic containers with a lid or cover are recommended for storing the milk. Containers made of copper or brass should be avoided for milk storage. Plastic containers can be easily scratched when cleaning which increases the risk of contamination. Some plastics cannot be cleaned in very hot water. If used, they should be replaced frequently.

\(^{11}\) How to cup feed is reviewed in Session 8.

\(^{12}\) Fresh breastmilk may be stored in a refrigerator for 24 hours. Heat-treat immediately prior to use.
A mother may be able to follow her infant’s sleeping pattern and prepare feeds ready for when she expects the infant to wake. If necessary, to avoid leaving the milk too long, or wasting it, she may sometimes have to wake her infant for a feed.

**Ask:** *How could a mother heat-treat her milk in a fuel-saving way?*

Wait for a few replies, then continue.

- To avoid having to use more fuel than necessary it may be possible to heat-treat the milk while cooking the family's meals.

- Discuss with the mother how she will manage the time required to boil her milk and to clean her equipment, and the need for extra fuel and water.

---

**VII. Summarize the session**

3 minutes

- Make these points:

  - In this session, we discussed how a mother who is HIV-positive may decide that breastfeeding is her best option and that she should be supported to establish and maintain it.

  - If she breastfeeds, she should make sure that her infant is well attached at the breast, to prevent nipple fissure and mastitis, which may increase the risk of transmission of HIV.

  - She should breastfeed exclusively, giving no other foods or fluids including water, for at least the first 4 and if possible for the first 6 months. This will minimise the risk of diarrhoea and other infections. Also, the risk of HIV transmission may be less with exclusive than with mixed feeding.

  - Stopping breastfeeding early may be an option for some mothers when replacement feeding is difficult in the first few months, but later becomes more easily available or acceptable.

  - Breastfeeding by another woman may be an option if an HIV-negative wet nurse is available. The baby's own mother should continue to care for the baby as much as possible.

  - Mothers who are HIV-positive can express and heat-treat their own breastmilk to feed to their baby.
Session 5
Replacement Feeding in the First Six Months

_objectives:_
At the end of this session, participants should be able to:
- Describe breastmilk substitutes that can be used for replacement feeding;
- List foods that are unsuitable in the first six months;
- Describe how milks can be modified for infant feeding;

_outline:_
Total time - 60 minutes

I. Introduce the session 5 minutes
II. Demonstrate locally available milks 30 minutes
III. Describe how milks can be modified to make replacement feeds 10 minutes
IV. Decide which milks to prepare in Session 11 5 minutes
V. Discuss stigma with replacement feeding 10 minutes

_before the session:_
You will need to:

Collect containers, tins, packets, of all milks available locally, whether or not suitable for infants, including those provided by social service organisations and supplemental nutrition programs. Make sure that you have obtained the full range of currently available products. Find out which milks are full fat, semi-skimmed or skimmed.

Put all the packets, tins and cartons of milk together on a table in front of the class divided by type – fresh, tinned, powdered milks or commercial formula.

Make two large signs – “Possible for replacement feeding 0-6 months” and “Unsuitable for replacement feeding 0-6 months”. Put the signs on different small tables, or at different ends of a large table. You will put the various milks beside these signs after participants have assigned them.

Find out what micronutrient supplements are available locally and which would be suitable for replacement feeding. Find out if any are provided specifically for use in prevention of MTCT programmes, e.g. UNICEF’s Micronutrient Supplement for Replacement Feeding.
I. **Introduce the session**  

- **5 minutes**

☐ Make these points:

- A mother who has been counselled on infant feeding options may decide to use replacement feeding. So, we need to discuss what this mother could use to feed her baby.

- Earlier we saw this overhead and defined replacement feeding as:

☐ Show **Overhead 2/6 - Replacement Feeding** and read out the definition.

```
Replacement feeding

is the process of feeding a child who is
- not receiving any breastmilk,
- with a diet that provides all the nutrients the child needs,
- until the child is fully fed on family foods.
```

- A child may change from breastfeeding or a modified form of breastfeeding, such as expressed breastmilk, to replacement feeding at any age. Adequate replacement feeding is needed throughout the time the child is at greatest risk of malnutrition: that is until the child is at least two years old.

- If an infant is not getting breastmilk, milk in some other form is needed for at least the first six months.

- From about 6 months of age, a child needs adequate complementary foods, but it is also useful if some kind of milk is part of the diet up to two years of age or more.

- Foods and drinks that are given to infants instead of breastmilk are called *breastmilk substitutes*. The term covers milks and other foods and drinks which may be given, but which are not suitable for this purpose – for example, dilute cereal feeds - as well as those which are suitable.

- In order to adequately feed a baby on breastmilk substitutes, the supply of milk must be reliable and uninterrupted. If fresh milk is only available in certain seasons or the shop has stocks of powdered or tinned milk only sometimes, the supply is not reliable. Mothers may not want to choose that milk.

- As well as a source of milk, the child’s mother will need water, fuel and utensils to prepare the replacement feeds. She will also need extra time.
II. Demonstrate locally available milks

30 minutes

☐ Indicate the table with all the different packets, tins and cartons of milk mixed together. Make these points:

- On this table you can see most of the different kinds of milk that are available here. We will look at each of them in turn and try to decide if:
  - it is possible to use it for replacement feeding,
  - modification might be needed to make it possible,
  - it is unsuitable for an infant under six months.

☐ Hold up each different kind of milk in turn. Discuss them by type – fresh, tinned, powdered milks, or commercial formula. In each type, there may be some which are possible, some which need modification and some which are unsuitable. Discuss the milks available locally. Leave out the sections describing milks that are not available locally.

☐ Start with Group 1: Fresh liquid milk

ครอบครัว First show each kind of milk and ask a participant to place it on the table labelled “POSSIBLE” or “UNSUITABLE”.

☐ When the participants have decided on which table to put each milk in this group, discuss each kind of milk from that group in turn, making the points below. As you discuss each milk, praise the participants for those that they have put into the correct group. If they put one into the incorrect group, ask them if they want to reassign it.

- First we will look at fresh liquid milk.

- **Whole cow’s milk** is the commonest, or you may have buffalo or goat’s milk. It may be available in cartons or bottles or people may collect it in their own containers. Sometimes the fresh milk available in the market has already been diluted or some of the cream removed.

☐ Check which table this milk has been put on. Praise if correct or re-assign.

- This milk needs to be modified for an infant, but it can be in the POSSIBLE group. We will talk about how to modify it later.

- **Skimmed milk** has the fat (cream) removed and therefore the energy level is low. Most of the vitamins A and D are also removed because they are in the milk fat. (UNSUITABLE table)

- **Semi-skimmed milk, which contains 2% fat**, is sometimes available. Milk normally contains more fat than this – about 3.5-4%. A baby may need additional energy if semi-skimmed milk is used. (This milk also should be on the UNSUITABLE table.)

Further information

1 If milk from a camel, buffalo or other animal is common, include information on its use.
Pasteurisation heats the milk to a temperature below boiling. This milk keeps for a day or two in a clean, cool place, but still needs to be boiled soon before use for an infant.

Ultra high temperature (UHT) treatment heats the milk to a very high temperature for a few seconds. This kills all the bacteria so the milk keeps for several months if it is sealed in clean containers.

Sterilisation heats the milk above boiling point for several minutes. This kills the bacteria and the milk keeps for several months in a sealed clean container. Sterilisation changes the taste and destroys many vitamins especially folate. Some studies show that sterilised milk may be more likely to cause necrotising enterocolitis (NEC), so it is considered UNSUITABLE.

Homogenised milk has been treated so that the cream does not rise to the top. This process does not kill bacteria and it needs to be boiled soon before use for an infant.

☐ Make sure that all the fresh liquid milks are assigned to the correct table - POSSIBLE or UNSUITABLE.

☐ Continue with Group 2: Tinned liquid milks.

😊 First show each kind of milk and ask a participant to place it on the table labelled “POSSIBLE” or “UNSUITABLE”.

☐ When the participants have decided on which table to put each milk in this group, discuss each kind of milk from that group in turn, making the points below. As you discuss each milk, praise the participants for those that they have put into the correct group. If they put one into the incorrect group, ask them if they want to reassign it.

- Next we will look at tinned liquid milks.

- **Evaporated milk** is sterilised, has some of the water removed, and is sealed in cans. Sometimes the fat content is altered. The processing destroys vitamin C and folate but extra vitamins may be added. Diluted with water, it has a similar composition to fresh milk. (POSSIBLE table)

- **Condensed milk** has some of the water removed but a lot of sugar has been added. This extra sugar makes bacteria grow more slowly when the tin is opened. Also, the fat level may be reduced. This balance of fat and sugar in condensed milk make it very different from evaporated milk. (UNSUITABLE table)

☐ Make sure that all the tinned liquid milks are assigned to the correct table, POSSIBLE or UNSUITABLE.
Now discuss **Group 3: Powdered milk**

First show each kind of milk and ask a participant to place it on the table labelled “POSSIBLE” or “UNSUITABLE”.

When the participants have decided on which table to put each milk in this group, discuss each kind of milk from that group in turn, making the points below. As you discuss each milk, praise the participants for those that they have put into the correct group. If they put one into the incorrect group, ask them if they want to reassign it.

- The next type of milk we look at is powdered milk.

- **Full cream powdered milk** is whole cow's milk that is dried to a powder. Much vitamin C and some B vitamins are lost, but the protein, fat, minerals and most of the vitamins A and D remain. It can be made up with water to the strength of whole fresh milk. (POSSIBLE table)

- If using powdered whole milk check the “Use By” date to ensure that the powder is still fresh.

- Show participants where to find the Use by Date on the tin and where the label gives the fat level.

- **Dried skimmed milk** has the fat and fat soluble vitamins removed. (UNSUITABLE table)

- Most modified powdered milks, such as “creamers” used for “whitening” tea or coffee or various filled milks, may have the animal fat removed and replaced with vegetable fat. Sugar may also be added and ingredients to make it dissolve easily. (UNSUITABLE table)

- Make sure that all the powdered milks are assigned to the right table, POSSIBLE or UNSUITABLE.

Discuss **Group 4: Commercial infant formula**

First show each kind of milk and ask a participant to place it on the table labelled “POSSIBLE” or “UNSUITABLE”.

When the participants have decided on which table to put each formula in this group, discuss each kind of formula from that group in turn, making the points below. As you discuss each formula, praise the participants for those that they have put into the correct group. If they put one into the incorrect group, ask them if they want to reassign it.

- The last group to discuss is commercial infant formula.
- **Commercial infant formula** is usually made from cow's milk that has had the fat removed and is dried to a powder. Another form of fat (often vegetable fat), sugar and micronutrients are added. It needs only water added before use.

- You may have **Generic Formula** available. The composition is the same as branded commercial formula. The only difference is in the way in which it is marketed and distributed. It is also labelled more simply.

**Further information**

Formula from cow’s milk may be processed to be high in whey proteins. This formula may be easier for the young infant to digest. Formula that is high in casein protein can be more difficult for the young infant to digest as it forms thick curds in the infant’s stomach. The higher protein and mineral level make it less suitable for young infants.

- **Soya infant formula** uses processed soya beans as the source of protein and comes in powdered form. Usually it is lactose-free and has a different sugar added instead.\(^3\) (POSSIBLE table)

- **Follow-on (or follow-up) milks** are marketed for older infants (over six months). They contain higher levels of protein and are less modified than infant formula. Follow-on Milks are not necessary. A range of ordinary milk products can be used over six months of age and micronutrients supplements also given. (UNSUITABLE table)

- **Low birth weight or preterm formula** is manufactured with higher levels of protein and certain minerals and a different mixture of sugars than ordinary formula for full-term infants. Low birth weight formula is not recommended for healthy, full term infants. The nutritional needs of low birth weight infants should be individually assessed. (UNSUITABLE table)

- **Specialised formulas** are available to use in conditions such as lactose intolerance, allergic conditions and metabolic diseases like phenylketonuria. These formulas are altered in one or more nutrients and should only be used for infants with the specific conditions under medical/nutritional supervision. (UNSUITABLE table)

- Make sure that all the commercial infant formulas are assigned to the correct table, POSSIBLE or UNSUITABLE.

- You now have all the milks and formula that you collected divided into “Possible for replacement feeding 0-6 months” or “Unsuitable for replacement feeding 0-6 months”.

*Ask: What foods and drinks other than milk are sometimes used to feed infants below 6 months?*

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\(^2\)If a type of manufactured formula is not available locally, do not spend time discussing it. Generic formula only differs in the way it is marketed and distributed. The nutrients are similar to regular commercial formula. FAO/WHO Codex Alimentarius defines food standards including formula and micronutrients.

\(^3\)There are also soya milks available that are not specially formulated for babies and if used, need special modification and the addition of micronutrients.
Make a list on a flipchart of what participants’ report. For each one, discuss if it is possible or unsuitable, and why, and mark it accordingly. Below is a list of some foods and drinks that might be included in some areas.

<table>
<thead>
<tr>
<th>Food</th>
<th>Suitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coconut milk</td>
<td>unsuitable</td>
</tr>
<tr>
<td>Dilute cereals, gruels</td>
<td>unsuitable</td>
</tr>
<tr>
<td>Flavoured milks</td>
<td>unsuitable</td>
</tr>
<tr>
<td>Juices</td>
<td>unsuitable</td>
</tr>
<tr>
<td>Sodas</td>
<td>unsuitable</td>
</tr>
<tr>
<td>Sugar drinks</td>
<td>unsuitable</td>
</tr>
<tr>
<td>Teas</td>
<td>unsuitable</td>
</tr>
</tbody>
</table>

Most of the milks that we have discussed can be used as a food after 6 months, even if unsuitable before 6 months. However, dilute cereals and sugary drinks fill a child’s stomach, and may reduce his appetite for nutritious foods. They are not suitable as an alternative to food for any young child.

Ask participants to come up to the tables and to look at all the milks displayed. Ask them to examine the packets and to notice:

- What is said about their constituents?
- What instructions are given for their use?
- Are these instructions clear and accurate?
- Does it explain how to mix the milk to make it equivalent to full strength fresh milk?
- Which milks do mothers already use for infants? Which might they want to use? Are these from the POSSIBLE or UNSUITABLE tables?

Remind participants to check their local products regularly so that they are up-to-date with the constituents and directions and aware of any new products that become available.

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4 These questions are also in the Participants’ Manual on page 33.
III. Describe how milks can be modified to make replacement feeds 10 minutes

☐ Make these points:

- Among the “possible” milks for infants are full cream milks, including fresh liquid milk, powdered milk, or tinned evaporated milk; and some commercial formulas.

- In full strength full cream milk, the level of protein and some minerals is too high, and it is difficult for an infant's immature kidneys to excrete the extra waste. These milks require some modification to make the proportions more appropriate.

- A commercial formula has been modified so that the proportions of different nutrients are appropriate for infant feeding, and micronutrients have been added. Formula needs only to be mixed with the correct amount of water.

- It is important to remember however, that although the proportions of nutrients in either commercial or home-prepared formula can be altered, their quality cannot be made the same as breastmilk. Also, the immune factors and growth factors present in breastmilk are not present in animal milk or formula, and they cannot be added.

Ask: How can the high levels of protein and minerals in animal milks be reduced?

- You can dilute them with water.

- Diluting with water makes the energy too low. You can add sugar to increase it.

- If too little water is added, the infant's kidneys may be overloaded with mineral and protein waste. If too much water is added the infant will not get enough of some nutrients and may not grow well.

- Fresh animal milk needs to be boiled to make the protein easier to digest, and less likely to irritate and damage the baby’s intestinal mucosa. Processed milk (such as tinned liquid or powdered milk) has already been heat-treated.

- (Mention if used locally) Sheep or buffalo milk contains more fat than cow's or goat’s milk so they need to be diluted more and less sugar is needed.

☺ Ask participants to look at the recipes listed in BOX 5.1 their manual on page 34. Notice that in each recipe for home-prepared formula the milk is diluted with water and sugar is added. Explain that they will be using these recipes later to prepare formula.
BOX 5.1
RECIPE FOR HOME-PREPARED FORMULA

**Fresh cow's, goat's or camel's milk**
- 40 ml milk + 20 ml water + 4g sugar = 60 ml prepared formula
- 60 ml milk + 30 ml water + 6g sugar = 90 ml prepared formula
- 80 ml milk + 40 ml water + 8g sugar = 120 ml prepared formula
- 100 ml milk + 50 ml water + 10g sugar = 150 ml prepared formula

**Sheep and buffalo milk**
- 30 ml milk + 30 ml water + 3g sugar = 60 ml prepared formula
- 45 ml milk + 45 ml water + 5g sugar = 90 ml prepared formula
- 60 ml milk + 60 ml water + 6g sugar = 120 ml prepared formula
- 75 ml milk + 75 ml water + 8g sugar = 150 ml prepared formula

**Evaporated milk**
Reconstitute with cooled, boiled water according to the label to the strength of fresh milk. Then modify as fresh milk by dilution and adding sugar. Check with specific brand. A typical recipe is:
- 32 ml evaporated milk + 48 ml water to make 80 ml full strength milk
- plus 40 ml water + 8 g sugar = 120 ml prepared formula

**Powdered full-cream milk**
Reconstitute with cooled, boiled water according to the label to the strength of fresh milk. Then modify as fresh milk by dilution and adding sugar. Check with specific brand. A typical recipe is:
- 10 g powdered milk + 80 ml water to make 80 ml full strength milk
- plus 40 ml water + 8 g sugar = 120 ml prepared formula

- If mothers will use powdered full-cream milk or evaporated milk, provide a recipe specific to that brand. State the total amount of water to add both to reconstitute to the strength of milk and to dilute to make formula.

- **Micronutrient supplements should be given with all these kinds of home-prepared infant formula.**
**Micronutrients**

- Make these points:
  - In addition to diluting, adding sugar and boiling animal milk, it is necessary to add *micronutrients*. Breastmilk contains the micronutrients that a baby needs, and if not breastfeeding these need to be provided in another way.
  - Micronutrients are the vitamins and minerals that the body needs in small amounts to keep it working well.
  - The micronutrients that may not be available easily from other milks are:
    - iron
    - zinc
    - vitamin A
    - vitamin C
    - folic acid
  - Micronutrient supplements are added to commercial formula when it is manufactured. Home produced infant formula made from all suitable forms of milk, needs to have micronutrients added or given with it. 5

- Show and discuss locally available micronutrient supplements suitable for infants and young children.
  - Discuss what each contains per dose, looking particularly at whether they contain iron and zinc.
  - Discuss which micronutrient supplements could be used for children under six months who are fed on home-prepared formula.
  - Compare the composition with that of the micronutrient supplement in the Appendix on page 223.
  - If UNICEF’s *Micronutrient Supplement for Replacement Feeding* is available locally, demonstrate how it is used.

**IV. Decide which milks to prepare in Session 11** 5 minutes

Smiley Ask participants to help you to decide which of the POSSIBLE milks would be appropriate for mothers in this locality, and which are useful to demonstrate in Session 10 “Preparation of milk feeds – measuring amounts” and then prepared in Session 11 “Preparation of milk feeds – practical.” Select at least one type of milk that can be used to make home-prepared formula.

List which milks will be used:

________________________________________  __________________________________________

5Research is underway to find the most appropriate form in which to provide micronutrients to infants. Information on the current UNICEF’s *Micronutrient Supplement for Replacement Feeding* is provided in the appendix.
V. Discuss stigma with replacement feeding

Ask: Will mothers have difficulty explaining why they are not breastfeeding when they go home? How could they deal with this difficulty?

Let participants discuss this point for a few minutes.

- Make these points:

  - Explaining why they are not breastfeeding can create real difficulties. In some situations, women can say that they are not breastfeeding because they are ill, but they do not say what illness.
  
  - If her husband or other family member knows that she is HIV-positive and supports her, they can say that she is a good mother even if she does not breastfeed.
  
  - In some situations, where a number of mothers allow their HIV status to be disclosed, or they belong to support groups who know about each other, this can help to overcome the problem of stigma.
  
  - When a woman with HIV is being counselled about infant feeding, the health worker may need to discuss how the woman will handle questions about why she is not breastfeeding.
Session 6
Preparation for Practical Exercise

**Objectives:**

At the end of this session and the following assignment, participants should have:
- Appropriate ingredients and equipment ready for the later practical session.

**Outline:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Describe what ingredients and equipment are needed</td>
<td>5 minutes</td>
</tr>
<tr>
<td>II. Decide who in the group will bring each item (groups)</td>
<td>10 minutes</td>
</tr>
</tbody>
</table>

**Before the session**

You will need to:
- Make for each group a copy of WORKSHEET 6.1: Preparation for Practical Session.
- 😊 Ask participants to sit in their groups.

**Adaptation:**

If the participants are not from the locality or it is difficult to go out to buy ingredients, the Course Director may arrange for the equipment and ingredients to be provided for them. In this case, make sure the prices are available for the ingredients.

Section I is conducted as usual, changing statements about purchasing to indicate that the ingredients will be provided. Participants will still need time to check they have all their equipment and ingredients. They can do this in Section II.
I. **Describe what ingredients and equipment are needed**  

☐ Explain the purpose of this preparatory session:

- Later, in Sessions 10 and 11 you will measure and prepare different kinds of formula for replacement feeding of infants.

- We want you to prepare the formula in the same way and using the same equipment that most mothers will have to do it, so that you will learn about the difficulties that they may have. This will help you to counsel them effectively about replacement feeding.

- You will work in your small groups of 4, with your trainer helping you.

- The worksheet on page 34 in your manuals lists the items that you will need. We will also give each group a loose sheet with the same information on it.

☐ Distribute WORKSHEET 6.1: Preparation for Practical Session to each group. 
While they look at the worksheet, explain these points:

- We ask each group to buy [you will be provided with] ingredients to prepare the formula – milk and sugar. The purpose is to know the current prices in the market. Record the prices on this worksheet for use later in Session 13 “Costs of replacement feeding.” You will be reimbursed for what you spend.

- We also ask you to borrow some simple utensils listed on the worksheet. If you live locally, you may be able to bring them from your own home – or you may be able to borrow from a friend. [Or you will be provided with the equipment]

- For this practical session, you may want to wear clothing suitable for cooking over an open fire.

- A source of water and means of cooking – a stove or materials for building an open fire, will be arranged for you.

- Bring this worksheet with you to the later sessions.

☐ Explain any additional items that you want them to bring that are not on the worksheet.

II. **Decide who in the group will bring each item**  

☐ Now, decide in your group who will be responsible for bringing each item – if you wish, you can collaborate with other groups, so that one person brings, for example, powdered milk or sugar for all the groups. If you collaborate to buy items, remember to find out the price for your own group.

☐ Give the groups 10 minutes to decide who will bring what items. Trainers sit with their groups to assist if needed.
**WORKSHEET 6.1: Preparation for Practical Session**

### Ingredients for the group to purchase

<table>
<thead>
<tr>
<th>Item</th>
<th>Price paid</th>
<th>Cost per</th>
<th>Who will purchase:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin/carton or packet of commercial infant formula suitable for use from birth / 500g</td>
<td></td>
<td>/ 500g</td>
<td></td>
</tr>
<tr>
<td>Packet or box of powdered full cream milk / 500g</td>
<td></td>
<td>/ 500g</td>
<td></td>
</tr>
<tr>
<td>Fresh cow’s milk (250 ml is enough) / litre</td>
<td></td>
<td>/ litre</td>
<td></td>
</tr>
<tr>
<td>Other milk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar (60 g is enough) / kg</td>
<td></td>
<td>/ kg</td>
<td></td>
</tr>
</tbody>
</table>

### Equipment for the group to borrow if possible

<table>
<thead>
<tr>
<th>Item</th>
<th>Who will bring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash basin for hands, soap, towel</td>
<td></td>
</tr>
<tr>
<td>Wash basin for utensils, soap, towel, brush</td>
<td></td>
</tr>
<tr>
<td>Mat or other covering to make a clean surface</td>
<td></td>
</tr>
<tr>
<td>Container to carry water (2 litres)</td>
<td></td>
</tr>
<tr>
<td>Pot or kettle to boil water</td>
<td></td>
</tr>
<tr>
<td>Small pot for boiling milk</td>
<td></td>
</tr>
<tr>
<td>Cover to use while milk is cooling</td>
<td></td>
</tr>
<tr>
<td>Eating spoons used in homes (large and small)</td>
<td></td>
</tr>
<tr>
<td>Tin opener (if needed for milk)</td>
<td></td>
</tr>
<tr>
<td>Knife or scissors for opening packets (if needed)</td>
<td></td>
</tr>
<tr>
<td>4 drinking glasses or see-through jars for mixing infant feeds. (Trainer may suggest local items)¹</td>
<td></td>
</tr>
<tr>
<td>Open cup for feeding formula to infant</td>
<td></td>
</tr>
</tbody>
</table>

¹ The glass, jar or other container should be able to be boiled, if possible, or washed in very hot water for cleaning.
Session 7

Review of Counselling Skills

Objectives:

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

- Adapt basic breastfeeding counselling skills for counselling women with HIV on all infant feeding options.

Outline:

<table>
<thead>
<tr>
<th></th>
<th>Total time - 120 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Introduce the session</td>
</tr>
<tr>
<td>II.</td>
<td>Review listening and learning skills (groups)</td>
</tr>
<tr>
<td>III.</td>
<td>Review building confidence and giving support skills (groups)</td>
</tr>
<tr>
<td>IV.</td>
<td>Practise counselling skills (groups)</td>
</tr>
<tr>
<td>V.</td>
<td>Review skills for giving information</td>
</tr>
<tr>
<td>VI.</td>
<td>Facilitate written exercise using WORKSHEET 7.1 (groups)</td>
</tr>
<tr>
<td>VII.</td>
<td>Summarize the session (groups)</td>
</tr>
</tbody>
</table>

Before the session

Review Sessions 6 “Listening and learning” and Session 11 “Building confidence and giving support” from Breastfeeding Counselling: a training course (Trainer’s Guide).

Review “How to facilitate a written exercise” on page 13 in the Introduction.

You will need:

For each group, 1 copy of Counselling Stories 1-4 on pages 97-98, cut as shown.

Prepare two flipcharts with the lists of Counselling Skills, one with a list of Listening and learning skills, the other with a list of Building confidence and giving support skills, as in BOX 7.1 on page 88. Keep them covered until needed. You will need these lists for later sessions also.
Before the session, continued

😊 Ask participants to assist with demonstrations.
   2 participants to assist with Demonstration 7/1
   1 participant to assist with Demonstration 7/2 and Demonstration 7/3
   2 participants to assist with Demonstration 7/4
   2 participants to assist with Demonstration 7/5

Show them where the text is in their Manuals. Ask them to read through and to practice with their colleague. Those who will be mothers should choose a name for themselves and their baby.

Dolls will be used in the demonstrations and counselling practice

This session may be divided with two or more trainers taking different sections to provide variety.

😊 Ask participants to sit in their small groups.

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**BOX 7.1 COUNSELLING SKILLS**

**Listening and Learning Skills**
- Use helpful non-verbal communication
- Ask open questions
- Use responses and gestures which show interest
- Reflect back what the mother says
- Empathize – show that you understand how she feels
- Avoid words that sound judging

**Building Confidence and Giving Support Skills**
- Accept what a mother thinks and feels
- Recognise and praise what a mother and baby are doing right
- Give practical help
- Give a little relevant information
- Use simple language
- Make one or two suggestions, not commands

*Participants can find this list on the inside back cover of their Manuals*
I. **Introduce the session**

- Make these points:
  - This session is a review of skills that are useful in counselling women about infant feeding. It is not a full course on counselling. To cope with the other difficulties that she has to face, a woman with HIV may need more in-depth counselling as discussed in Session 2. You may need to refer her for this.
  - We will review the two sets of skills “Listening and Learning”, and “Building Confidence and Giving Support”. These are important skills for health workers who are assisting mothers, however they are feeding their babies.
  - For counselling mothers with HIV, the way in which you give information is particularly important. This is one of the “Building Confidence and Giving Support” skills, and we will discuss it in extra detail later.

---

II. **Review Listening and Learning skills**

- Uncover the prepared flipchart list of Listening and Learning Skills. Leave the other list covered.

- Make these points:
  - The first skill is: **Use helpful non-verbal communication**.
  - A mother needs to be comfortable and at ease to benefit from counselling. If she is uncomfortable, or frightened, or in a hurry, she may not be able to think about the counselling.
  - Non-verbal communication shows the mother that you are interested in her through your posture, your expression, everything except what you actually say. This helps her to feel more comfortable.

*Ask: What kinds of non-verbal communication could help a mother feel that you are interested in her so that she finds it easy to talk?*

Let participants give some examples. These should include ideas such as smiling, nodding, keeping your head about level with hers, eye contact, removing barriers, taking time, using appropriate touch, and a comfortable and safe environment.
Now point to the second skill on the list and make these points:

- The second skill is: Ask open questions

- Open questions often start with “who”, “what”, “why”, “how”, or “when”. They encourage a person to talk to you, and to give more information, so they help you to learn more in the time available.

- The opposite is closed questions, which usually start with words like “Do you?” “Are you?” “Is he?” “Has she?” A person can answer them with a “yes” or “no” and may give you little information.

Ask: Can you give an example of a closed question?
Let participants give a few examples, then continue.
Example, “Is your baby feeding frequently?”

Ask: Can you change that into an open question?
Let participants change their examples.
Example, “How often does your baby feed?”

Now point to the next three skills on the flipchart and make these points:

- The next three skills are:
  - Use responses and gestures which show interest,
  - Reflect back what the mother says, and
  - Empathize – show that you understand how she feels

- We can also show that we are listening to a woman by:
  - Responses that show interest and encouragement - smiling, nodding, phrases such as “Oh, dear” or “Go on....” or “Eeeeh…”

Ask: What responses do people use locally?
Let participants give some examples of useful responses.

- Another way to show interest is by Reflecting back what the woman is saying to show that you are listening. This can help to clarify her statement.

- For example, if a woman says:
  “I don't know what to do. If I don't breastfeed the neighbours will ask why.”

- You could reflect back:
  “The neighbours might ask you about it?”

- Another way to encourage a woman to talk is to Empathize with her. This means to show that you understand her feelings from her point of view. It is different from sympathy. When you sympathize, you look at it from YOUR point of view.

- Ask the two participants whom you prepared to give Demonstration 7/1. The trainer makes the comment after each example.
Demonstration 7/1: Empathize

Health Worker: Good morning (name). How are you and (name) today?
Mother: (Name) is not feeding well; I am worried.
Health Worker: I understand how you feel, when my child was ill, I was so worried. I know exactly how you feel.
Mother: What was wrong with your child?

Comment: Here, the focus has moved from the mother to the health worker. This was sympathy, not empathy. Let us hear this again with the focus on the mother and empathizing with her feelings.

Health Worker: Good morning (name). How are you and (name) today?
Mother: (Name) is not feeding well; I am worried (he/she) is ill.
Health Worker: You are worried about (name).
Mother: Yes, some of the other children in the village are ill and I am frightened (name) may have the same illness.

Comment: In this version, the mother and her feelings are the focus of the conversation. This was empathy.

Now point to the last skill on the list, and make these points:

- The next listening and learning skill is to Avoid words which sound judging. These are words like: right, wrong, good, well, badly, properly, enough. If you use these judging words when you talk to a woman, you may make her feel that she is wrong or that there is something wrong with her baby.
  For example: Do not say, “Are you feeding your baby properly? Do you give him enough milk?”
  Instead you can say something like: “How are you feeding your baby? What kinds of foods do you give him?”

Ask: How could you ask this question without using a judging word?
  “Are you preparing your baby's feeds properly?”
  Let participants give suggestions.
  One way is to ask – “How do you make up your baby's feeds?”
Demonstrate using “Listening and learning skills”

- We will now demonstrate some of these listening and learning skills.

- Turn to page 38 in your manuals and find Demonstration 7/2. This is the first part of a counselling session with a mother and we will continue it later.

- Notice that there are spaces beside each remark by the health worker. Listen to the demonstration, and notice which skills are used. After the demonstration write the skills used into the space beside what was said. Underline any judging words that were used. (Skills are included only in Trainer's Guide below.)

😊 Ask the participant whom you prepared to read the words for Mrs E, while you (the trainer) are the health worker.

**Demonstration 7/2: Listening and learning skills**

Room setting: Seats with no desk between the health worker and Mrs E. If possible indicate that they are in a small room with a door.

☐ Trainer reads out the introduction:

Mrs E. is pregnant and she has asked specially to come to the ante-natal clinic to discuss something that is worrying her. Mrs E’s turn comes and she is brought into a small room with the health worker.

The health worker doesn't know why Mrs E wanted to see her. Greeting Mrs E, the health worker starts the counselling session.

- **Helpful non-verbal communication**

  (Offers Mrs E a seat and closes the door.)

  Good morning, (Mrs E). I am (name), the community midwife. You wanted to see me to talk about something.

- **Open question**

  What is worrying you?

**Mrs E:**

Well, I am wondering about how to feed my baby when he is born.

- **Health Worker:**

  Mmm (nods, smiles)

- **Open question**

  What have you heard already about feeding your baby?

**Mrs E:**

In the clinic, the nurses tell us that breastfeeding is best and I breastfed my other child, but I don't know about this baby.

- **Health Worker:**

  Yes, breastfeeding is recommended.

- **Empathize,**

  You feel unsure about breastfeeding this baby.

- **Open question**

  What is making you think about not breastfeeding?

**Mrs E:** (hesitantly)

Well, last month I found out I had HIV and I heard the baby could get it by breastfeeding.
Health Worker: Empathizing
I see. So you are wondering what to do. We can talk about different ways to feed a baby so that you can decide what you want to do.

Mrs E: Yes, that would help me. I don't know what to do.
Health Worker: Empathy It is a difficult decision. I am glad that you came to talk about it.

Comment:
The health worker listened to Mrs E and learned why she had come to see her. The health worker did not immediately start telling Mrs E what to do. The health worker used her skills to help Mrs E feel comfortable and willing to talk. She did not use judging words.

- Thank the participant. She can sit back in her group, but she must be ready to come back in a few minutes.

Give participants about 10 minutes to write the skills in the spaces in their manuals.

All trainers circulate to give individual feedback to participants on their answers. They should make sure that participants understand the following points:
- The health worker used non-verbal communication to show interest and help the mother to feel comfortable.
- The health worker used an open question to find out what was worrying the mother, what she had heard about breastfeeding and why she was thinking of not breastfeeding this baby.
- The health worker reflected back to encourage the mother to say more.
- The health worker empathized with the mother’s feeling of confusion at how she should feed her baby.

- Attach the list of Listening and learning skills to the wall or other surface where participants can see it. The list should stay there throughout the course, as it will be needed in later sessions.

III. Review building confidence and giving support skills 20 minutes

- Uncover the first two skills on the list of “Building confidence and giving support skills.” Keep the other points covered for a time. Make these points:
- Now we will look at some more counselling skills. These are to build a mother's confidence. Building a woman’s confidence helps her to make her own decisions and to resist pressures from other people.
First, **Accept what a mother thinks and feels.** You do not disagree or criticise what she says and you do not agree with an incorrect idea.

**Ask:** *How does it feel if someone disagrees with what you say?*

  Wait for 2-3 responses, and then continue.

  For example, if a mother says “All babies need water in hot weather, because they are thirsty”, and you say “Oh no they don’t, there is plenty of water in breastmilk”.

  How would this mother feel?

She might feel unhappy, and she might be annoyed that you did not listen to her. It might reduce her confidence, and you might not want to say any more.

Accepting means responding in a neutral way and not agreeing or disagreeing. This shows that you respect a woman’s thoughts and feelings, and makes her feel that you support her. This builds her confidence.

In the same example you could say, “You are worried that the baby might be thirsty?”. Later on you could explain that a baby can quench his thirst on breastmilk just as well.

Now look at the next skill, which is **Recognise and praise what a mother and baby are doing right.**

**Ask:** *How does it feel if someone praises what you have done?*

  It builds your confidence. You think that you can try other things and that they will work.

As health workers, we are trained to look for problems. This means that we may only see what we think is wrong and try to correct it. We must learn to recognise what a mother and baby are doing right and praise or show approval of good practices.

Accepting what a mother thinks and feels, plus recognising and praising good practice, builds a mother’s confidence and encourages her to continue good practices. When a mother feels that you accept her ideas and recognise her good practices, she is more likely to accept any suggestions that you make.

Now we return to the counselling session that we started earlier. Turn to page 40 in your manuals, and find Demonstration 7/3. Again, notice that there are spaces for you to fill in after the demonstration beside each remark by the health worker.

😊 Ask the same participant to help as in Demonstration 7/2.
Demonstration 7/3: Accepting and praising

Make the following introduction:

The counselling session with Mrs E stopped earlier after the health worker had listened and learned about the reason for the visit. Now the session continues:

Health Worker:

Praise
Open question
Mrs. E:

Health Worker:

Reflect back
Mrs E: (mistaken idea)

Health Worker:

Accept
Empathize
Mrs E:

Thank the participant. Give participants about 5 minutes to write the skills in the spaces in their manuals.

All trainers circulate to give individual feedback to participants on their answers. They should make sure that participants understand the following points:

- The health worker praised the mother for coming to talk things over.
- The health worker asked an open question about Mrs E’s thoughts on feeding the baby. This shows that the health worker respects Mrs E’s opinion.
- The health worker reflected back to encourage Mrs E to say more.
- The health worker accepted the mother's idea without agreeing or disagreeing.
- The health worker empathized with the mother's feelings. This shows Mrs E that the health worker is interested in her.
IV. Practise counselling skills 35 minutes

☐ Give each group a copy of Counselling Stories 1-4 (pages 97-98). Each group of 4 participants should have a set of 4 stories, so that each participant can have a different one to practise with. Explain what the participants will do:

- You will now use role-play to practise “Listening and Learning Skills” and the first two “Building Confidence and Giving Support Skills.” The skills are listed on page 37 of your Manuals and also inside the back cover.

- You will work in groups of four, taking turns to be a ‘mother’ or a ‘counsellor’ or observers. When you are the ‘mother’, use the story on your card. The ‘counsellor’ counsels you about your situation. The other participants in the group observe.

☐ Explain how to do the role play:

- When you are the ‘counsellor’:
  - Greet the ‘mother’ and introduce yourself. Ask for her name and her baby’s name, and use them.
  - Ask one or two open questions to start the conversation and to find out why she is consulting you.
  - Use each of the counselling skills to encourage her to talk to you.
  - Do not offer information or try to solve the mother's problem at this time.

- When you are the ‘mother’:
  - Give yourself and your baby (if your story has one) names and tell them to your ‘counsellor’.
  - Answer the counsellor’s questions from your story. Don’t give all the information at once.
  - If your counsellor uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

- When you are observing:
  - Use your Counselling Skills list. Observe which skills the counsellor uses, which she does not use, and which she uses incorrectly. Mark your observations on your list in pencil.
  - After the role-play, praise what the counsellor does right, and suggest what they could do better.

☐ Trainers each sit with one group of 4 participants. Make sure that the participants understand the exercise and do it as intended – and that the “mother” doesn’t give all the information at once.

At the beginning of the exercise, give participants a few minutes to read their stories. Each role-play is very short and just shows the ‘counsellor’ listening and giving support. The ‘counsellor’ does not give information at this time. After each role-play, you lead the discussion. Allow 30 minutes for the exercise. Then thank participants and praise them for their efforts.
**Counselling Story 1**

You are 34 weeks pregnant. You had an HIV test and were found to be HIV-negative. You received information about preventing HIV infection and were encouraged to breastfeed.

You have come to the infant feeding counsellor because you are still worried about breastfeeding and HIV transmission. You want to get the infant formula just in case you get HIV at some later time.

Statements that you might use:

“**My baby is due soon and I want to find out about getting infant formula for him.**”

“I had the test and they say I don’t have HIV, but I'm worried I might get it while I'm breastfeeding and then the baby would get it.”

“I think it would be better if I didn't breastfeed at all - then the baby would be protected.”

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**Counselling Story 2:**

Your baby is 24 hours old. You will be discharged from hospital later in the day. You found out that you were HIV-positive during this pregnancy and decided not to breastfeed.

You learned how to make home-prepared infant formula but you don’t think that home-prepared formula is as good as a highly advertised brand of commercial formula. You are worried that your baby won't grow well on home-prepared formula and you want to find a way to buy the expensive, highly advertised infant formula.

Statements that you might use:

“I know about the home prepared formula but I will have to find the money to buy the (brand) formula as soon as I can.”

“I don't know how we will find the money for the (brand) formula.”

“The ads for the (brand) formula say it is the best for the baby. If I use the home-prepared formula my baby may not grow as well.”
Counselling Story 3:

Your Baby is 1 month old. You are HIV-positive and plan to breastfeed for a few months and then stop. You are at a well-baby clinic.

You want to start giving the baby some drinks of tea, and sometimes cereals or milk. You breastfed your previous children for two years or more, giving them tea and thin porridge and soup from 1 month. They had diarrhoea a few times, but they grew quite well.

Statements that you might use:
“I am going to start giving my baby tea and porridge now, as he needs more than breast milk.”
“My other children started to take these foods from this age.”
“A baby can take thin porridge and tea from a bottle while I am out, and I can breastfeed when I get back”

Counselling Story 4:

Your baby was born last night in the hospital. He was three weeks early. You found out that you were HIV-positive two days ago, and you have not yet seen the infant feeding counsellor. You didn't have much time to consider how you would feed your baby.

You are very confused and stressed. Your mother tells you to breastfeed so the neighbours won't suspect you are HIV-positive. Your husband wants you to use formula to protect the baby.

Statements that you might use:
“You told me I have HIV. You tell me to decide how I will feed my baby. Just tell me what is best to do.”
“My mother says one thing, my husband says a different thing. I don't know what to do.”
V. Review skills for giving information 20 minutes

☐ Make these points:

- A person may have incorrect ideas, based on lack of information or misunderstanding. Part of a health worker’s job is to provide information that is correct and in a way that the person can understand.

- The remaining four “Building Confidence and Giving Support Skills” are for giving relevant information in the most helpful way.

☐ Show the list of “Building Confidence and Giving Support Skills”. Point to the remaining four skills that have not been discussed yet. Make these points:

- A support skill that you may have heard of is Give practical help. This could include helping a mother to breastfeed as discussed in an earlier session. In later sessions we discuss teaching an HIV-positive mother how to prepare formula feeds, if that is her choice of feeding method. We will not discuss “Giving practical help” further in this session.

- The first of the information giving skills to discuss is Give a little relevant information. In order to provide relevant information, you need to listen to what the person is saying, think about their situation, and decide what information will be most useful at this time.

- Try to limit your information to two or three things at a time so that the person is not overwhelmed. If a woman is tired, ill, or stressed, she may not be able to take in a lot of information.

- The next skill is to Use simple language. Give information in a way that is easy for a person to understand. Use simple, everyday words that she already knows.

- 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.

- For example, instead of saying “Bottles are dangerous”, you could say, “Cups are usually safer”.

☐ Demonstrate the information giving skills.

☐ Now, we will demonstrate two ways of providing information to a pregnant woman.

☺ Ask the 2 participants who you prepared to give Demonstration 7/4. One is the health worker and one is Mrs F who is pregnant.

☐ After each point is demonstrated, the trainer asks the participants for their opinion, and gives the comments.
Demonstration 7/4: Giving information

Room setting: The health worker is sitting at a desk and Mrs F comes into the room. The health worker offers her a seat with the desk between them.

Health Worker: Good morning Mrs F. What can I do for you?
Mrs F: I'm not sure if I should breastfeed my baby or not. I'm worried he might get HIV.
Health Worker: I'm glad that you asked. Well now, the situation is this. Approximately 15% of mothers who are HIV-positive transmit the virus through breastfeeding. However the rate varies in different places. It may be higher if the mother has acquired the infection recently and has a high viral load or symptomatic AIDS.
If you have unsafe sex while you are breastfeeding, you can pick up HIV and then you are more likely to transmit it to your baby.
However, if you don't breastfeed, your baby may be at risk of other illnesses such as gastrointestinal and respiratory infections.

Discuss – Ask participants what they observed. They should reply that the health worker is providing too much information. It is not relevant to the woman at this time. She is using words that are unlikely to be familiar. Some information is given in a negative way and sounds critical, as though accusing Mrs F.

Ask the participants to continue the demonstration.

Health Worker: You may choose to breastfeed, to ask another woman who is HIV-negative to breastfeed your baby, to use cows milk or infant formula or express and heat treat your milk. It is your decision.

Discuss – Ask participants what they observed. The health worker is talking about too many options, but without explaining them. Continue.

Health Worker: You might be able to get free infant formula from the clinic, but I'm not sure.

Discuss – Ask participants what they observed. This information is vague, and not helpful. Continue.

Health Worker: Now, you have left it very late to come for counselling, so if I were you, I would decide ...

Discuss – Ask participants what they observed. The health worker is critical of the woman, and is blaming her, and telling her what to do rather than helping her to make her own decision.
Now we will see another woman receiving information in a different way.

Ask the two participants whom you prepared to give Demonstration 7/5. One is Mrs G who is pregnant, and the other is a health worker.

**Demonstration 7/5: Giving Information**

Room setting: The health worker is sitting at a desk and Mrs G comes into the room. The health worker offers her a seat the same side of the desk.

**Health Worker:** Good morning Mrs G. How can I help you?

**Mrs G:** I'm not sure if I should breastfeed my baby or not. I'm worried that he might get HIV.

**Health Worker:** You are worried about what is best for your baby. It is sensible of you to come and talk about it. You have time to think about it before your baby is born.

**Mrs G:** Thank you – yes I am very worried – my friend said that most babies get HIV if they breastfeed.

**Discuss** - Ask participants what they observed. The health worker empathizes with the woman’s worries and praises her for coming in time. The health worker is not critical. The woman wants to say more.

**Health Worker:** There is a small risk of a baby getting the HIV infection through breastmilk but it is also important to remember that a baby may get ill and not grow well if he is not breastfed. There is no one right way for everyone; we can talk about which is best for you and your baby.

**Discuss** - Ask participants what they observed. Health worker provides a small amount of clear information in a positive way. Continue.

**Mrs G:** Yes it is true. I gave the older one some bottle feeds and she got diarrhoea quite badly.

**Health Worker:** That must have been a worry for you. Well, we can start by looking at the different ways you might feed your baby and what you need for each one. Would that help you to decide?

**Discuss** - Ask participants what they observed. They should have noticed the health worker accepting what the mother said about bottle feeding, and empathizing. She uses simple language.
Ask: Which way of giving information would be more helpful to a woman to enable her to decide what to do?
   In this second demonstration, the health worker first used listening and learning skills. Then she gave a little relevant information in simple language that the mother could understand. This way of talking shows respect for the mother, and helps her to feel confident and supported.

- In Session 14, we will come back to this counselling session and discuss in more detail the information and the feeding options to discuss with this mother.

- The last skill is to **Make one or two suggestions, not commands.**

- When you give a command you are telling a woman that you know best what she should do. When you give suggestions, you are allowing her to make her own decisions.

Ask: For example, how could you change this command to a suggestion?
   “You should cup feed your baby.” (Command)
   Wait for a few responses.

   A possible response is:
   “Have you considered cup feeding your baby?” (Suggestion)

- After you have given a woman some information and suggestions give her time to think about what you have said. Offer her another time to talk with you or refer her to someone with more experience if necessary.
V. Facilitate written exercise using **WORKSHEET 7.1** 10 minutes

- Introduce **WORKSHEET 7.1** with these points:
  - Turn to page 44 in your manuals, and find **WORKSHEET 7.1, Making suggestions, not commands**. This exercise will give you more practice in using this skill. Change each command listed to a suggestion.
  - Ask the trainers each to sit with their group of 4 participants to make sure that they understand the written exercise, and to give individual feedback.
  - Let participants work individually on the exercise for as long as time allows. If there are examples they have not completed, they can do them in their own time and review them with their trainer.
  - At the end of the allocated time, each trainer summarizes the session (page 105) with her group.

---

**Making suggestions, not commands**

**Commands** use the imperative form of verbs (*give, do, bring*) and words like *always, never, must, should.*

**Suggestions** include:
- Have you considered.....?
- Would it be possible....?
- What about trying ... to see if it works for you?
- Would you be able to?
- Have you thought about...? Instead of...?
- You could choose between ... and.... and..
- It may not suit you, but some mothers ..., a few women…
- Perhaps.... might work.
- Usually .... Sometimes .... Often....
WORKSHEET 7.1: Making suggestions, not commands

How to do the exercise

Below are 5 commands that someone might want to give to a woman who is HIV-positive. In the space below each command, rewrite it as a suggestion. Use the language you normally use with the mothers. Each sample suggestion in italics is only one of many possibilities.

1. Bring your husband with you to discuss how the baby will be fed.
   Would you be able to bring your husband with you to discuss how the baby could be fed?

2. Look at the leaflet and decide how you will feed your baby.
   Perhaps after you consider the information we could discuss what you think about feeding your baby?

3. You must breastfeed exclusively and stop after 4 months.
   Sometimes mothers who are HIV-positive breastfed exclusively for 4 months and then stop. Have you considered that?

4. Use a cup to feed your baby.
   Usually bottle feeding is not recommended.

5. Do not use cereal or juice as a substitute for milk if your baby is under 6 months old.
   Would it be possible to continue giving just milk to your baby until he is about 6 months old?
VII. Summarize the session

Point to the counselling skills on the flipchart pages:

- We have reviewed these counselling skills of:

**Listening and Learning**
- Use helpful non-verbal communication
- Ask open questions
- Use responses and gestures which show interest
- Reflect back what the mother says
- Empathize—show that you understand how she feels
- Avoid words which sound judging

**Building Confidence and Giving Support**
- Accept what a mother thinks and feels
- Recognise and praise what a mother and baby are doing right
- Give practical help
- Give a little relevant information
- Use simple language
- Make one or two suggestions not commands

- These skills help you to counsel a woman about her infant feeding options. We will use them more in a later session.

- However, to cope with the other difficulties that she has to face, a woman with HIV may need more in-depth counselling. You may need to refer her to a more specialised counsellor for this.
Session 8

Food Hygiene and Feeding Techniques

**Objectives:**
At the end of this session, participants should be able to:

– Explain the requirements for clean and safe feeding;
– List the reasons for recommending cup feeding;
– Describe ways of comforting a baby who is not breastfeeding

**Outline:**
Total time - 60 minutes

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**Before the session**
You will need:
Overheads 8/1, 8/2, 8/3, 8/4, 8/5, 8/6, 8/7
A doll, small cup and a cloth for Demonstration 8/1

😊 Ask one participant to assist in Demonstration 8/1. Practise the demonstration with her before the session.
I. Introduce the session  

- Make these points:
  - In this session, we will discuss some of the practical aspects of feeding a child, other than the food itself. These include:
    - how to make and give feeds cleanly and safely,
    - why cup feeding is recommended instead of bottle feeding,
    - ways of comforting a baby who is not breastfed.
    - how to help a caregiver who is not the baby’s mother

II. Explain the requirements for clean and safe feeding  

- Make these points:
  - A baby who is not breastfed is at increased risk of illness for two reasons:
    - Replacement feeds may be contaminated with organisms that can cause infection.
    - The baby lacks the protection provided by the breastmilk.
  - Clean, safe preparation and feeding of milk and complementary feeds are essential to reduce the risk of contamination and the illnesses that it causes.

- The main points to remember for clean safe preparation of feeds are:
  - Clean hands
  - Clean utensils
  - Safe water and food
  - Safe storage

Point 1: Clean Hands

- Show Overhead 8/1 - Clean hands and discuss the points that follow.
Ask: *When is it important to wash your hands?*

Wait for a few replies, then continue.

- Always wash your hands
  - after using the toilet, after cleaning the baby’s bottom, after disposing of children’s stools; and after washing nappies and soiled cloths;
  - after handling foods which may be contaminated (e.g. raw meat and poultry products) and after touching animals;
  - before preparing or serving food,
  - before eating, and before feeding children.

However it is not necessary to wash your hands before every breastfeed if there is no other reason to wash them.

- It is important to wash your hands thoroughly
  - with soap or ash;
  - with plenty of clean running or poured water;
  - front, back, between the fingers, under the nails.

- Let your hands dry in the air or dry them with a clean cloth. It is best not to dry them on your clothing or a shared towel.

**Point 2: Clean utensils**

☐ Show *Overhead 8/2 - Clean utensils* and make these points:

- You need to keep both the utensils that you use, and the surface on which you prepare feeds, as clean as possible.
- Use a clean table or mat, that you can clean each time you use it.
Wash utensils with cold water immediately after use to remove milk before it dries on, and then wash with hot water and soap. If you can, use a soft brush to reach all the corners.

Keep utensils covered to keep off insects and dust until you use them.

Use a clean cup to give any drink to a baby.

Use a clean spoon to feed complementary foods. If a caregiver wants to put some of the baby’s food into her mouth to check the taste or temperature, she should use a different spoon from the baby.

**Point 3: Safe water and food**

- Boil water for drinking and baby’s feeds
- Keep water in clean covered container
- Boil milk before use
- Give freshly prepared complementary foods

Safe water and food are especially important for babies.

*Ask: How can water be made safer for feeding babies?*

Wait for a few replies, then continue.

- Bring the water to a rolling boil briefly before use. This will kill most harmful micro-organisms. (A rolling boil is when the surface of the water is moving vigorously. It only has to “roll” for a second or two.)

- Put the boiled water in a clean, covered container and allow to cool. The best kind of container has a narrow top, and a tap through which the water comes out. This prevents people dipping cups and hands into the water, which can make it not safe.

- If the water has been stored for more than a day, re-boil it before use.
**Ask: How can food be made safer for babies?**

Wait for a few replies, then continue.

- Fresh cow’s or other animal’s milk to be used for a baby also needs to be briefly boiled to kill harmful bacteria. Boiling also makes the milk more digestible. The milk and water can be boiled together. You will practise this later.

- Milk sold in the shops may already have been heat treated in various ways such as pasteurisation, UHT (ultra-high temperature) or sterilisation. These treatments kill the harmful micro-organisms, and they help the milk to keep longer so long as it is unopened. It can be used without boiling if it is used immediately on opening. After it is open, it will only keep as long as fresh milk. If it has been open more than an hour, it will need to be boiled before giving it to a baby.

- Some families keep water cool in a pottery jar, which allows evaporation of water from the surface. This method is not safe for milk.

- If a mother is giving complementary foods, she should prepare them freshly each time she feeds the baby, especially if they are semi-liquid.

**Point 4: Safe Storage**

☐ Now show **Overhead 8/4 - Safe Storage**

[Diagram of safe storage]

- Keep foods in tightly covered containers
- Store foods dry if possible (e.g. milk powder, sugar)
- Use milk within one day if refrigerated
- Use prepared feeds within one hour

- Now think about how people store food.

---

1 As described in Session 5.
Ask: *How can people store food safely in this community?*

Wait for a few replies, then continue.

- They can keep food tightly covered, to stop insects and dirt getting into it. This should be possible in most households.

- Food can be kept longer when it is in a dry form, such as milk powder, sugar, bread, and biscuits, than when it is liquid or semi-liquid.

- Fresh fruit and vegetables keep for several days if they are covered, especially if they have thick peel, like bananas.

- Fresh milk can keep in a clean covered container at room temperature for a few hours. Exactly how long depends on the condition of the milk when bought, and what the room temperature is. However, for an infant, milk must be boiled and then used within an hour of boiling.

- If a mother does not have a refrigerator, she must make feeds freshly each time. When a feed has been prepared with formula or dried milk, it should be used within one hour, like fresh milk. If a baby does not finish the feed, she should give it to an older child or use in cooking.

- If a mother has a refrigerator, all the formula for one day can be made at one time and stored in the refrigerator in a sterilised container with a tight lid. For each feed, some of the formula is poured into a feeding cup.

- Some families keep hot water in a thermos flask. This is safe for water. But it is NOT safe to keep warm milk or formula in a thermos flask. Bacteria grow when milk is kept warm.

- Discuss with the mother or other caregiver how the household routine works - whether the mother cooks once or twice a day, whether she can prepare feeds many times a day, how often she goes to market and what facilities she has for storage. Help her to find ways of preparing the baby’s food in a clean and safe way.
III. Discuss cup feeding a young baby  

10 minutes

☐ Make these points:

- Cups are recommended for feeding babies instead of bottles.\(^2\)

Ask: What are the disadvantages of bottles for feeding babies?
Wait for a few replies, then continue.

☐ Show Overhead 8/5 - Disadvantages of feeding bottles, and make the points that follow.

Make these points:

- Bottles are difficult to clean, and easily contaminated with harmful bacteria, particularly if milk is left in a bottle for long periods allowing bacteria time to breed.
- Bottles and contaminated milk can make babies ill with diarrhoea.
- Ear infections are more common with bottle feeding.
- Bottle feeding is associated with tooth decay, leading to pain as well as later eating difficulties.
- A bottle may be propped for a baby to feed itself, or given to a young sibling to feed the baby, so the baby has less adult attention and social contact.

- Mothers may consider use of a bottle easier for themselves because it can be carried around, propped for the baby or given by a sibling. You may need to explain to a mother that these advantages to them are actually disadvantages to the baby.

Show Overhead 8/6 - **Advantages of cup feeding**, and make the following points:

- Cups are easily available in every household.
- Cups are easy to clean so the risk of contamination is less than with bottles.
- Cup feeding is associated with less risk of diarrhoea, ear infections and tooth decay.
- A cup cannot be propped beside the baby. The caregiver has to hold the baby and pay attention. This ensures social contact during feeding and adult attention if the baby is having any difficulties.

Make these additional points:

- A cup does not need to be boiled, in the way that a bottle does. To clean a cup, wash it and scrub it in hot soapy water each time it is used. If possible, dip the cup into boiling water, or pour boiling water over it just before use, but this is not essential. An open, smooth surfaced cup is easiest to clean. Avoid tight spouts, lids, or rough surfaces where milk could stick and allow bacteria to grow.
- Small and preterm babies can be cup fed, as well as older babies.
- Spoon feeding is acceptable. However it is slow for large amounts of milk. There is a risk that a caregiver may become tired and stop giving the feed before the baby has taken sufficient.

*Ask: How often do you see cup feeding in your area?*

Wait for a few replies then continue.

- If mothers are not used to cup feeding, they need information about it, and they need to see babies feeding by cup. The method needs to be taught in a way that gives them confidence to do it themselves.
**Optional) Cleaning feeding bottles and teats**

- If cup feeding is well accepted in your area, leave this section out. It is included to make the information available in case mothers insist on using bottles; and to show how difficult it is to do adequately. This may encourage people to try using cups.

- Bottles and teats are more difficult to clean than cups. A bottle and teat need to be rinsed immediately after use with cold water, then scrubbed inside with a bottle brush and hot soapy water. At least once a day they should be sterilised. This takes more time, attention and fuel.³

*Ask: What are ways of sterilising used locally?*
  
  Wait for a few replies then continue.

- Ways of sterilising washed bottles may include:
  - Boiling – the bottle needs to be completely covered in water. The water needs to be boiling with the surface actively rolling, for at least 10 minutes
  - Soaking in a diluted bleach solution for at least 30 minutes ⁴

- Utensils needed for bottle feeding are:
  - Bottles
  - Teats
  - Bottle brush
  - Pot for boiling bottle or non-metallic container for soaking the bottle in bleach.

- Bleach is not good for a baby. If this method of sterilisation is used, the bottle needs to be rinsed with previously boiled water before adding the milk, to ensure no bleach remains.

- Teats need to be turned inside out and scrubbed using salt or abrasive. They should then be boiled or soaked as above to sterilise.

- During counselling, the health worker will need to discuss with the mother which sterilisation method is most suitable for her.

- If a mother decides to use a feeding bottle, help her to do it in a way that ensures good contact with the baby. She should hold the baby close, make eye contact, and talk to the baby while feeding.

- Milk should not be left in the bottle after a feed. Milk may stick in corners, and bacteria can grow in it and then spread to the next feed. Give any left overs to an older child, or use them in cooking, and wash the bottle thoroughly immediately, before the milk sticks.

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³Cups will need to be sterilised in the hospital setting if the infant is very small or ill and the cups are shared between infants.

⁴ There are special sterilising liquids available for use with baby’s feeding equipment, which should be diluted according to the instructions on the label. It may also be possible to use household hypochlorite bleach with appropriate additional dilution.
IV. Demonstrate teaching a mother to cup feed 15 minutes

- Make these points:

- When you teach a mother to cup feed you use some of the “Listening and Learning” and “Building Confidence and Giving Support” skills that we discussed in Session 7. However, if you have asked the mother, and she has agreed to be instructed, you can give her some instructions that sound like commands, rather than suggestions. This does not mean that you are using bad skills.

- We will now demonstrate teaching a mother to cup feed. Find the text in your manuals on page 51.

- Notice that there are spaces beside each remark by the health worker. Listen to the demonstration, and notice which skills are used. After the demonstration write the skills used into the space beside what was said. (Skills are included in Trainer's Guide.)

😊 Ask the participant whom you have prepared to play the mother. She needs a doll to be her baby, a cup and small cloth. The trainer takes the part of a health worker teaching her how to cup feed her baby.

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**Demonstration: 8/1 Teaching a mother to cup feed**

- Trainer introduces the demonstration:

  (Mother name) had her baby a few hours ago. The midwife now is explaining and showing (name) step-by-step how to cup feed so that she can do it herself.

**Health Worker:**
Open question: Good morning (name). How are you and (baby’s name) today?
Mother: Well, thank you.
Health Worker: You remember how we discussed cup feeding your baby, and how cup feeding is easier and cleaner than using a bottle?
Mother: Yes, I remember you said that.
Health Worker: Suggests: Good - you remember. Would you like me to show you how?
Mother: Oh, yes, please. But I am afraid he might choke - he is so young.
Health Worker: Empathizes: You’re worried about it, aren’t you?
Gives positive information: Well, first, (baby’s name) needs to be awake and sitting up. It is helpful to wrap him firmly, so that he can sit upright more easily. Babies don’t choke if they are sitting up – it is only likely to happen if he is lying back and the milk is poured in too fast.
Mother: Like this? (Puts baby (doll) in upright position.)
Health Worker:
Praise Yes, that is a good position.
Suggest You may want to hold a cloth under his chin in case he dribbles. You have some milk in a small cup, yes?
Commands but OK Now, hold the cup to the baby’s lips and tilt it so that the milk just touches his lips.

Mother:
Is this right? (Put cup to baby’s (doll’s) lips.)

Health Worker:
Praise Yes, he likes that, doesn’t he?
Commands but OK Keep the cup tilted so that he can sip the milk. It is important not to pour the milk or press on his lower lip. Let him take the milk at his own speed.
Open question What do you think of this way of feeding?
Mother: He seems to be taking the milk well. I didn’t think he would be able to drink from the cup.

Health Worker:
Praise Yes, he is feeding well.
Mother: How do I know when he has had enough?
Health Worker: Usually when a baby has had enough he closes his mouth and will not take any more. Sometimes he may just want a little pause and will start to drink again. Let him decide when to stop.
Suggest If he takes a very small feed, you can offer more milk at the next feed, or give the next feed earlier, especially if he seems hungry.
Praise You and (baby’s name) are doing very well.
Open Question How do you think you will get on doing this all the time?
Mother: I think we will manage it.
Health Worker: Do you think that you can hold him close like that and look at his face and talk to him while you feed him? If you give him a lot of attention and closeness, it tells him that you love him.
Suggest Do you see, he has closed his mouth now, so he has probably had enough.
I will come back and stay with you for the next few feeds and to answer any questions you have.

Thank the participant for her help.

Give participants about10 minutes to write the skills in the spaces in their manuals.
All trainers circulate to give individual feedback to participants on their answers.

V. Discuss caring for a baby who is not breastfeeding 15 minutes
Ways of comforting a baby

- Make these points:

  - Babies who are not breastfed are at risk of not getting enough attention, so a special effort needs to be made.
  
  - Mothers and other family members may expect to put a crying baby to the breast to comfort him. If a mother is HIV-positive and not breastfeeding, she will need to find other ways of comforting her baby.
  
  - Babies often cry because they are lonely and need someone to give them attention, not only because they are hungry. So they can be comforted in other ways than by breastfeeding.

  *Ask: What other ways can you suggest of comforting a baby?*

  Let participants mention some ways, demonstrating with the doll as needed.

  - Massage, swaddling, carrying, rocking, singing or talking to the baby, and sleeping with the baby can all help to comfort him or her.
  
  - Sucking is very comforting to a baby. He can suck on his mother’s forearm, a clean finger, or any part of the body except the nipple. This also ensures that he has contact with his mother.

- If pacifiers are used commonly or if participants mention them as a way to comfort infants, make these points:

  - A pacifier does not make a good substitute for contact with another person. A baby who needs comfort or attention needs contact with another person, not to be left alone with a pacifier in his mouth.

  - Pacifiers can carry infection and can increase the risk of a child having diarrhoea, respiratory illnesses, and thrush. Dipping a pacifier in honey or sugar can cause dental problems. Honey has been associated with outbreaks of botulism in infants, causing a number of deaths.
Feeding a baby at night

Make these points:

- Babies need frequent feeding, about 8 or more times a day during the first 1-2 months. Breastfed babies may continue to feed 8 or more times a day as they get older. With replacement feeding, feeds can be reduced after 2 months to about 6 times a day. This is because a baby’s stomach takes longer to digest and empty after formula feeds.

- However, babies who are very small, and babies less than 2 months old, need night feeds. Some babies wake for a feed. Other babies may need to be awakened for a feed. The health worker needs to discuss with a mother who is not breastfeeding how she will feed her baby at night.

Ask: What are some ways in which a mother can feed her baby at night?
Let participants discuss this for a few minutes.
Suggestions to discuss might include:
  Could a mother heat milk in the night to prepare a feed?
  Could she measure the ingredients, such as powdered milk, sugar and boiled water, and leave them covered, so that all that she has to do in the night is to mix them?

When a baby is cared for by other people

Make these points:

- A baby may be cared for by someone other than the mother all or part of the time. The other caregivers need to know how to make up and give feeds cleanly and safely.

Ask: Who cares for the babies of mothers in this community who work away from home?
Wait for a few replies, and then continue.

Ask: How can they learn to give safe clean feeds?
Wait for a few replies, then continue.

- If a mother cares for her baby some of the time, she may be able to teach the other caregiver herself. Discuss with her how she might do this. Remind her how you taught her about feeding and show her again any points that she is not clear about.

- Discuss whether the mother wants to prepare feeds to leave for a caregiver, or if she will teach the caregiver to do all the preparation. She may feel that it is safer to do as much of the preparation as possible herself, especially if the caregiver is young, is inexperienced or has difficulty measuring.
The caregiver might come for infant feeding counselling with the mother. If the mother is not available, the caregiver may need to come on her own.

The main points the caregiver needs to know are:
- the four points of clean and safe feeding,
- proper measuring and preparation of food,
- cup feeding of milk,
- suitable amounts to feed the baby.\(^5\)

If a baby is very young, teach about appropriate milk feeds and cup feeding. Teach about complementary feeding when the infant is a little older.

Show Overhead 8/7 - For the caregiver and make the points that follow:

- This picture shows what a mother has to prepare, if she is going to leave feeds ready for a caregiver. She cannot mix up a feed, because it will not be safe to feed the baby after an hour. She will have to leave the measured ingredients, for the carer to mix.

- It is more difficult to leave liquid or fresh milk. Unless there is a refrigerator, it is not safe if stored.

- The mother will need to leave clean utensils. She will need to boil and measure the water, measure the milk powder, sugar, and micronutrients supplement or formula. She needs to cover them all and leave them in a cool, clean, safe place, where insects and animals cannot get at them.

\(^5\) This is discussed in Session 10.
The mother must teach the caregiver to mix the ingredients just before she gives the feed, and to feed it from a cup.

A child may refuse to take a feed if the familiar caregiver is not present. Patience and encouragement are needed while a child learns to accept a new caregiver.

VI. Summarize the session 3 minutes

☐ Conclude with these points:

- In this session, we discussed:

  - Breastmilk substitutes need to be prepared in a very clean, safe way to reduce the risk of contamination and infection. Health workers need to discuss suitable methods of cleaning utensils with mothers.

  - Cup feeding is recommended rather than using a feeding bottle. Cups are easier to keep clean and using them ensures contact between the mother or other caregiver and the baby.

  - When cup feeding the baby should be alert and upright. Let the baby control the rate of drinking, and do not pour the milk into his mouth.

  - Mothers who are used to comforting a baby by breastfeeding need to learn other ways to provide comfort if the baby is not breastfed.
Session 9
Replacement Feeding from 6 to 24 months

Objectives:

At the end of this session, participants should be able to:

- Discuss an appropriate time to start complementary feeding;
- Describe feeding a child from 6 to 24 months of age;
- Discuss active feeding of a young child.

Outline:

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Before the session

You will need:
Overheads 9/1, 9/2, 9/3, 9/4, 9/5, 9/6

A cup or bowl that holds 200 ml when full.
Decide on names for the children in the examples.
Find out the commonly available foods for feeding children. If locally made, nutritious, low priced, complementary foods are available, tell participants about them. If possible show some of the food.

Obtain examples of commonly available micronutrient supplements, such as vitamin mineral mixes for children, with their prices, and calculate how much they would cost to give everyday, and if they contain iron and zinc. Compare the quantities with the composition of the Micronutrient Supplement for Replacement Feeding in the Appendix on page 223.

Continued on next page
Discuss any national or local nutrition programmes and policies with a local nutritionist.

_ask 2 participants to help with both Demonstration 9/1 and Demonstration 9/2. They should read the instructions in their manuals on page 58, and practise with one another.

For the demonstrations, you will need a spoon, a feeding bowl with some mashed food in it, a biscuit or piece of bread and a cloth to use as a bib.

I. Introduce the session 5 minutes

☐ Make these points:

- Previously we discussed feeding an infant in the first six months when the diet was entirely milk. In this session we discuss
  - feeding a child from 6 to 24 months as other foods are introduced;
  - an appropriate time to start other foods;
  - suitable foods to give; and
  - ways of encouraging a child to eat well.

- Breastmilk provides ideal nutrition for an infant. It provides:
  - complete nutrition for at least 4 and usually 6 months;
  - half or more of a child’s nutritional needs from 6-12 months;
  - up to one-third of a child’s nutritional needs from 12-24 months.

- Infants should be exclusively breastfed or fed with suitable breastmilk substitutes, for at least the first four and if possible the first six months of life. The provision of other foods and liquids in addition to milk is called _complementary feeding_, because the foods are additional or complementary to the milk rather than adequate on their own as the diet.

- Most babies do not need complementary foods before six months of age. All babies older than six months should receive complementary foods.

- However, it is also important that they continue to breastfeed, or to have some other form of milk up to at least 2 years of age. It is very difficult to feed a child less than 2 years old adequately on complementary foods alone without some form of milk or other animal food product. If an HIV-positive mother decides to stop breastfeeding early, her child will need some other form of milk instead.

- Adding complementary foods too soon or in too great an amount can replace the milk and reduce intake. If the added foods are starchy and low in protein and micronutrients, this can result in a diet that is not adequate for an infant.
If a baby between 4 and 6 months old is not growing well or is very restless after feeds, despite unrestricted milk feeding, complementary feeds can be started and given 1 or 2 times a day, after breastfeeds or milk feeds.

A baby between 4 and 6 months old who is growing well on breastfeeding or suitable breastmilk substitutes, but who is reaching for family foods, may be given a few small soft pieces of the family foods rather than regular daily feeding with complementary foods.

Breastmilk contains enough water for a baby. Breastfed infants less than about six months old do not need additional water, even in a hot climate.

II. Describe suitable foods for a child from 6 to 24 months

Make these points:

The main foods that people eat are called staples – they are usually grains or cereals and starchy roots and fruits. People generally eat large amounts of staple, and it provides much of the energy they need plus some protein and other nutrients, but it cannot provide all the nutrients needed.

Ask: What are the main staples eaten in this area?
   Wait for a few replies then continue.

Staples are used to make porridge and paps for children. They are relatively cheap, easy to obtain, easy to prepare and eat and most children like them. However they are bulky and fill up a child's small stomach quickly. A child cannot get enough nutrients or energy by eating only porridge and paps. A one year old child's stomach can only hold about a cup (200 ml) of food at one time.

Show the cup or small bowl that holds exactly 200 ml.

A good diet consists of a mixture of most of the following:
- a staple food such as a cereal, with
- animal food such as meat, fish, eggs
- milk
- pulses, such as beans, peas or lentils
- vegetables and fruit
- fats and oils such as vegetable oil, margarine, butter or ghee.

In different areas different foods are available and given to children. When a health worker is talking with a mother, she needs to discuss the foods that are available to that community and considered suitable for children.

Now we will look at what some young children eat and discuss how this might meet or not meet their needs.

---

1 Include other local foods as appropriate.
Example 1: Feeding a 9-month-old child without milk

☐ Show Overhead 9/1 - Child 1: no milk. Keep the chart part of the overhead covered.

☐ Make these points and indicate the portions of food in the picture:\(^2\)

- Here is (name). She is 9 months old and her weight is low at 6 kg. She has never breastfed. Her mother gave her commercial formula until she was six months old. Since then she has been fed on porridge and other foods but no milk.

During a typical day (name) eats:

Morning (1): Three-quarters of a cup of soft porridge with a small spoon of sugar and a spoon of oil added

Snack (2): Three spoons of mashed pawpaw

Mid-day (3): Three spoonfuls mashed lentils, 2 spoons of potato or other staple, 1 spoon green vegetable from the family pot and a spoon of margarine.

Snack (4): A piece of bread with a little butter

Evening (5): Three-quarters of a cup of soft porridge with a small spoon of sugar and one spoon of oil added.

Ask: Does this food give (name) enough energy and nutrients to grow well?
   Wait for a few replies, then continue.

\(^2\)The details of the foods and nutrients can be found in an appendix at the end of the session.
Uncover the chart portion on Overhead 9/1 and point out the following:

- In this chart, 100% is the total amount of each nutrient that an infant needs in one day. The bars show what percentage (%) of (name’s) needs are provided by the foods that she/he is eating. For the infant to get all that she/he needs, the bar should go to the top of the square.

Ask: Which nutrients does (name) not eat enough of?
Let participants comment, then continue.

- (Name) does not eat enough energy, protein or micronutrients – especially iron. Her mother is feeding her five times a day, and she is giving her many good foods and enriching her food with added oil and sugar. But this does not meet (name’s) needs.

Ask: What can be done to increase the energy, protein and micronutrients in (name’s) diet?
Wait for a few replies, then continue.

- Probably the best way to increase the energy and protein in (name’s) diet would be to give her some milk, as well as the food she has. It is difficult to feed an infant of this age enough energy adequately without some form of milk.

- (Name’s) mother talked with the health worker, who praised her for feeding her five times a day and for giving fruit and vegetables as well as porridge. She explained how giving some milk would help (name) to grow faster.

- (Name’s) mother did what the health worker suggested. She started giving (name) 500 ml of milk each day. She mixed some with the porridge to soften it and gave some as drinks.

- (Name’s) diet then looked like this:
You can see that the milk gives (name) enough energy and enough protein. Notice that she is still an infant. Up to 12 months of age, she needs almost as much milk as a baby less than six months old.

*Ask: Is (name) getting all the nutrients that she needs now?*

No – she is not getting enough iron.

To meet the iron requirements of a young child, she needs to eat meat, liver or other offal, chicken or fish. Even a small amount of these animal foods can help a child's diet.3

However, for (name) to get enough iron and zinc from her food she needs to eat about 60 gms of liver, or more of other kinds of meat, each day - this is more than an infant or young child is likely to eat. So the health worker recommended a micronutrient supplement.

So (name’s) diet now includes milk, fruit and vegetables as well as the staple and a micronutrient supplement. This meets (name’s) nutrient needs and enables her to grow and be healthy.

---

3Fruit or vegetables or a small amount of animal food at the same meal as porridge helps the child’s body to absorb the iron from the porridge. Cooking in iron pots can also contribute to the iron intake especially if the foods cooked are acidic such as tomatoes, lemons or vinegar.
Example 2: Infrequent feeding

Show **Overhead 9/3 - Child 2: Three meals**
Keep the part of the overhead with the chart covered.

![Image of Child 2: Three meals](image)

- **Percentage of needs, 3 meals**
  - Energy
  - Protein
  - Iron
  - Vit A
  - Vit C

- **Make these points and indicate the portions of food in the picture:**
  - (Name) is 18 months old and his weight is low at 8 kg. He was exclusively breastfeed for 6 months, and then stopped. He has 3 meals a day using a variety of foods including milk.

  (Name) has:
  - Morning (1): One cup of thick porridge with a small spoon of sugar and a spoon of oil, ½ an orange and a ½ cup milk.
  - Mid-day (2): One-half cup mashed lentils, ½ cup thick porridge and two spoons of spinach.
  - Evening (3): One-half cup of thick porridge with some fish sauce and a spoon of oil added, plus a piece of pawpaw and ½ cup of milk.

**Ask:** What do you think of (name’s) diet?
Wait for a few replies, then continue.

- Uncover the chart part of **Overhead 9/3** and make these points:
  - (Name) is getting good foods. His mother gives him milk, fruit and vegetables as well as the staple. He is getting enough protein and vitamins but not enough energy or iron. If (name) continues on this diet, he will grow slowly.
Ask: Why is (name) not getting enough energy?
Wait for a few replies, then continue.

- (Name) is fed only 3 meals a day. A child of this age cannot eat enough food if he eats only three times a day – his stomach is too small. He needs to eat 5 times a day to get enough.

- The health worker suggested that (name’s) mother feed him more often. She does not need to cook more meals. She can give him some snacks between meals.

Ask: What kind of snacks would be easy to give this child?
Wait for a few replies, then continue.

- He needs energy rich snacks that do not need to be cooked, and that he can eat himself. For example, bread, biscuits or roasted cassava spread with butter, margarine, nut paste or honey; or some fruit such as a banana. These should be in addition to the main meals – they should not replace them.

- Feeding a young child frequently can be difficult if a mother or other caregiver has many other duties also. Talking with a mother may help her to find ways of meeting her child’s needs without too much extra work.

- (Name’s) mother decided to give him some bread and margarine in the middle of the morning and the same in the afternoon. She also adds a spoonful of margarine to his mid-day meal. He now has:

☐ Show Overhead 9/4 - Child 2: Three meals and two snacks
Ask: *What do you think of (name’s) diet now?*
Wait for a few replies, then continue.

- (Name) gets enough energy, but he still does not get enough iron. He needs a micronutrient supplement as well in order to grow well.

- So, to help a young child to get enough energy and nutrients when much of the diet consists of bulky staple foods, families can:
  - feed the child frequently – 5 times a day;
  - add other nutrient rich foods, such as animal products, vegetables, fruit, oil and sugar, to enrich the porridge or staple;
  - include milk in the child’s diet. Milk can also be a useful snack.

- It is very difficult for any child under two years of age to get enough energy from other foods without milk. **It is therefore important in replacement feeding programmes in HIV prevalent areas to provide milk for children up to two years of age. It is not enough just to provide breastmilk substitutes during the first six months of life.**

- It is also necessary to consider how young children can get enough micronutrients, particularly iron and probably also zinc.\(^4\) In many situations, micronutrient supplements will be necessary.

**Micronutrient supplements**

- Show examples of commonly available micronutrient supplements and make these points:

- Earlier in Session 5 we discussed the use of micronutrients for children under six months of age.

Ask: *Which of these products also could be used for children over six months of age?*
Let participants look at the labels and discuss.

Ask: *What is the cost for one month of providing micronutrient supplements from locally available products?*

- Calculate this cost and also include in the Exercise in Session 13.

<table>
<thead>
<tr>
<th>TABLE 9.1 COST OF MICRONUTRIENT SUPPLEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per pack/bottle</td>
</tr>
</tbody>
</table>

---

\(^4\) New research indicates that young children may be deficient in zinc. Zinc is found in high amounts in liver and other meats, fish, milk, groundnuts, beans and eggs. However, young children are unlikely to eat sufficient amounts of these foods to meet their zinc requirements. Micronutrient supplements usually include zinc. Zinc is usually found alongside iron, so only iron is mentioned in the examples, for simplicity.
III. Discuss active feeding\textsuperscript{5} 5 minutes

☐ Show Overhead 9/5 - Active feeding and read out the definition of active feeding:

\begin{center}
\includegraphics[width=0.5\textwidth]{active_feeding.png}
\end{center}

☐ Make these points:

- Young children need to be encouraged and assisted to eat – this is called Active Feeding.
- The caregiver needs to concentrate on the child during the feeding.
- Showing mothers how to feed their children may be as important as explaining what to feed.

\textit{Ask: Why might difficulties occur with feeding young children?}

⇒ Write replies on the board or flipchart. Include any of those following that were not mentioned by participants.

\textsuperscript{5}The Care Initiative, (UNICEF, Nutrition Section, New York, 1997) is a means of assessing existing care structures (at family and community level), analysing the resources and structures, and facilitating improved care for nutrition. Refer to information from the Care Initiative as needed.
Difficulties may occur with feeding, and thus growth, if:
- meals occur when a child is too tired to eat;
- carers force foods into a child's mouth;
- foods are difficult to eat;
- a child's appetite for nutritious foods is spoiled by sugary drinks;
- a child is not yet able to show that he is hungry;
- a child is left to feed himself and eat alone;
- a child has to compete with other children for the same dish of food;
- a child is punished for not eating.

Show **Overhead 9/6 - Child needs own portion** and ask the questions:

*Ask: What is happening in this group of children eating?*
  A young child has to compete with older children for food from the same dish.

*Ask: How could it affect the amount of food that the youngest child eats?*
  A young child who has to share may not get enough food, or may get only the staple, and not other nutrient rich foods.

- Young children eat slowly. They should have their own dish of food, so that they get their full share and do not need to compete with others. If a child has her own dish, the caregiver can see how much the child is eating and she can make sure that the child eats enough of the nutrient rich foods.

- Extra care is needed if an older sibling feeds a young child. When you talk with a mother, ask, “Who feeds the child” and “How do they do it?” to find out if the child is actively encouraged to eat.
■ Complementary feeding is a social activity as well as providing food. As a child starts to eat family foods, he should also be eating with the family or other children.

■ Factors that reduce a child's appetite may include
  - lack of variety in the food,
  - lack of nutrients needed for appetite (e.g. zinc and possibly iron),
  - illness, sore mouth,
  - anxiety and stress in the home.

■ Children without much appetite (anorexic children) should be offered nutritious foods that they like and should be encouraged to eat frequently. As a child recovers from illness, she needs extra food to make up for the meals that she missed while ill. Micronutrients may help the child's appetite.

*Ask: How can families encourage young children to eat?*

  Wait for a few replies, then continue. Ask participants to keep their manuals closed while they answer this question.

😊 Now, ask participants to turn to page 57 of the Participant's Manual and find BOX 9.1 HOW FAMILIES CAN ENCOURAGE YOUNG CHILDREN TO EAT. Ask participants in turn to read out the points one by one and to discuss them briefly.

---

**BOX 9.1**

**HOW FAMILIES CAN ENCOURAGE YOUNG CHILDREN TO EAT**

They can:

- offer small amounts at times when the child is alert and happy;
- offer more food if the child shows interest;
- give foods of a suitable consistency, not too thick or dry;
- give physical assistance - a spoon of a suitable size, food within reach of the child, young child sitting on caregiver’s lap while eating;
- offer verbal encouragement, e.g. “Open for lovely, tasty beans”, smiles and other positive facial gestures.

If a child receives more attention for refusing food than for eating it, he may eat less.
IV. Demonstration of active feeding 15 minutes

Ask the 2 participants whom you prepared to give Demonstration 9/1. One participant plays the part of a child aged about 18 months and another participant is the ‘parent’.

Introduce Demonstrations 9/1 and Demonstration 9/2

Now we see demonstrations of two ways to feed a young child. After the demonstration we will discuss what it shows.

Demonstration 9/1: Poor feeding

The ‘young child’ on the floor sitting on a mat.
Parent puts a bowl of food beside the child with a spoon in it.

Parent turns slightly away and continues with other work.
Doesn't make eye contact with the child or help with feeding.
Child pushes food around the bowl, looks to parent for help, eats a little, cannot manage a spoon well, gives up and moves away.
Parent says “Oh, you aren't hungry” and takes the bowl away.

Ask: How do you think this child feels about eating?

Wait for a few replies and also ask the ‘child’ how she felt.
The ‘child’ may feel eating is very difficult, may be hungry, sad….

Now we see another way of feeding a young child.

Demonstration 9/2: Active feeding

Parent washes the child’s hands and then sits level with child. Parent keeps eye contact and smiles at child. Using a small spoon, small amounts of food are put to the child's lips and child opens his mouth and takes it a few times.

Parent praises child and makes pleasant comments – “Aren't you a good boy/girl”, “Here is lovely dinner” while feeding slowly.
Child stops taking food by shutting mouth or turning away.
Parent tries once - "Another spoonful of lovely dinner?"
Child refuses and parent stops feeding.

Parent offers a piece of food that child can hold - bread crust, biscuit or something similar. “Would you like to feed yourself?”
Child takes it, smiles and sucks/munches it.
Parent encourages “You want to feed yourself, do you?”

Ask: How did the child feel this time about feeding?

Wait for a few replies. Ask the ‘child’ too. The child may feel happy about eating, like the contact and the praise, enjoy feeding him/herself.

Thank the participants for their help.
V. Discuss use of commercial 'baby foods' 5 minutes

☐ Make these points:

- Commercial baby foods are prepared in factories and sold in cans or jars or packets. These may be produced by big international companies and imported or they may be made locally.

*Ask: Which products do you see in your area?*
  Wait for a few replies, then continue.

- These products have both advantages and disadvantages.

😊 Ask participants to look at page 59 in the Participant's Manual and find BOX 9.2 COMMERCIAL BABY FOODS. Ask one participant to read out the list of **Advantages** and another to read out the list of **Disadvantages** of commercial baby foods.

<table>
<thead>
<tr>
<th>BOX 9.2 COMMERCIAL BABY FOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages:</strong></td>
</tr>
<tr>
<td>– Quick and easy to prepare, and may not need cooking;</td>
</tr>
<tr>
<td>– Usually clean and safe when first opened;</td>
</tr>
<tr>
<td>– Most babies like them, as they are usually sugary;</td>
</tr>
<tr>
<td>– Some products contain a good mixture of nutrients and micronutrients.</td>
</tr>
<tr>
<td><strong>Disadvantages:</strong></td>
</tr>
<tr>
<td>– Expensive compared to home-prepared foods;</td>
</tr>
<tr>
<td>– Labelling may suggest giving them to babies before 6 months;</td>
</tr>
<tr>
<td>– Labelling may suggest giving the foods in place of milk feeds;</td>
</tr>
<tr>
<td>– Supply may be unreliable;</td>
</tr>
<tr>
<td>– If mixed with contaminated water it may make the child ill;</td>
</tr>
<tr>
<td>– Some products are low in important nutrients;</td>
</tr>
<tr>
<td>– Difficult to store safely once opened.</td>
</tr>
</tbody>
</table>

- The health worker can discuss with a mother if these products are useful for her child or not. They may be useful 'convenience' foods occasionally for families who can afford them.
The use of commercial baby foods may create dependence, which is a problem if the supply is unreliable.

Usually families can make home-prepared foods, which are as good or better than commercial foods.

In some countries, there are low priced commercial complementary foods, which are made locally. They are also usually convenient and nutritious.

Remember that infants taking these foods continue to need milk every day as well.

If locally made, nutritious, low priced, complementary foods are available, tell participants about them.

IV. Outline feeding concerns related to HIV 5 minutes

Ask: How does belonging to a family that is living with HIV affect the nutrition of young children?

Wait for a few replies then continue. Ask participants to keep their manuals closed at this time.

Make these points:

- As time goes on, a child’s mother may become more sick with HIV related illnesses. Her illness may result in the child getting less care, and being at greater risk of malnutrition.

- If she is not breastfeeding, a mother may soon be pregnant again, or have another young baby. This can also affect the feeding of the young child.

- Illness and death in a household can reduce the availability of food, through lack of money, inability to work the land fully, to go to the market or to prepare food.

- An older child may be responsible for caring for younger children, if the parents are sick or dead.

- The child may be at increased risk of illness, if not breastfeeding, or if infected with HIV, and need extra care. Active feeding is needed to help with catch-up growth after illness. But less care may be available.
VII. Summarize the session

☐ Conclude with these points:

- In this session, we discussed:

- From about 6 months of age, all infants need complementary foods, made from family foods, which contain enough energy and other nutrients for adequate growth. A diet consisting only of milk is no longer sufficient.

- However, children need to continue with some milk up to at least one year of age, and if possible 2 years – it is difficult for them to get enough energy from other foods.

- The staple food provides the base to which milk and animal foods, energy foods such as oil and sugar, and fruits and vegetables are added.

- Children need to eat often to ensure sufficient intake. If infants are breastfed, up to the age of one year they need complementary food only 3 times a day because breastmilk is such a good food. If infants are not breastfed, they need 5 meals of other food, or food and other milk. After one year of age, all children need to eat five times a day.

- Iron and zinc requirements are particularly difficult to meet unless there is fish or meat or offal regularly in the diet. Micronutrient supplements may be needed if these foods are not eaten in sufficient quantity.

- Active, frequent feeding is needed to encourage a child to eat sufficient foods. Feeding can be a pleasant time between the parent and child. When feeding is pleasant and active, the child is more likely to eat well.

- The time from 6 to 24 months is a high-risk time for malnutrition and care is needed to ensure that a child has sufficient suitable food. If the mother is sick with an HIV related illness and/or she becomes pregnant again soon this can increase the risk of malnutrition for the young child.
Composition of foods used in examples

Child 1: 9 months old, no milk

<table>
<thead>
<tr>
<th>Food</th>
<th>Energy</th>
<th>Protein</th>
<th>Iron</th>
<th>Vit A</th>
<th>Vit C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement</td>
<td>830</td>
<td>9.6</td>
<td>11</td>
<td>350</td>
<td>25</td>
</tr>
<tr>
<td>300 ml soft porridge, 60 g white refined</td>
<td>201</td>
<td>4.8</td>
<td>0.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lentils, 10 gm raw</td>
<td>33</td>
<td>2.5</td>
<td>0.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Potato, 20 gm</td>
<td>15</td>
<td>0.3</td>
<td>0.2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Dark greens, 10 gm</td>
<td>6</td>
<td>0.4</td>
<td>0.7</td>
<td>55</td>
<td>8</td>
</tr>
<tr>
<td>Bread, 10 gm</td>
<td>24</td>
<td>0.8</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Margarine, 2.5 gm</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Oil, 10 gm</td>
<td>90</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Margarine, 10 g</td>
<td>75</td>
<td>0</td>
<td>0</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>Sugar 10 gm</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pawpaw, 30 gm</td>
<td>9</td>
<td>0.1</td>
<td>0</td>
<td>60</td>
<td>16</td>
</tr>
<tr>
<td>Total, no milk diet</td>
<td>512</td>
<td>8.9</td>
<td>2.5</td>
<td>201</td>
<td>28</td>
</tr>
<tr>
<td>Milk, cows 500 ml</td>
<td>330</td>
<td>17.5</td>
<td>0.7</td>
<td>260</td>
<td>5</td>
</tr>
<tr>
<td>Total, improved diet</td>
<td>842</td>
<td>26.4</td>
<td>3.2</td>
<td>461</td>
<td>33</td>
</tr>
</tbody>
</table>

Percentage of requirements, no milk 62% 93% 23% 57% 112%
Percentage of requirements, with milk 101% 275% 29% 132% 132%

Child 2: 18 months old, infrequent feeding

<table>
<thead>
<tr>
<th>Food</th>
<th>Energy</th>
<th>Protein</th>
<th>Iron</th>
<th>Vit A</th>
<th>Vit C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement</td>
<td>1092</td>
<td>10.9</td>
<td>12</td>
<td>400</td>
<td>30</td>
</tr>
<tr>
<td>Maize, 120 gm, 400 ml thick porridge</td>
<td>402</td>
<td>9.6</td>
<td>1.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Milk 200 ml</td>
<td>132</td>
<td>7</td>
<td>0.1</td>
<td>104</td>
<td>2</td>
</tr>
<tr>
<td>Lentils, 20 gm raw, 60 gm cooked</td>
<td>65</td>
<td>5</td>
<td>1.4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Dark green leaves, 40 gm</td>
<td>23</td>
<td>1.8</td>
<td>2.9</td>
<td>220</td>
<td>32</td>
</tr>
<tr>
<td>Orange, 1/2 - 50 gm</td>
<td>22</td>
<td>0.3</td>
<td>0</td>
<td>66</td>
<td>23</td>
</tr>
<tr>
<td>Pawpaw, 40 gm</td>
<td>12</td>
<td>0.2</td>
<td>0.2</td>
<td>80</td>
<td>21</td>
</tr>
<tr>
<td>Fish, dried small, 5 gm</td>
<td>16</td>
<td>2.2</td>
<td>0.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oil, 10 ml</td>
<td>90</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sugar 5 gm</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>782</td>
<td>26.1</td>
<td>6.3</td>
<td>472</td>
<td>78</td>
</tr>
<tr>
<td>Margarine, 30 g</td>
<td>222</td>
<td>0</td>
<td>0</td>
<td>204</td>
<td>0</td>
</tr>
<tr>
<td>Bread, 30 gm</td>
<td>72</td>
<td>2.2</td>
<td>0.6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total with snacks</td>
<td>1076</td>
<td>28.3</td>
<td>6.9</td>
<td>676</td>
<td>78</td>
</tr>
</tbody>
</table>

Percentage of requirements, no snacks 72% 239% 53% 118% 260%
Percentage of requirements, with snacks 99% 260% 58% 169% 260%
Session 10

Preparation of Milk Feeds - measuring amounts

**Objectives:**

At the end of this session, participants should be able to:

- Specify amounts to feed an infant who is not breastfed;
- Make measuring utensils for liquids and powders;
- Translate measures into a mother's home utensils;
- Provide clear instructions on preparation of milk feeds using home measures.

**Outline:**

| I. | Introduce the session | 2 minutes |
| II. | Discuss the amount of milk to give if a baby is not breastfed | 8 minutes |
| III. | Describe how to measure liquids (groups) | 20 minutes |
| IV. | Describe how to measure sugar and milk powder (groups) | 15 minutes |
| V. | Facilitate Exercise 10.1: How to prepare milk feeds (groups) | 15 minutes |

Total time - 60 minutes

This session requires planning and practice before the course. Read the Pre-course instructions on pages 138-141. Go through the instructions with all the trainers that will be working with groups in Session 10.
Before the session

You will need:

The 3 recipes written on flipchart pages - see BOX 10.1, BOX 10.2, and BOX 10.3.
Put in the dilution for the brand you are using as calculated in BOX 10.A, page 141.

A set for the trainer to use for the demonstration of:

- The items need for the measuring methods chosen before the course (BOX 10.B) on page 141, plus
- Easily available see-through small containers - jars, glasses
- Marker suitable for glass - ask permission before using a permanent marker on a participant's glass
- Sugar (about 60 gms)
- Small cloth to work on when weighing sugar (e.g. clean handkerchief)
- Cloth for mopping spilt water
- Spoons of various sizes (as commonly used)

Water - about 2 litres of drinking water plus water for washing-up

Milks you decided to discuss in Session 5. (You may already have the milks from Session 5 or your practice session)
- Powdered full cream milk
- Commercial or generic infant formula
- Cow’s milk
- Evaporated milk or other milks available locally

Arrange all the utensils and ingredients for the demonstration in a convenient way on a table where everyone can see clearly.

ıyla Participants will need their WORKSHEET 6/1 Preparation for practical session, distributed on Day 1.

Each group also needs:

- set of measuring items for the measuring method chosen before the course
- small cloth to work on when weighing sugar
- cloth for mopping spilt water
- their group's spoons and containers
- marker suitable for glass
- table or space to practise measuring water, sugar and milk powder.

Remind trainers to stay with their groups to make sure that they understand what to do, and that they do it correctly and completely.

They must make sure that each group finishes the session with a set of marked measures for liquid or powdered milk, water, and sugar, for each kind of formula they will use. The group must then take the set of measures with them to use in Session 11 “Preparation of Milk Feeds – practical.”
I. Introduce the session

- Make these points:
  - HIV-positive mothers who choose not to give breastmilk, and other caregivers, need to know how to prepare replacement feeds for their infants. Replacement feeds must be prepared in the safest possible way, to reduce the risk of illness. Mothers need to practise this skill with a health worker present, either in the health facility or at home, so they can do it easily and the same way every time.
  - In this session, we will discuss:
    - amounts of milk to prepare for an infant who is not breastfed;
    - how to make measures for liquids and powders;
    - how to make measures using utensils that a mother brings from home;
    - how to follow recipes using home measures and locally available milks.
  - When a mother makes replacement feeds, whether from commercial or home prepared, it is very important that the milk and water are mixed in the correct amounts, and also sugar and micronutrients added if needed. Wrongly prepared feeds may make a baby ill, or he may be underfed.

*Ask: Why is it especially important to measure replacement feeds accurately during the first six months?*

Wait for a few replies, then continue.

- These milk feeds will be the infant’s entire food intake during this time. Small differences that might not matter for one or two feeds may have a serious effect if they are repeated for every feed.

II. Discuss the amount of milk to give if a baby is not breastfeed

- Make these points:
  - A baby who is cup fed can control how much he takes, by refusing to take any more when he has had enough. And the amount that a baby takes at each feed varies. But the caregiver must decide how much to put in a cup to offer the baby.

*Ask: How much milk do you think is needed for a cup feed for a young infant?*

Let participants suggest, then continue.

- A baby needs an average of 150ml/kg body weight/day. This is divided into 6, 7 or 8 feeds according to the baby’s age. The exact amount at one feed varies.

- Ask participants to turn to page 60 of their manual, where they will find TABLE 10.1 APPROXIMATE AMOUNT OF FORMULA NEEDED PER DAY. You do not need to read it out.
TABLE 10.1 APPROXIMATE AMOUNT OF FORMULA NEEDED PER DAY

<table>
<thead>
<tr>
<th>Age in months</th>
<th>Weight in kilos</th>
<th>Approx. amount of formula per 24 hours</th>
<th>Approx. number of feeds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>450 ml</td>
<td>8 x 60 ml</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>600 ml</td>
<td>7 x 90 ml</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>750 ml</td>
<td>6 x 120 ml</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>750 ml</td>
<td>6 x 120 ml</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>900 ml</td>
<td>6 x 150 ml</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>900 ml</td>
<td>6 x 150 ml</td>
</tr>
</tbody>
</table>

*includes rounding up or down for ease of measurement

- Make these points referring to the table:

  - Sometimes it is easier to decide according to a baby’s age than the weight. This table shows the average amounts for a baby month by month. We have rounded them up or slightly down, so that individual feeds are easier to measure. These amounts can be used as a starting point and then adjusted for the individual baby.

  - As you can see on the table, a newborn infant is fed small amounts frequently. The amount gradually increases as the infant grows. Most infants need no other food or fluids until about 6 months.

  - It is normal for the amount of milk that a baby takes at each feed to vary. This is true, whatever the method of feeding, including breastfeeding. When a baby is feeding by cup, offer a little extra, but let the baby decide when to stop.

  - If a baby takes a very small feed, offer extra at the next feed, or give the next feed earlier, especially if the baby shows signs of hunger.

  - If a baby is not gaining enough weight, he may need to be fed more often, or given larger amounts at each feed, according to his expected weight at that age. We will discuss monitoring a baby’s growth in Session 16.

- Ask participants to turn to page 61 in their manual and to find TABLE 10.2 APPROXIMATE AMOUNTS OF MILK NEEDED BY MONTH.

- Make these points:

  - This table shows approximately how much milk a baby needs in the first six months. The numbers are rounded rather than exact. An individual baby may need more or less than the amount listed.
### TABLE 10.2 APPROXIMATE AMOUNTS OF MILK NEEDED BY MONTH

<table>
<thead>
<tr>
<th>Age in months</th>
<th>Milk feeds ml/day</th>
<th>Cow’s milk, sugar and water needed to make home-prepared formula per day</th>
<th>Commercial formula needed per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>450</td>
<td>300 ml milk + 150 ml water + 30 g sugar</td>
<td>4 x 500 g tins</td>
</tr>
<tr>
<td>2</td>
<td>600</td>
<td>400 ml milk + 200 ml water + 40 g sugar</td>
<td>6 x 500 g tins</td>
</tr>
<tr>
<td>3</td>
<td>750</td>
<td>500 ml milk + 250 ml water + 45 g sugar</td>
<td>7 x 500 g tins</td>
</tr>
<tr>
<td>4</td>
<td>750</td>
<td>500 ml milk + 250 ml water + 45 g sugar</td>
<td>7 x 500 g tins</td>
</tr>
<tr>
<td>5</td>
<td>900</td>
<td>600 ml milk + 300 ml water + 56 g sugar</td>
<td>8 x 500 g tins</td>
</tr>
<tr>
<td>6</td>
<td>900</td>
<td>600 ml milk + 300 ml water + 56 g sugar</td>
<td>8 x 500 g tins</td>
</tr>
<tr>
<td>Total for 6 months (approximately)</td>
<td>92 litres of milk + 9 kg sugar</td>
<td>40 x 500 g (20 kg)</td>
<td></td>
</tr>
</tbody>
</table>

☐ Ask participants to answer the following questions from TABLE 10.2

**Ask: How much milk would be needed for one day for a one month old baby who was having home-made formula from cows milk?**

From the chart, you can see that about 300 ml of milk is needed for one day. However the mother may need to buy the milk in a 500 ml packet. If she has no refrigerator to store the extra milk, she will have to use it up by giving 200 ml to other family members.

**Ask: How much commercial infant formula would you need to feed an infant for the first month?**

You would need about 2 kg or four 500 g tins of formula.

- If you add up all these months, you will find that if cow’s milk is used, a baby needs approximately 92 litres of milk during the first 6 months. If commercial infant formula is used, a baby needs about 20 kg (40 x 500 gm tins).(see the figures at the bottom of TABLE 10.2)

- A baby who is not breastfed needs a regular supply of milk. A child continues to need milk after complementary foods are introduced, up to at least one year of age, and if possible 2 years. So, the mother needs to consider how she can provide milk for all this time.
III. Demonstrate how to measure water and liquid milk 20 minutes

Ask participants to turn to page 34 in their manual and find BOX 5.1 RECIPES FOR HOME-PREPARED FORMULA. (BOX 5.1 is on page 81 of the Trainer’s Guide)

☐ Make these points:

- BOX 5.1 shows some recipes for making home-prepared formula. 120 ml is the amount that a baby of about 3-4 months old would need for each of six feeds per day. We will use this amount for this demonstration.

- A very young baby needs smaller amounts at each feed. However, the proportions of 2 parts milk to 1 part water and proportion of sugar should be the same.

- Show the caregiver the amounts to use according to the age of the baby at the time. Show her new amounts as the baby gets older and takes more at each feed.

 Ask: If a mother does not have a measuring jug or other container marked with amounts, how can she measure the milk and water?

Let participants give their ideas.

- A mother can bring a container from home that you can mark for her as a measure. The container should be
  - easily available
  - easy to clean and sterilise
  - see-through
  - able to be marked with paint, permanent marker, or by scratching a line on it;
  - or used as a measure simply by filling it to the top.

☐ Show some suitable containers.

- Before a mother can use a container as a measure you need to mark the amount on the container, or show her how full it needs to be to measure the amount that she has to use.

 Ask: How can you decide where to mark the mother’s container?

Let participants give their ideas.

- You can measure the correct amount of water or milk in your own measure, put it into the mother’s measure, and make a mark at the level it reaches. If you have a measuring jug you can use that as your measure.

---

1 As we showed in TABLE 10.1.
Include this section if the only available measure is a cut-off feeding bottle. It is not necessary to include it if other measures are commonly available.

- Or you can make a measure from a feeding bottle by cutting off the top.
- Explain each of the following steps as in Figure 10-1 Making a measure as you demonstrate cutting the bottle.

**Figure 10-1  Making a Measure**

![Figure 10-1](image)

**Step 1.** Take a plastic feeding bottle which is straight up and down, and which has clear measures marked on the side.

**Step 2.** Cut off the top, at a place well above the mark for 100 ml.

**Step 3.** This leaves you with a straight-sided measure, which should be easy to keep clean. (No-one can be tempted to put a teat on it and use it to feed a baby. Cut up the teat and throw it away.)

- The cut-off bottle is a way for a health worker to show appropriate amounts using a mother’s own container. Then the mother does not have to buy her own bottle to use as a measure.

Using the measure which you have decided is most suitable, continue with these points to demonstrate measuring the water, and marking the mother’s container. *(Figure 10-2)*

1. Put water into your measure, to reach the 40 ml mark.
2. Pour the 40 ml water from your measure into the mother’s container.
3. Help the mother to mark the level that the water reaches. For the measure to be accurate, the line should be thin and straight, not thick or sloped.

- Explain to the mother that to make up a feed of 120 ml from cow’s milk, she needs one measure of water and two measures of milk. (40 ml water + 80 ml milk).

**Figure 10-2  Mark a measure**

![Figure 10-2](image)
Now ask each group of participants to make a measure of 40 ml for a mother. They will use this measure later in the practical Session 11. Ask groups also to use another clear container or jar make a measure of 120 ml using the same method. They will need to use this later to make a feed with powdered milk.

☐ Explain how to measure evaporated milk (if evaporated milk is used locally)

- If a mother uses evaporated milk, she will need to dilute it with boiled water. She needs to follow the instructions on the tin to make it equivalent in strength to fresh milk. She should then add more water, sugar and micronutrients in the same way as making home-prepared formula from fresh milk.

- For (name) brand of evaporated milk the recipe is:

☐ Show on the flipchart the recipe you calculated previously (BOX 10.A, page 141):

```
BOX 10.1  EVAPORATED MILK RECIPE

(LOCAL BRAND) needs:
    ___ ml evaporated milk + ___ ml water to make 80 ml full strength milk.
To make 120 ml of home-prepared formula add 40 ml more of water

Mark the mother’s measure for:
    ___ ml of evaporated milk and (___ml + 40 ml) of water

Also add 8 g of sugar and the micronutrients to the milk
```

- Mark the mother's measure with one line for the amount of undiluted evaporated milk to use and another line for the total amount of water to use. The mother fills the evaporated milk to the line and then pours the milk into the pot. Then she fills the water to the higher line and adds that to the pot to bring to the boil.

- Remind the mother that the tin opener and the top of the tin should be washed well before use.

☐ If you are using evaporated milk in Session 11, ask participants to mark a container with one line for the amount of undiluted evaporated milk and another line for the total amount of water.
IV. Demonstrate how to measure sugar and milk powder  20 minutes

☐ Make these points:

- We will now demonstrate how to measure sugar and milk powder to make home-prepared formula.

- You can measure sugar by spoon or by weight. Most mothers will find it easier to use a spoon than to measure small weights like 8 g. However, spoons differ in size.

- Ask a mother to bring a spoon from home so that you can show her how to measure with that spoon. She should try to keep this same spoon especially for making up feeds for her baby.

- Encourage her to come back if she changes to another size spoon, or if she changes to a different kind of sugar. She needs to check that she is measuring the right amount when the size of the feed changes as the baby gets older.

☐ Ask participants to show the spoons that they have brought. Probably they will differ in size, illustrating the point. If their spoons are all the same, show some different size spoons that you brought yourself.

- You need to know how full to make each size of spoon to measure 8 g. There are three ways to fill a spoon:
  - level it with the back of a knife or handle of another spoon
  - “round” the spoon (with a curved finger)
  - heap the spoon
  - For smaller amounts, you can make a level spoonful and then take away half the sugar.

☐ Demonstrate with a spoon and some sugar how to level the spoon, make it rounded using a finger, heap it and how to remove half from the level spoon.

*Figure 10-3 Measuring with a spoon*

---

2 8 gm for a 120 ml feed
Make these points:

- First you need to measure 8 g sugar.

- Sometimes people use a balance to weigh food, for example in the market. Most balances however, do not weigh small amounts like 8 g accurately. (A balance to weigh children does not usually measure less than 100 g accurately). You need a special small balance such as one for letters in the Post Office, a nutrition balance, or a pharmacist’s balance.

- If you do not have a small balance, you can make a simple one from a wooden school ruler, balanced on an eraser, as in Figure 10-4, Simple Balance.

- If you are making your own balance, you will need weights. (Explain the weights you are using that you decided before the session – coins, water in a syringe or other weights.)

![Figure 10-4 Simple Balance](image)

Demonstrate and explain how to use the ruler balance that you prepared earlier to measure 8 g sugar.

**Step 1:** Stand an eraser on its side, and make the ruler balance on it. The eraser should be in the middle of the ruler.

**Step 2:** Take two equal sized light cups (or plastic lids), and put them one each end of the ruler. They should be exactly at the ends of the ruler. Make sure that the ruler balances with them on.

**Step 3:** Put the 8 g weight into one of the cups (your 2 x 4g coins or the 8 ml of water – not the syringe itself). That end of the ruler will go down.

Ask a participant to help with the next step, and to put sugar into the empty cup until the ruler balances again. Ask her to make sure that both cups are at the ends of the ruler.
Step 4: Put the sugar into the empty cup on the other end of the ruler.

Step 5: Show all the participants the sugar in the cup, and point out that this is what 8 g of sugar looks like.

Ask: Is a mother going to balance her sugar this way each time she makes up a feed?
No. You can show her how much sugar to put on her spoon to make up the 8 g, (or the amount she needs for one feed.)

☐ Demonstrate and explain how you will show mothers how to measure 8 g sugar with a spoon. Your bag or bowl of sugar should be on the demonstration table on the small cloth to collect any sugar that spills.

😊 Ask a participant to tip the 8 g of sugar on the balance into her spoon to see how full the sugar makes the spoon.

😊 Now ask each group to use their simple balances and spoons to measure 8 g. If they like, they can check the weight by using the nutrition balance, if available. They may need to use a level, rounded, heaped spoonful or two spoonfuls, depending on the size of their spoons.

Ask the groups to keep the spoons that they used, and to remember how they measured 8 g with it. They will use the spoon to measure sugar later.

☐ Now demonstrate and explain how to measure milk powder and water to make home-prepared formula from powdered full cream milk

- A mother may make home-prepared formula from powdered milk. She will have to measure the amount of milk powder to make feeds accurately.

- (If only one type of suitable powdered milk is used locally, or if they are all the same type, this can be omitted) Some brands of powdered full cream milk are very fine and powdery, and some are more granular and bulky. The volume, or size, of the same weight of fine powdery milk will be less than the volume of the same weight of granular milk powder.

- Ask the mother to bring a packet of the milk powder that she will use to the hospital or health centre, so that you can see what type it is, and you can check that she is using a suitable full cream milk.

- For (name) brand of full cream powdered milk the recipe is:

☐ Show on the flipchart the recipe:
BOX 10.2 FULL CREAM POWDERED MILK RECIPE

(LOCAL BRAND) needs:
80 ml water + 10 g powdered milk to make 80 ml full strength milk.

To make 120 ml of home-prepared formula add an extra 40 ml of water

Mark the mother’s measure for 120 ml of water (80 ml +40 ml)
Also add 8 g of sugar and the micronutrients

Ask: How can you measure this amount of milk powder?
Let participants give their ideas.

- You can measure it in the same way that you did for sugar. Put 10 g weight into one cup on the ruler balance, and then put powder in the other cup until it balances.

😊 Ask a participant to either fill the syringe with the required amount of water and put it in the balance cup or to put in 10g of coins. Then ask her to spoon the milk powder into the other balance cup until it balances.

Ask: Are mothers going to do this each time they make a feed?
No. You will help her to learn how many spoons she needs to measure 10 g of powder.

😊 Ask the participant to put the milk powder from the balance cup into a spoon, and to check if the amount makes a level, rounded, heaped or more than one spoonful, as for the sugar.

- The mother puts the 10 g of milk powder into the container that is marked to 120 ml. She adds a small amount of boiled, cooled water to the powder, and mixes to make a smooth cream with no lumps. Then she adds more water up to the 120 ml mark.

😊 Ask the participant who measured the milk powder to put it into the 120ml measure. And to add the right amount of water, mixing a small amount into the powder first.

- The mother also needs to measure the sugar with the spoon that she has learned to use. She should add this to the formula, and stir the formula well.

😊 Ask each group to weigh 10g milk powder, to put it into one of their spoons, and see how full the spoon needs to be. Then they should mix the milk powder as you demonstrated with 120 ml water and 8g sugar. (They should use the measure for 120 ml of water and the spoon for 8g sugar that they marked earlier in the session)

- You also need to add a micronutrient supplement to home-prepared formula. Stir it in just before giving the infant the feed. It may come in a powder form with one sachet for each day. One day’s sachet can all be mixed into one feed or divided throughout the day. If dividing the sachet, keep it tightly closed between feeds.
Now demonstrate how to use commercial infant formula

- In some areas you may be using a generic brand of formula, available from UNICEF. This has the same ingredients as commercial infant formula.

- You do not need to add sugar or micronutrients to commercial (or generic) formula. They are already mixed into the milk powder.

- Generic infant formula as supplied by UNICEF will have two measures in the tin - a smaller scoop for the powder and a larger measure for 30 ml of water. One measure of water should be mixed with one scoop of powder. Four scoops of milk powder and four measures of water will make 120 ml of formula.

- Usually commercial infant formula comes with a special measure (called a scoop) in the tin of powder. This should be used only for that brand of infant formula. Different brands may have different size measures. Scoops always have to be levelled. Use a clean knife or the handle of a spoon. Do not use heaped scoops.

Show the measures from locally available commercial formula.

- For brands of formula where there is no water measure provided, you will have to show the mother how to measure water. Mark the mother’s container with the amount of water to make up a feed of 120 ml or the required volume for a smaller baby. Use the quantities printed on the label.

- For (name) brand of commercial infant formula the recipe is:

  ![BOX 10.3 COMMERCIAL INFANT FORMULA RECIPE](image)

Now ask each group to practise measuring the milk powder for 120 ml of formula. They already have the measure for 120 ml of water that they prepared earlier in the session.
IV. Facilitate EXERCISE 10.1: How to prepare milk feeds 15 minutes

Ask participants to turn to page 67 of their manual, and to find EXERCISE 10.1 How to prepare milk feeds.

- These pages contain examples of simple instructions for preparing different kinds of milk, written in the order in which a mother would do them. They use pictures to make it clearer to a mother who does not read.

- In Session 11 “Preparation of milk feeds - practical” each person in a group will prepare a different kind of formula or a different amount

- In this exercise, each of you will make an instruction sheet about the formula you will prepare, suitable to give to a mother when you teach her. Mark the amounts in the spaces provided. Use the quantities written on the flipchart and in your manual on page 34.

- Three of the feeds can be 120 ml. At least one of the feeds should be 60 mls of one of the home prepared formulas.

- Prepare any additional measures if needed for a smaller amount of feed.

Trainers sit with their group to make sure that the group understands the exercise and to answer any questions.

At the end of the exercise, each group (of four people) should have
- four recipes/instruction sheets that show the preparation of different kinds of milk in different size feeds;
- measures marked for the amount of feed they are each preparing;
- pots and any other equipment for the practical session as listed on WORKSHEET 6.1.

All these items need to be brought to Session 11 “Preparation of Milk Feeds - practical”.
Fresh Milk

Feeds for (name) ______________ (born) ___________ from (date) ___________

Make ____ ml for each feed. Feed the baby ____ times each day (24 hours)

Always use the marked cup or glass and spoon to measure the feeds.

Wash your hands before preparing a feed.

Fill the cup or glass to the mark with water. Pour the water into the pot.
Fill the cup or glass to the mark with milk. Add to the water in the pot.
Use 2 measures of milk and 1 measure of water.

Measure the sugar
Use the spoon filled the way it is marked in the picture.
Put in ______ spoonfuls.

Bring the milk and water to the boil and let it cool. Keep it covered while it cools.

Add the micronutrients to the feed.
Stir well.

Feed the baby using a cup.

Wash the utensils.

Come back to the health centre on _______________
Evaporated Milk

Feeds for (name) ______________ (born) ___________ from (date) __________

Make ___ ml for each feed. Feed the baby ____ times each day (24 hours)

Always use the marked cup or glass and spoon to measure the feeds.

Wash your hands before preparing a feed.

Fill the cup or glass to the 'milk' mark with the milk. Pour the milk into the pot.

Fill the cup or glass to the 'water' mark with water. Add it to the milk in the pot.

Measure the sugar
Use the spoon filled the way it is marked in the picture.
Put in ______ spoonfuls.

Bring the milk and water to the boil and let it cool. Keep it covered while it cools.

Add the micronutrients to the feed.
Stir well.

Feed the baby using a cup.

Wash the utensils.

Come back to the health centre on ____________
Powdered full cream milk

Feeds for (name) ______________ (born) ___________ from (date) __________

Make ____ ml for each feed. Feed the baby _____ times each day (24 hours)

Always use the marked cup or glass and spoon to measure the milk powder and water.

Wash your hands before preparing a feed.

Bring the water to the boil and then let it cool. Keep it covered while it cools.

Measure the powdered milk into the marked cup or glass. Use the spoon filled the way it is marked in the picture. Put in _____ spoonfuls.

Add a small amount of the boiled water and stir. Fill the cup or glass to the mark with the water.

Measure the sugar. Use the spoon filled the way it is marked in the picture. Put in _____ spoonfuls.

Add the sugar to the feed. Add the micronutrients to the feed. Stir well.

Feed the baby using a cup.

Wash the utensils.

Come back to the health centre on ______________
Commercial infant formula

Feeds for (name) ______________ (born) ___________ from (date) __________

Make ____ ml for each feed. Feed the baby _____ times each day (24 hours)

Always use the marked cup or glass and spoon to measure water and the scoop to measure the formula powder.

Wash you hands before preparing a feed

Bring the water to the boil and then let it cool. Keep it covered while it cools.

Measure the formula powder into the marked cup or glass. Make the scoops level. Put in _____ scoops.

Add a small amount of the cooled boiled water and stir. Fill the cup or glass to the mark with the water. Stir well.

Feed the baby using a cup.

Wash the utensils.

Come back to the health centre on ____________
Session 11
Preparation of Milk Feeds – practical

Objectives:

At the end of this session, participants should be able to:
– Prepare different kinds of milk feeds correctly;
– Help others to prepare feeds correctly;
– Explain how long the different feeds take to prepare.

Outline:

<table>
<thead>
<tr>
<th>Total time - 120 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.  Introduce the session</td>
</tr>
<tr>
<td>II. Practical preparation of milk feeds (groups)</td>
</tr>
<tr>
<td>III. Discuss what was learned in this practical session</td>
</tr>
</tbody>
</table>

Before the session

Prepare a place where the groups can cook
Arrange for a fireplace or obtain enough stoves of a commonly used type for each group.
Obtain firewood, charcoal, paraffin, and/or other locally used fuels. Put wood where it will keep dry or dry out.
Provide matches and any other necessary equipment - prickers for the stove, paper or kindling to start fires, etc.
Ensure that the stoves will work, that they have wicks and are filled with fuel.
Identify a source of water near to the cooking site.
Mark each group's area, and try to allow enough space for their mats, utensils, and cookers.

Copy WORKSHEET 11.2 Time Record Sheet, for each group.

Remind participants that they will need their utensils, the measures and the instruction sheets prepared in Session 10.

Discuss with the trainers their role during the session.

The entire session can take place at the cooking place if it is suitable. The introduction and later the discussion are for the whole group together. For the rest of the time, the participants work in their small groups.
I. **Introduce the session**  
5 minutes

☐ Make these points:

- Helping mothers to prepare feeds is easier if you have done it yourself using equipment similar to that which the mothers have at home.

- Mothers have several options for replacement feeding. Knowing what is needed and how long these different options take to prepare is part of the information that you will need to give them.

- In this session, each group will prepare:
  - 4 different feeds of suitable breastmilk substitutes using appropriate measures and local ingredients;
  - each member of the group should prepare a different feed (fresh liquid milk, powdered full cream milk, evaporated milk, or commercial formula). Three of the feeds can be 120 ml. At least one of the feeds should be 60 mls of one of the home prepared formulas.
  - give a clear demonstration to others in your group of what you do, as if you are demonstrating to a mother.

- You will also:
  - observe others preparing feeds, noticing what they do correctly (and praising them);
  - if they do anything incorrectly, help them to improve their technique using your counselling skills; and
  - collect information on what is needed for each preparation and on how much time it takes.

☺ Ask participants to turn to page 74 in their manual and find the WORKSHEET 11.1: Practical Preparation of Milk Feeds.

☐ Give each group a copy of WORKSHEET 11.2: Time Record Sheet. Explain that these times will be used in a later session to calculate the time cost of preparing feeds.

II. **Practical preparation of milk feeds**  
90 minutes

☐ Show each group where they will work. As soon as they are in their place, they can start to follow the instructions on the worksheet.

The trainers circulate observing that the groups:
  - have all their equipment and ingredients;
  - are doing the exercise correctly following the instruction sheet;
  - are working in a safe manner;
  - are observing and giving feedback to the others as appropriate.

III. **Discuss the practical exercise**  
25 minutes
Ask participants to discuss what they learned about preparing the feeds, and how easy or difficult it would be for mothers. (They will discuss costs later in Session 13.)

Use the following questions to start the discussion.

What are the difficulties of preparing each kind of feed? Discuss each in turn.

What are the things that a mother is most likely to have difficulty with, and perhaps make mistakes over?

Which kind of milk is easiest to prepare? Which is most difficult?

Would a mother be able to prepare these feeds many times a day?

How could she manage at night?

What special instructions would help her to prepare feeds both as safely and as easily as possible?
WORKSHEET 11.1: Practical Preparation of Milk Feeds

Each member of your group in turn will demonstrate preparation of one type and amount of formula. The others will observe. Follow the recipes/instruction sheets that you prepared in Session 10.

The group member preparing the feed (demonstrator) explains each step clearly, as she does it. The other group members listen and observe. Consider the following questions:
- Is she preparing the feed in a clean and safe manner?
- Is she mixing the correct amounts?
- Is she heating and mixing the feeds correctly?
- Is her explanation clear?

After each person has prepared her feed, the other members of the group give feedback and discuss the demonstration.
- First the demonstrator comments herself about how she prepared the feed.
- Then the rest of the group says what they observed.
- Observers comment first on what was done well and correctly, and then on what needs improvement.

The next group member who demonstrates should avoid making any of the same mistakes.
If time permits, you can prepare another feed correcting anything that the observers suggested could be improved; or a different amount of one of the same feeds.

Steps:

1. Find your group’s work area and cooking equipment. Record the time on your WORKSHEET 11.2: Time Record Sheet.

2. Start your fire. One member of the group fetches a container of water while the fire is being lit.

3. Record the time when the fire is ready to use.

4. Put about 1 litre of water on the fire to boil, and record the time.

   **While the water is coming to the boil, continue with Steps 5 to 7.**

5. Check that each person has the correct recipe, ingredients, measures and equipment for the formula that she or he will prepare.

6. Review the points of clean and safe preparation from Session 8. *Clean hands* and *clean utensils*, including knives or scissors that you will use to open packets, working on a clean surface.

7. Open your sugar and other ingredients. Discuss how your group can *safely store* the opened ingredients – covered or sealed, and how to provide *safe water*.
8. When your water has boiled, take it off the heat and put it to cool. Record the time it is ready to use.

9. Prepare the milks in the amounts that your group planned in Session 10. Use the measuring techniques that you would use to teach a mother.

10. Participant 1: Prepare ___ ml formula from fresh cow’s milk. Record the starting time. Prepare the formula according to your instruction sheet. Cover and leave until cool enough to feed to the baby. Record the time when the formula is cool enough. (Test it by putting a few drops on the front part of your wrist – it should feel the same temperature as your skin). Stir in the micronutrient supplement, if available.

11. Participant 2: Prepare ____ ml formula from powdered full cream milk. Record the starting time. Prepare the formula according to your instruction sheet. Cover and leave until cool enough to feed to the baby. Record the time when the formula is cool enough, testing on your wrist. Stir in the micronutrient supplement, if available.

12. Participant 3: Prepare ___ ml commercial infant formula. Record the starting time. Prepare the formula according to your instruction sheet. Cover and leave until cool enough to feed to the baby. Record the time when the formula is cool enough, testing on your wrist.

13. Participant 4. Prepare _____ ml of another kind of milk OR Prepare a different quantity of the most commonly used milk. Use the appropriate milk as above and similar steps.

14. Put out your fires and estimate how much fuel you used – e.g. half the bundle of wood.

15. Calculate your group’s WORKSHEET 11.2: Time Record Sheet.
## WORKSHEET 11.2 Time Record Sheet

<table>
<thead>
<tr>
<th>Group ________________ cooking with ________________</th>
<th>Time started</th>
<th>Time ready to use</th>
<th>Time required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fire</strong></td>
<td></td>
<td></td>
<td>(a)</td>
</tr>
<tr>
<td><strong>Kettle put to boil</strong></td>
<td></td>
<td></td>
<td>(b)</td>
</tr>
<tr>
<td><strong>Fresh cow's milk formula</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Powdered full cream milk formula</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Commercial formula</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Another formula made from</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Another formula made from</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add the time needed to make the fire and boil the water (a) + (b) to the time required to prepare each type of feed.

<table>
<thead>
<tr>
<th>Type of feed</th>
<th>Time to boil water (a) + (b)</th>
<th>Time required to prepare feed</th>
<th>Total time needed to prepare one feed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fresh cow's milk formula</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Powdered full cream milk formula</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Commercial formula</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Another formula made from</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Another formula made from</strong></td>
<td>_____ ml</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Estimate of amount of fuel used: _______________________________________

Bring this record sheet to
SESSION 13 - COSTS OF REPLACEMENT FEEDS
Session 12  
Making Breastmilk Substitutes Available

**Objectives:**
At the end of this session, participants should be able to:
- Explain how the International Code of Marketing of Breast-milk Substitutes protects women who are breastfeeding and those who are not;
- Outline how breastmilk substitutes can be made available, if needed, in a sustainable manner.

**Outline:**

<table>
<thead>
<tr>
<th>Total time - 60 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduce the session</td>
</tr>
<tr>
<td>II. Describe the problem of “spillover”</td>
</tr>
<tr>
<td>III. Discuss the International Code of Marketing of Breast-milk Substitutes (groups)</td>
</tr>
<tr>
<td>IV. Discuss the difficulties with donations of formula</td>
</tr>
<tr>
<td>V. Discuss making breastmilk substitutes available</td>
</tr>
<tr>
<td>VI. Summarize the session</td>
</tr>
</tbody>
</table>

**Before the session**

You will need:

Review Session 33, “Commercial promotion of breastmilk substitutes”, in the Breastfeeding Counselling: a training course.
Read through the International Code of Marketing of Breast-milk Substitutes as you prepare the session, page 22 in HIV and Infant Feeding - Guidelines for Decision Makers.
Participants will need their copy of Guidelines for Decision Makers.
Consider if you need to make a flipchart as on page 176.

Ask 2 participants to assist with Demonstration 12/1.
I. **Introduce the session**

2 minutes

- Make these points:

  - Mothers who are HIV-positive and who, following counselling, choose not to breastfeed need replacement feeds for their baby.

  - As we discussed in Session 5, there are many different breastmilk substitutes, which are sometimes given to infants, some of which are not suitable or adequate for replacement feeds. HIV-positive mothers who choose not to breastfeed need access to a form of milk that is both suitable and adequate for their infants. They should not be tempted to use an unsuitable breastmilk substitute because they cannot afford a suitable one.

*Ask: Why may formula and milk be difficult to buy?*

Let participants give a few replies, and then continue.

- A mother may have difficulties because the formula or milk is:
  - too expensive
  - not available regularly or reliably
  - difficult to buy near to where she lives

- To help families overcome this difficulty, some governments or other competent authorities may decide to make formula or milk available free or at a subsidised price to HIV-positive mothers. They may decide to make micronutrient supplements available to use with home-prepared formula and complementary foods.
II. Describe the problem of “spillover”  

Ask participants to keep their manuals closed at this time.

Ask: What may happen with women who are HIV-negative or untested, if breast-milk substitutes are made available for HIV-positive mothers?

Let participants make a few suggestions, and then continue with these points.

- If formula is made easily available, there is a risk that women who are HIV-negative or who have not been tested will want to use it. They may lose confidence in breastfeeding, and decide to feed their babies artificially. This spread is called spillover.

- The result of spillover would be a decrease in breastfeeding rates, and an increase in illness and deaths among children who are not at risk of HIV infection. So if breastmilk substitutes are provided for HIV-positive women, this must be done in a way which does not result in spillover.

⇒ Write the heading “WAYS TO PREVENT SPILLOVER” on a flipchart or board. Develop a list from participants’ suggestions. (The words in bold are a suggested summary for you to write on the flipchart).

Ask: What ways can you think of to prevent spillover?

Include the following:

- **Actions to prevent spillover include:**
  - **Strengthen education on breastfeeding** to encourage mothers to choose it as the best option whenever possible.
  - **Ensure accurate education on MTCT of HIV**
  - **Strengthen the BFHI**, to help mothers initiate and establish breastfeeding satisfactorily.
  - **Provide breastfeeding counselling** for all mothers to ensure that HIV-negative and untested mothers have confidence in breastfeeding, and that women who are worried do not decide to use artificial feeding “just in case” without being tested.
  - **Counsel privately about replacement feeding** for HIV-positive mothers, to avoid influencing other mothers.
  - **Control formula distribution** for HIV-positive mothers carefully.
  - **Monitor** rates of exclusive breastfeeding and use of artificial feeding in the community, so that spillover is recognised and appropriate action can be taken.
  - **Strengthen** implementation of the International Code of Marketing of Breast-milk Substitutes.

- We discuss many of these points during other sessions. In this session we will discuss in more detail how the International Code of Marketing of Breast-milk Substitutes (“the Code”) can help to ensure that infant formula is used appropriately.
III. **Discuss the International Code of Marketing of Breast-milk Substitutes**  

25 minutes

- Make these points:
  - The purpose of the Code is to contribute to safe and adequate nutrition for infants: by the protection and promotion of breastfeeding, and by ensuring the proper use of breastmilk substitutes, when they are necessary, on the basis of adequate information and through appropriate marketing and distribution.
  - The Code covers all breastmilk substitutes – including infant formula, any other milks or foods, including waters and teas, and cereal foods, which are sometimes marketed or otherwise represented as suitable for infants under 6 months of age. The Code also covers feeding bottles and teats. This is called the *scope* of the Code.
  - The Code does not try to stop infant formula or other products being available, or being sold, or used when necessary. But it does seek to stop activities designed to persuade people to use them, or to influence their choice, such as:
    - advertising, including posters in health facilities;
    - giving free samples of breast-milk substitutes to mothers and health workers;
    - giving discount coupons to mothers;
    - giving free gifts of any sort to health workers and mothers;
    - giving free or low cost supplies of formula to health facilities.
  - Some people are confused and think that the Code no longer applies where there are women living with HIV who may choose to feed their infants artificially. However, the Code is still relevant, and it fully covers the needs of mothers with HIV. Implementing it is in fact even more important, both to protect HIV-positive mothers, and to help prevent spillover.

*Conduct Discussion on the Code in Small Groups*

- Participants work in their groups of 4 with their trainers. Trainers use the discussion points listed after each section to guide the discussion.

- Explain what to do:
  - We will now read some selected sections of the Code and discuss how they relate to the provision of breastmilk substitutes for mothers who are HIV-positive.
  - Look at pages 77-78 in your manuals. You will find some portions of the Code there.
  - Now find the complete Code on pages 22-28 in the *HIV and Infant Feeding - Guidelines for decision makers* (purple circle).
  - It is important to see the complete Code in the *Guidelines* so that you are aware where the selected sections come from and so that you can read the complete Code later.
Ask one of the participants to read the portion of Article 4.2 from their manual.¹

**Participant reads:**
From Article 4.2
"Informational and educational materials…. should include clear information on all the following points:
(a) the benefits and superiority of breastfeeding
(b) maternal nutrition and the preparation for and maintenance of breastfeeding
(c) the negative effect on breastfeeding of introducing partial bottle feeding
(d) the difficulty of reversing the decision not to breastfeed; and
(e) where needed, the proper use of infant formula, whether manufactured industrially or home-prepared.
(and later) … the social and financial implications of its use."

*Ask: How does this section help to protect mothers and babies?*

Discussion points:
This section ensures that:
- appropriate information about breastfeeding is included in all materials, so that the value of breastfeeding is not undermined
- accurate information can be given about other options, for mothers who are considering not breastfeeding for reasons such as HIV. This would include the information that you learned to give in this course.
- such information should include the cost of artificial feeding.

Now ask a different participant to read from Article 5²

**Participant reads:**
From Article 5:
5.1 “There should be no advertising or other form of promotion to the general public of products within the scope of this Code.”
5.2 “Manufacturers and distributors should not provide, directly or indirectly, to pregnant women, mothers or members of their families, samples of products within the scope of this Code”
5.4 “Manufacturers and distributors should not distribute to pregnant women or mothers of infants and young children any gifts of articles or utensils which may promote the use of breast-milk substitutes or bottle-feeding.”

*Ask: How does this section help to protect mothers and babies?*

Discussion points:
- Some people think that advertisements and free samples would be helpful for mothers with HIV. This is not true. It is difficult enough for a woman to make up her mind what to do without advertisements trying to influence her choice, and to persuade her to buy a breastmilk substitute that she cannot afford.
- Women need one-to-one individual counselling to make their choice, including discussing costs and other difficulties of artificial feeding.

¹ Relates to page 24, article 4.2, especially point (e) in HIV and Infant Feeding-guidelines for decision-makers.
² Relates to page 25, article 5: point 5.1, 5.2 and 5.4 in HIV and Infant Feeding-guidelines for decision-makers.
Advertisements and gifts should not influence the information that she receives from her infant feeding counsellor, or her choice of a particular brand of formula. She needs objective and non-commercial information.

- A free sample of formula or other product will not help her, if she cannot afford to buy more when it has finished. If she uses it, her breastmilk will dry up, and she could be left with nothing to feed her baby on.

- If she mixes breast and formula feeding, she may increase the risk of HIV transmission.

 retorn

Ask another participant to read from Article 6³

Participant reads:
From Article 6
6.2: “No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this Code”
6.3: “Facilities of health care systems should not be used for the display of products within the scope of this Code, for placards or posters concerning such products...”
6.5: “Feeding with infant formula, whether manufactured or home prepared, should be demonstrated only by health workers, or other community workers if necessary; and only to the mothers or family members who need to use it; and the information given should include a clear explanation of the hazards of improper use.”

Ask: How does this section help to protect mothers and babies?

Discussion points:
- This protects mothers who are HIV-negative or untested from promotion of formula and other products that they do not need.
- Any formula used by HIV-positive mothers should be kept out of sight, and not displayed on the ward where it could influence mothers who do not need it.
- HIV-positive women should be taught how to use formula privately, and not by a demonstration in front of other mothers. This both protects their own confidentiality and dignity, and avoids influencing other mothers.
- HIV-negative and untested women should not watch demonstrations of how to prepare formula. Doing so could undermine their confidence in their ability to breastfeed, and make them disbelieve the messages that promote breastfeeding as the best option for them.
- HIV-positive women should be warned about the dangers of preparing breastmilk substitutes incorrectly, so that they are not tempted to economise by overdilution, or by not cleaning the utensils often enough.

³ Relates to pages 25, article 6, parts of 6.2, 6.3 and 6.5 in HIV and Infant Feeding-guidelines for decision-makers.
- The Code thus allows for mothers who need to use formula to have help, however:
  1) they must be identified as needing to use formula (for example by a positive HIV test and following counselling on the feeding options);
  2) they can only receive help from an appropriately trained and independent person, not from someone employed by the manufacturers, and
  3) the dangers of using the formula incorrectly must be clearly explained to them.

Ask: Sometimes you need to demonstrate to HIV-positive mothers how to use formula. How can you do this without displaying it to other mothers?

Participants suggest how this could be arranged in their facility – for example teaching the women at a special time, and in a separate room.

😊 Ask another participant to read from Article 9

Participant reads:
From Article 9:
9.1 “Labels should be designed to provide the necessary information about the appropriate use of the product, and so as not to discourage breastfeeding.”
9.2 “Manufacturers and distributors of infant formula should ensure that each container has a clear, conspicuous, and easily readable and understandable message printed on it, or on a label which cannot easily become separated from it, in an appropriate language, which includes all the following points:
   a) the words “Important Notice” or their equivalent
   b) a statement of the superiority of breastfeeding
   c) a statement that the product should be used only on the advice of a health worker as to the need for its use and the proper method of use
   d) instructions for appropriate preparation, and a warning against the health hazards of inappropriate preparation.”

Ask: How does this section help to protect mothers and babies?

Discussion points:
- For breastfeeding mothers, this labelling protects them from thinking that after all, formula is just as good as breastfeeding.
- For HIV-positive mothers, when they have chosen to use the formula, and have been instructed in its proper use, in consultation with a health worker, it ensures that adequate instructions in an understandable form are always there as a reminder.
- One way to avoid the formula being used as a sales inducement is for it to be provided in generically labelled containers. This means a simple label without a brand name or attractive package design. Most labels and packages are designed to attract attention, and to identify a particular brand and advertise it. You may see generically packaged formula being provided for mothers in some places.

☐ Bring the groups back together as a class to discuss some of these points further.
V. **Discuss the difficulties with donations of formula**

15 minutes

- Make these points:

  - You may have heard that some manufacturers and distributors have offered to donate formula for women who are HIV-positive. Let us look at what the Code says:
    
    **From Article 6.7**
    
    “Where donated supplies of infant formula ... are distributed ... the institution or organization should take steps to ensure the supplies can be continued as long as the infants concerned need them.”

  - Under the Code and its subsequent resolutions,4 these donations cannot be given through the health care system – that is, through maternity or paediatric wards, MCH or family planning clinics, private doctors’ offices and child care institutions.

  - The health system if it wishes can provide free or subsidised formula to HIV-positive mothers, but the system must purchase the formula through normal procurement channels.

  - If donations are made by manufacturers, they must be given to mothers through some other system, for example, as part of social welfare, and there are three conditions which must apply:
    
    - they are only given for infants who have to be fed on breastmilk substitutes – including HIV-positive mothers who have chosen this option;
    - the supply is continued for as long as the infants concerned need it – as we have said, for formula this should be a minimum of 6 months, and the need for milk of some sort continues throughout infancy;
    - the supply is not used as a sales inducement.

*Ask: Why should free supplies not be given to hospitals and health centres, if there is a need for them?*

Wait for a few replies, then continue.

- Free supplies should not be given to hospitals and health centres because:
  
  - Experience shows that when free supplies are given, they become too easily available. Many mothers who do not need them want to use them. These mothers often lose confidence in their ability to breastfeed, and may unnecessarily give up breastfeeding.
  - Donations make health facilities dependent on them. If the donations cease - which often happens - there may be no alternative source of milk available, and no provision in the health service budget to buy them.
  - Donations are a very successful form of promotion – which encourages families to buy the same product. The Code does not allow any form of promotion.

*Ask the two participants whom you prepared to give Demonstration 12/1. One participant plays the charity worker, the other participant is Mrs P.*

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4 Articles 6.6, 6.7 of the Code were clarified in the World Health Assembly resolutions 39.28 and 47.5, which are also included in *HIV and Infant Feeding-guidelines for decision-makers.*
Demonstration 12/1  Donations of infant formula

Mrs P has been counselled about HIV and about infant feeding, and has decided to use formula. The counsellor has referred her to a charity organisation to obtain free supplies of formula. She is talking to the charity worker who is NOT a counsellor.

Participants continue:

**Charity Worker:** Good morning Mrs P, how can I help you?

**Mrs P:** (Nervous and embarrassed – looks around to see if anyone is observing her. Gives Charity Worker a letter) Good morning, madam. The counsellor at the health center gave me this letter to give you – she said that I can get some formula here to feed my baby, as I can’t afford to buy any.

**Charity Worker:** Oh yes, I understand. Of course we can help you. I will give you these four tins of FatBoy 1, which should be enough for one month. You learned how to make it up in hospital, didn’t you? Next time you go for the baby to be weighed, she will give you another note, and you can come back for more formula.

**Mrs P:** Thank you. I was so worried about how I would afford the tins. We have so little money. Now I know that I will have enough to feed my baby.  

(Mrs P leaves)

Trainer: Mrs P returns to charity worker one month later.

**Mrs P:** Good morning – my baby is growing well on the formula that you gave me 1 month ago, but it is nearly finished, so I need some more.

**Charity Worker:** Oh dear, I am so sorry. I am afraid that we are out of stock at the moment, and we just don’t have anything that we can give you. No more supplies have arrived – and all the last shipment has been given out. I don’t know what to suggest – I am really sorry, but there is nothing I can do. Can you come back next week? Perhaps some will have arrived.

**Mrs P:** (crying) What can I do now? My breastmilk has dried up, and I have no money to buy milk. How can I feed my baby?
Ask: What points does this demonstration make?
Let participants make some suggestions. They should think of at least some of the following points:
- Supplies need to be reliable and sustainable. Short-term supplies can be dangerous.
- It is risky to rely on donated supplies.
- When a woman has started to use formula, it is difficult to go back to breastfeeding quickly. She could relactate, but it would take a week or two.

VI. Discuss making breastmilk substitutes available

Ask: How can an HIV-positive mother get formula, if she cannot afford to buy it?
Wait for a few replies, then continue. Ask participants to keep their manual closed when thinking about this question.

Make these points:

- As we discussed earlier, the Code says that manufacturers cannot give supplies to hospitals and health centres, or to any part of the health care system. But the Code does NOT say that hospitals and health centres cannot give supplies to mothers: they are permitted to give formula to mothers.

- The health service has to BUY the formula to give to mothers, in the same way that it does for most drugs and food for patients and other supplies. And the health service should ensure that the mother will have a supply of formula for as long as her infant needs it – that is at least 6 months – and milk in some form after that.

- If hospitals and health centres have to buy formula, as they usually buy drugs and food, it is more likely that they will ensure that it is given out in a carefully controlled way, and not wasted or misused. Formula is more likely to be given only to mothers who are HIV-positive, who have been counselled and who have chosen to use formula.

Practical aspects

Make these points:

- We now need to think of practical aspects of making formula, or milk and micronutrients available to mothers.

- Mothers need to be able to obtain their supplies easily and in such a way that their confidentiality and self-respect are maintained. For example, they should not have to stand in a long public queue.

- Supplies must be reliable in the short term, so that they do not suddenly stop and leave the mother with nothing for a week or two.
Supplies must be sustainable in the long term – so that they are not discontinued after a few months, leaving mothers without any form of help.

You will need to make careful estimations of amounts needed. It will be important to order enough, and keep enough in stock, without having so much that it is misused.

Make the following calculation (indicated in bold) on a flipchart:

Let us say that at your health centre, each month there are 10 new pregnant women diagnosed with HIV, who are counselled about infant feeding. Your health service purchases formula to give free to HIV-positive mothers who choose to use it.

Let us say that of the 10 women, 5 decide to give replacement feeds.

How many tins of formula will each mother need in the first month?

Ask participants to look at page 61 in their manuals, to see how many tins of formula each mother will need. (4 tins)

Ask: What is the total number of tins that will be needed by the 5 new mothers this month? (20 tins)

You will give them formula for 6 months and you have to give formula for all the mothers who started to use formula during the previous 5 months also. These other mothers - 5 mothers will need 6 tins each, 10 mothers will need 7 tins each and 10 mothers will need 8 tins each a month. This means that in one month you need 30 + 70 + 80 = 180, plus the new 20 = 200 tins.

You need to have one month’s supply in stock, to cover delays of delivery, etc.

So, you could have 2 months supply that is 400 tins in store at one time.

Further information:
If participants find it difficult to follow the calculations, a table such as this drawn on the flipchart may help them to see how the numbers build up.
Ask: What kind of a storeroom would you need?
Let participants give some suggestions, then continue.

- Any distribution point, whether inside or outside the health care system would need to be clean, dry, with shelves on which to store the supplies;
- to be lockable, and secure;
- not to be easily visible to the public who come to the centre.

Ask: What might be the most suitable distribution points?
Participants may be able to suggest some such as
- within the health care system: health posts, or health centres
- outside the health care system: social services centres, or pharmacies.

Ask: How can distribution be managed to ensure that HIV-positive mothers get reliable supplies, while preventing waste and misuse?
- Write participants’ ideas on a flipchart.

- There will be a need for:
  - good stock control: formula should be managed like drug supplies;
  - accurate records of whom formula is given to, without loss of confidentiality;
  - linking distribution to follow-up of the infant concerned;
  - supervision of responsible health workers and distribution points;
  - recruitment of community groups such as those that support people living with HIV to help control and monitor distribution.

- Some Mothers who are not HIV-positive may decide that they need formula. They may think that they do not produce enough milk, or their baby may be crying a lot, or not suckling well, or they may have sore nipples.

Ask: How can you prevent these mothers deciding that they “need” formula?

- All infant feeding counsellors should be trained also as breastfeeding counsellors so that they can help mothers to overcome breastfeeding difficulties in a more appropriate way.

- Mothers who want to use formula for some feeds for other reasons, for example because they have to return to work, will have to purchase it in the normal way. They should not be given free or subsidised formula if they are not HIV-positive.
VII. Summarize the session

☐ Conclude with these points:

- In this session, we discussed:

  - The International Code of Marketing of Breast-milk Substitutes, which still applies and is of particular importance in areas where HIV is prevalent.

  - How the Code protects all mothers:
    - it protects breastfeeding mothers from promotion of breastmilk substitutes that could undermine their confidence in their ability to breastfeed.
    - it makes careful provision for mothers who need to use breastmilk substitutes for a genuine reason – provided they have been clearly identified as in need, so they receive accurate information without promotion of a particular product.

  - Health workers have a responsibility to ensure that information and practices follow the principles and aims of the Code.

  - Supplies of breastmilk substitutes (where needed) should be distributed in a manner that is accessible and sustainable. They should be distributed in a way that avoids spillover to women who are breastfeeding.
Session 13
Costs of Replacement Feeding

Objectives:

At the end of this session, participants should be able to:
– Calculate and discuss the costs of replacement feeding from 0-6 months.

Outline:

<table>
<thead>
<tr>
<th>I. Introduce the session</th>
<th>Total time - 30 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Calculate the costs of replacement feeding (groups)</td>
<td>25 minutes</td>
</tr>
<tr>
<td>III. Summarize the session</td>
<td>3 minutes</td>
</tr>
</tbody>
</table>

Before the session

You will need:
A calculator, if available

Prepare a flipchart with the charts on pages 186 and 187.
CHART 13.1 COSTS OF REPLACEMENT FEEDING
CHART 13.2 TIME REQUIRED TO PREPARE ONE FEED
CHART 13.3 COSTS AS A PERCENTAGE OF WAGES
Or photocopy the charts onto Overhead Transparencies and use a water-soluble marker to write on them as you project them.

Check the amount of the various fuels used in Session 11 “Preparation of milk feeds – practical” and calculate an approximate average cost.
Find out the minimum legal (or average) wage for agricultural workers and urban domestic or casual workers in the area.
Find out the cost of a suitable micronutrient supplement if available.

Ask participants to have available WORKSHEET 6.1 Preparation for Practical Session, from Session 6 with information on the costs of feeds, and WORKSHEET 11.2 Time Record Sheet, from Session 11 on the times to prepare feeds.
I. Introduce the session 2 minutes

- Make these points:
  - In this session, we discuss the costs of replacement feeding. For simplicity, we consider only the first six months of life when an infant receives mainly milk feeds. It is important to remember that there will be costs also from 6-12 months and from 12-24 months. Infants continue to need milk in some form to at least 12 months.
  - It is important that health workers know the costs of replacement feeding so that they can give this information when they counsel women.

II. Calculate the costs of replacement feeding 25 minutes

*Ask: What costs have you observed with replacement feeding?*

Wait for a few replies, then continue.

- The costs of replacement feeding include:
  - Buying milk or formula,
  - Buying sugar and micronutrients,
  - Cost of water and fuel,
  - Other costs such as time and utensils.

☐ Show prepared flipchart or overhead with Chart 13.1 Cost of Replacement Feeding.

😊 Ask the groups to look at their Worksheet 6.1 Preparation for Practical Session, where they recorded the costs of different kinds of milk.

😊 Ask each group in turn to help you to fill in Chart 13.1.

Ask the costs per litre or tin of different kinds of milk, and then ask them to calculate with you the total cost for 6 months. They can look at Table 10.2 Approximate Amounts of Milk Needed by Month on page 61 in their manual to see how much cow’s milk and formula is needed for 6 months.

If different groups report different costs try to decide which is most likely to be general, or else calculate an average.
1. Cost of milk for home prepared formula

Ask (first group): What was the cost per litre of cow’s milk?  
⇒ Write the cost in the appropriate box on CHART 13.1.

Ask: How much will cow’s milk cost for 6 months?  
Multiply the cost of 1 litre by 92 to get the cost for six months.

Ask (next group): What was the cost of a packet of powdered full cream milk?  
⇒ Calculate the cost of 500 g and write the cost on the chart.

Ask: How much will powdered full cream milk cost for 6 months?  
An infant needs 12 kg for the first 6 months. So the cost of 500g x 24 is ___

If other forms of milk were used such as tinned evaporated milk, calculate those costs in a similar way.

So the cost for just the milk for six months ranges from (lowest) to (highest).

2. Cost of sugar

If a mother is making home-prepared formula, she will need to buy sugar. This must be added to the cost of the milk.

Ask (next group): What did the sugar cost per kilo?  
⇒ Write the cost on the chart.

Ask: What would it cost to buy enough sugar for 6 months?  
An infant would need 9 kg of sugar for the first 6 months to make home-prepared formula. Calculate the cost of 1 kg x 9.

3. Cost of micronutrients

If micronutrients are available locally and need to be purchased, this cost will need to be added to the cost of milk and sugar to make home-prepared formula.

Ask: How much would it cost for 1 month’s supply of micronutrients?  
⇒ Write the amount on the chart.

Ask: How much would it cost for 6 months supply of micronutrients?  
⇒ Write the amount on the chart.

1 This cost was calculated in Session 9, Table 9.1, page 56 in Participant’s Manual, page 129 in the Trainer’s Guide.
4. Combined costs

Ask: How much would it cost to buy cow’s milk, sugar, and micronutrients for 6 months?
   ➔ Add the cost of the cow’s milk and the sugar and micronutrients and write the amount on the chart.

Ask: How much would it cost to buy powdered full cream milk, sugar and micronutrients for 6 months?
   ➔ Add the cost of the full cream milk powder and the sugar and micronutrients and write the amount on the chart.

If other milks are used, calculate the combined costs in a similar way.

5. Cost of commercial formula

Ask (next group): What was the cost of a 500 g tin or packet of commercial formula? Write the cost on the chart
   If generically labelled infant formula is available, include the cost of that also.

Ask: How much will commercial formula cost for six months?
   Multiply the cost per 500 g tin by 40, to get the cost of 20 kg for 6 months.

6. Cost of water

- Water is needed for preparing the feeds as well as washing the utensils. The cost of this water is hard to calculate as it may be in money or in time. In a town, piped water may be charged for. Where there is no piped water, women may need to make extra trips to a well or a distant source to get the water for feeds.

- When you counsel a woman, you will need to discuss how she will get water if she decides not to breastfeed.

7. Cost of fuel

- You used fuel to boil water and milk. Fuel may be purchased or gathered, taking money or time.

- The average amount of fuel used during the practical exercise was ……. (amount you calculated before this session.) This cost about …..

- Fuel is also needed if a mother heat-treats her expressed breastmilk.

- The cost of fuel is very variable. A mother may heat the milk and water when the fire is lit for other cooking or she may need to light it separately several times a day. When you counsel a woman, discuss the availability of fuel.

---

2 Some brands have tins of 450 g. You will need 44 tins of 450 g to make 20 kg.

3 You do not need to calculate an exact cost for fuel.
8. Time to prepare a feed

- Time is needed to:
  - Get the milk
  - Prepare the feed and let it to cool
  - Clean up afterwards

☐ Show the prepared flipchart or overhead with CHART 13.2 TIME REQUIRED TO PREPARE FEEDS. Ask groups to look at their WORKSHEET 11.2 and to find the time it took to prepare feeds in Session 11 “Preparation of milk feeds – practical”.

☐ Ask each group in turn to tell you the time that they took to prepare each kind of feed. (If different groups have different times, calculate an average.)

*Ask: How long did it take you to prepare one feed using cow’s milk? Fill in the CHART 13.2.*

- If a baby has about 6-8 feeds a day, this could be (amount of time) per day.⁴

☐ Fill in the CHART 13.2 with the time for one day.

- Someone other than the mother may prepare the milk and cup feed the baby, however it will still take someone's time to do this. The health worker will need to discuss with a mother how she can manage this time requirement.

- A mother who chooses to give expressed breastmilk will also use time to express her milk, to heat it, and to wash the utensils afterwards. The time for an experienced mother to express is about 30 minutes, and she will need to do this at least six times a day (3 hours).

- She will also need to add the time taken to heat the expressed milk. This is about the same time as it takes to boil the milk in preparing formula from cow’s milk.

---

9. Other costs of replacement feeding

Ask: What other costs of replacement feeding can you think of?
Let participants suggest a few.

☐ Make these points:

- In an earlier session we mentioned the utensils needed for formula feeding - cup, pot, spoon and so on. If a mother has to buy these specially for feeding the baby, this will be another cost.

- If a mother is not breastfeeding, her fertility will return quicker. There may be a cost of family planning. Alternatively, there may be a cost of another baby soon after the previous child.

- There may also be costs of treatment if the child becomes ill because of not breastfeeding. We have not included these costs, as there are also costs if a child becomes ill with HIV.

☐ Make these points:

- You will need to re-calculate the costs at a later time if prices change or you are working in a different area.

- These are costs to the individual household in just the first six months for alternatives to breastmilk. The costs will continue at a similar rate for the second 6 months and at a lower rate (about half) for the second year of the child’s life. There will also be the cost of nutrient-rich foods from about 6 months onwards.

- If infants are fed formula in hospital, there will be costs to the hospital. You can calculate these costs also if relevant.

- These costs assume that the mother does not change her method of feeding. A mother may decide to change what she does – for example, to use commercial formula for the first month or two, and then change to home-prepared formula. This would obviously affect the total cost.

10. Costs as a percentage of family income

☐ Now help participants to calculate these costs as a percentage of the family income for different types of work - agricultural worker, domestic worker, government worker. Use appropriate examples.

☐ Show the prepared flipchart or overhead transparency with CHART 13.3 COSTS AS A PERCENTAGE OF WAGES.

- To make the cost more relevant to the individual situation, we will look at the costs as a percentage of the family income.
Ask: What is the average monthly wage of an agricultural worker in this area?
And of an urban domestic worker?

- Write average monthly wages for each type of worker on CHART 13.3. Use the wages given by participants, or those that you prepared earlier.

☐ Calculate the cost as a percentage of wages as follows:
- Calculate wages of each kind of worker for 6 months (monthly wage x 6), and fill in on CHART 13.3.
- Fill in on CHART 13.3 the costs of different kinds of formula for 6 months from CHART 13.1.
- Calculate what percentage of the wages the feed costs and write it on the CHART 13.3

\[
\text{Cost of milk for 6 months} \times 100 = \% \text{ of wage} \\
\text{Wages for 6 months}
\]

Example:
\[
\text{Cost of milk for 6 months} \quad $500 \quad x \quad 100 = 50\% \text{ of wage} \\
\text{Wages for 6 months} \quad $1000
\]

III. Summarize the session 3 minutes

☐ Make these points:

- Replacement feeding, either home prepared or commercially produced, may be a large cost to the family.

- When you counsel a woman or family, ensure that they understand this cost. If they plan to use this method of feeding they will want to be sure that they can afford it. You may want to explain the weekly or monthly cost or compare it to another cost they are familiar with.

- When a health worker counsels a mother who is considering replacement feeding, the health worker needs to help her to decide if she:
  - has uninterrupted access to affordable milk, sugar and micronutrient supplements or commercial formula;
  - has access to clean water and enough fuel;
  - feels confident that she, and other caregivers if any, can prepare feeds adequately;
  - has the time to prepare and give the feeds;
  - can continue to give home-prepared or commercial formula until the infant is at least six months old,
  - can give other milk from 6-12 months at least, and
  - can give nutrient-rich foods from about 6 months until at least age two years.

- If she can do all these things, she can probably give replacement feeds adequately. If not, she may need help to think through the options again.
### CHART 13.1  COSTS OF REPLACEMENT FEEDING for First Six Months

<table>
<thead>
<tr>
<th>Milk type</th>
<th>Average cost per unit</th>
<th>Number of units needed for 6 months(^5)</th>
<th>Total cost for 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cow's milk</td>
<td>/ litre</td>
<td>x 92 litres</td>
<td></td>
</tr>
<tr>
<td>Powdered full cream milk</td>
<td>/ 500 g</td>
<td>x 12 kg</td>
<td></td>
</tr>
<tr>
<td>Other milk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td>/ kilo</td>
<td>x 9 kg</td>
<td></td>
</tr>
<tr>
<td>Micronutrients</td>
<td>/ month</td>
<td>x 6</td>
<td></td>
</tr>
</tbody>
</table>

\[\text{Cost of cow's milk + sugar + micronutrients} + + = \times 6\]

\[\text{Cost of powdered full cream milk + sugar + micronutrients} + + = \times 6\]

\[\text{Other milk} + + = \times 6\]

<table>
<thead>
<tr>
<th>Commercial infant formula - brand</th>
<th>/ 500 g tin</th>
<th>x 40 tins</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial infant formula - generic</td>
<td>/ 500 g tin</td>
<td>x 40 tins</td>
<td></td>
</tr>
</tbody>
</table>

**Not included: Cost of fuel or water**

### CHART 13.2  TIME REQUIRED TO PREPARE FEEDS

<table>
<thead>
<tr>
<th>Type of feed</th>
<th>For 1 feed</th>
<th>For 1 day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh cow's milk formula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powdered full cream milk formula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial formula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Another formula made from</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time to express (and heat and cool)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^5\) From Session 10
# Chart 13.3 Costs as a Percentage of Wages

<table>
<thead>
<tr>
<th>Minimum wage</th>
<th>Agricultural worker</th>
<th>Domestic worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of feed</th>
<th>Cost of formula for 6 months</th>
<th>% of agricultural wage</th>
<th>% of domestic wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh cow's milk formula</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powdered full cream milk formula</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial formula</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Another formula made from ____________</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Session 14
Making Infant Feeding Choices

**Objectives:**
At the end of this session, participants should be able to:
- Use appropriate counselling skills to assist a woman to discuss infant feeding options.

**Outline:**

<table>
<thead>
<tr>
<th>I.</th>
<th>Introduce the Feeding Options cards</th>
<th>5 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.</td>
<td>Demonstrate counselling using the Feeding Options cards</td>
<td>10 minutes</td>
</tr>
<tr>
<td>III.</td>
<td>Practice counselling using the Feeding Options cards (groups)</td>
<td>45 minutes</td>
</tr>
</tbody>
</table>

**Before the session**
You will need:
A set of Feeding Options Cards for each participant

Display the flipchart pages with the Counselling Skills lists from Session 7 “Review of counselling skills”.

_ask a participant to play the part of Mrs E in Demonstration 14/1. This demonstration is a continuation of Demonstrations 7/2 and 7/3 so you may want to ask the same participant to play the mother. A trainer plays the health worker._

Obtain a small table or chair to put the cards on for the demonstration. Put chairs on the same side of the table for the health worker and Mrs E.

Discuss with the trainers their role during the group work.
I. **Introduce the Feeding Options cards**  

5 minutes

- Distribute a set of the Feeding Options Cards to each participant. Explain each card in turn. Hold the card up and ask the participants to find and study their own cards as you explain it.

- **Card 1** is called “20 mothers and babies”. Use this card to help you to explain to a woman the chances of her child being infected. Remember from Session 1, if all these 20 women are HIV-positive, only 3 of the babies are likely to get HIV through breastfeeding.

- The other Cards each illustrate one of the feeding options discussed in earlier sessions. Each card shows the advantages and disadvantages of that option plus pictures of feeding a child at various ages into the second year.

- **Card 2** is called “Exclusive and continued breastfeeding”. Exclusive breastfeeding for at least 4 and if possible 6 months, with breastfeeding continued into the second year together with appropriate complementary foods, in the generally recommended way, is one option for a woman to consider.

- **Card 3** is called “Stopping breastfeeding early”. This shows how a woman can breastfeed exclusively for the first few months. She can then stop breastfeeding and change to replacement feeding at some time between 3 and 6 months, when replacement feeding becomes possible for her.

- **Card 4** shows “Expressing and heat treating breastmilk.”

- **Card 5** shows “Breastfeeding by another woman”. Another woman who must be HIV-negative breastfeeds the baby, while the mother does all the other kinds of feeding and care.

- **Card 6** shows “Replacement feeding from birth” and shows the mother cup feeding her baby with formula – which might be either commercial or home-prepared – and also giving complementary foods after the child is about 6 months old.

- **Card 7** is called “Replacement feeding – sources of milk” (0-6 months) and shows the different types of milk that may be available to a mother.

- **Card 8** is called “Replacement feeding needs” (0-6 months) and shows what a mother needs for this kind of feeding in the first six months of her child’s life.

- It is important to remember that a woman may choose one method to start with and then later change to another. For example, she may begin by expressing her milk, then change to formula. She may begin with commercial formula and then change to home-prepared formula, or the other way round. So she may need to be counselled about the different options several times.
II. Demonstrate counselling using the Feeding Options cards 10 minutes

☐ Show the flipchart pages with the Counselling Skills list and make these points:

- To counsel a woman about HIV and infant feeding, it is helpful to use your counselling skills and the Feeding Options cards.
- We will now give a demonstration of how to use them. The demonstration is a continuation of the earlier counselling session with Mrs E from Session 7 “Review of counselling skills.” (Demonstration 7/2 and 7/3)
- We stopped with the Health Worker accepting Mrs E's mistaken idea that using infant formula was her only option and empathising with her worry. The Health Worker now needs to provide relevant information to Mrs E about different ways in which she might feed her baby.

😊 Ask the participant whom you prepared to play the part of Mrs E, the mother. The trainer plays the part of the Health Worker. They are sitting beside each other. The Demonstration is on page 87 in the Participants' Manual.

---

**Demonstration 14/1  Feeding Options cards for counselling**

Mrs E: I am so worried – I don’t know what to do.

Health Worker: Of course you are worried. Let’s talk about it some more. I know that you have heard that a baby can get HIV through breastmilk, but this only happens to a few babies, not all.

If you look at this card, you can see that it shows 20 mothers.

Show card 1

Now let us suppose that all these women are HIV-positive and their babies all breastfeed. Then, about 5 babies will be infected before birth or at the time of birth and about 3 more may be infected through breastfeeding.

Mrs E: So don’t all babies get it through breastfeeding?

Health Worker: No – most of them will not be infected. You may want to consider breastfeeding after all.

Show card 2

Breastfeeding is valuable because it is a perfect food and protects against many illnesses. Also it helps to prevent a new pregnancy.

There is some new information – some doctors think that perhaps if you breastfeed and give nothing else, not even water or tea, there may be less chance of the baby getting HIV.

Would you be able to do that?

Mrs E: Oh – well, I could think about it. I would still be worried about the baby getting HIV though.
Health Worker: Well, there are several other ways of feeding your baby that you may like to talk about.

Show cards 3, 4, 5, 6

You could breastfeed and then stop early. You could express your breastmilk and heat it to kill the HIV. You could find a woman who hasn’t got HIV to breastfeed your baby or you could use formula.

Mrs E: Oh, I didn’t know there were so many ways. I just thought I would have to use formula, but I didn’t know how.

Health Worker: Yes, there are a number of possibilities.

Indicate cards Which ones would you like to talk about some more?

Mrs E: Well, maybe using the infant formula.

Health Worker: Show card 7 Fine. Well, there is the kind of formula that you can buy, or you can make it at home from fresh milk, tinned evaporated milk or from powdered full cream milk.

Which one of these do you think you might be able to get?

Mrs E: I can't get the tins of formula near where I live but it is easy to get fresh cow's milk.

Health Worker: Indicate points on card 8 Let us look at using fresh cow's milk in more detail.

Could you get a packet of milk every day?

Mrs E: As long as my husband and I stay well and working, we could buy the milk.

Health Worker: That's good - the cost is not too much of a problem if you are both working.

You said that you breastfed your other child. If you do not breastfeed this baby, what will your family say?

Mrs E: (upset) Oh, I hadn't thought of that. My husband and I haven't told anyone we have HIV. What will I say?

Health Worker: I can see that might be a worry. You don't want the others to know.

Have you and your husband talked about telling a few close family members about the HIV? They might be supportive and help you.

Mrs E: (upset) Oh no, no. They would say we had brought shame and sickness into the family. They would not want us to be near them.

Health Worker: Show card 3 Yes, I see. Telling them doesn't seem to be the answer at this time.

Another possibility could be to breastfeed for a few weeks and then change to formula. What do you think of that idea?

Mrs E: That might be OK – I could find some kind of reason. I'll think about it during the first weeks.
Health Worker: There is still a small possibility that the HIV will go to the baby, but if you breastfeed exclusively, and don’t give anything else at all, not even water, there may be less chance. And if you stop breastfeeding early, there is also less chance, because the time is shorter.

Mrs E: That’s helpful – I didn’t know that - there is so much to think about.

Health Worker: We have talked about a lot today and you have a lot to think about. Perhaps you can talk with your husband about it.

Mrs E: Well, I don’t know what he will say…

Health Worker: Do you want to decide a time to come and talk with me again? Your husband can come too, if you wish, or a friend.

Ask: What did you notice about how the health worker counselled Mrs E?

Wait for some replies.
Encourage participants to try to think of the following points.

- The health worker listened to Mrs E and offered some information and suggestions in a way that she could understand. The health worker was helping Mrs E to find a method of feeding that would be possible for her. However, no decision was made this time, and Mrs E went home to consider the suggestions.

- The health worker raised the issue of other people being involved. She suggested telling other family members. For this situation, it may be more suitable to refer Mrs E to another counsellor for general questions about living with HIV.

- Later counselling sessions might explore other infant feeding options for Mrs E, and might include her husband.

- When a woman decides on a feeding method, the health worker can go through the practical details of that method. If a woman chooses to breastfeed, the infant feeding counsellor should provide practical details of exclusive breastfeeding and of a good breastfeeding technique to prevent mastitis and nipple fissure.
III. Practice counselling using Feeding Options cards 45 minutes

☐ Explain how to do the exercise:

- You will now practise using the Feeding Options cards to counsel HIV-positive women about infant feeding.

- You will work in groups of four with one trainer to each group. Take turns to be the woman, the counsellor, and observers, for about 10 minutes each time.

- Everyone uses the same Story for counselling for this exercise:

**Story for counselling**

The woman to be counselled is pregnant and knows that she is HIV-positive. She is receiving general HIV counselling from another counsellor. Now she has come for infant feeding counselling, to help her to decide how to feed her baby, and to be given help with whichever method she chooses.

- The participant playing the woman can ask for information on any of the feeding options. It will be more interesting if different participants in the group choose different options to talk about.

- The participant playing the health worker practises her counselling skills of listening and learning, and building confidence and giving support, especially giving information and making suggestions.

- When she has finished counselling the woman, the observers give feedback. Remember to praise what the counsellor did well as well as suggesting what she could do better.

- Start with two participants practising and two observing. When they are confident about what to do participants can work in pairs with the trainer observing them in turn and giving feedback on their performance.

- Each participant should practice being a counsellor at least once – twice if there is time.

☐ At the end of the time allocated, thank participants for their efforts.
Session 15
Teaching Replacement Feeding

Objectives:
At the end of this session, participants should be able to:
– Teach replacement feeding skills in a supportive way;
– Plan when to teach mothers how to prepare feeds.

Outline: Total time - 45 minutes

I. Introduce the session 3 minutes
II. Demonstrate how to help a mother to learn to prepare feeds 15 minutes
III. Discuss when to teach preparation of feeds 25 minutes
IV. Summarize 2 minutes

Before the session
You will need:
Flipchart list of Counselling Skills from Session 7

Prepare a table and chairs for Demonstrations 15/1 and 15/2
Put the following utensils and ingredients for preparing a feed on the table:
Clean cloth for preparation area Small pot
Measuring cup for the health worker Mother’s measure
Way of marking mother’s measure Spoon
Water for preparing the feed Sugar
Cloths for drying hands and utensils Instruction sheet for mother
Water and soap for washing hands and for washing cup and pot
Liquid milk or powdered milk or formula powder (amend details of demonstration if you are using a different type of milk)
Micronutrient supplement if available and using home prepared formula
Way of boiling the water and/or milk if possible

Conduct Demonstration 15/2 as realistically as possible, so that the mother would be able to give the feed safely to her baby. Wash utensils and boil the milk if possible.
Ask participants to assist with the Demonstrations, and help them to practise.
   2 participants to assist with Demonstration 15/1
   2 participants to assist with Demonstration 15/2

Discuss with them what the mother will use as a measure, (cup or jar) and how they will mark it. Note that a measure will be needed for water if formula is used, and for milk and water for home-prepared formula.

If you think the participants will not have time to prepare these demonstrations, a trainer can be the health worker and a participant can be the mother.

I. Introduce the session 3 minutes

Make these points:

- In Sessions 10 and 11 you learned how to measure and prepare replacement feeds yourself. You need to have done it yourself so that you can teach mothers and other caregivers how to prepare feeds.

- However, just telling a woman how to prepare a feed or letting her watch you prepare a feed is not enough. You need to give her supportive teaching and gently supervise her preparing one or more feeds herself to ensure that she can do it adequately.

- In this session, we look at how to help a mother learn to prepare feeds and we discuss when to teach the mother this skill.

II. Demonstrate how to help a mother to learn to prepare feeds 15 minutes

Now we will see two ways of teaching a mother to prepare a feed. After each demonstration, you will comment on how the health worker taught the mother.

- Notice which counselling skills the health worker in the demonstration uses.

- Point to the Counselling Skills list displayed.

Ask the participants whom you have prepared to give Demonstration 15/1. One participant is a mother and the other is a health worker, who demonstrates how to prepare replacement feeds.

There is a table with the utensils and ingredients for demonstration. The mother sits uncomfortably on a stool or chair on one side of the table, and the health worker stands on the other side of the table facing the mother.
Demonstration 15/1: Unsupportive teaching

Mrs L is HIV-positive and following counselling she decided not to breastfeed. Her baby was born last night and she will leave hospital later today. Earlier this morning a nurse cup fed the baby while Mrs L watched. Now a different nurse is teaching Mrs L how to prepare the feeds.

Health Worker:
Now Mrs L, if you are paying attention, I will show you how to prepare your baby's feed properly.

Gives Mrs L a sheet of written instructions
It is all written down on this paper, so that you will remember what to do after you are at home.
Now, first make sure that everything is clean including your hands.
Do you always wash your hands with soap and hot water before handling the baby's food?

Mrs L:
(meekly) Yes, ma'am.

Health Worker:
Good. Well now, collect all the things you need - milk, water, sugar, pot, spoon, and cup. Make sure that the place you put them on is clean. You can put them on a clean cloth like this.

Puts the utensils on a clean cloth on the table
Measure the ingredients like this.
You must use the quantities that are written down on the paper that I gave you.
Don't add too much water or too much milk powder or you will make your baby ill.
You can understand the instructions I wrote down, can't you?

Mrs L:
(meekly) Yes, ma'am.

Health Worker:
If possible show a hot plate or way of heating that the mother would not have at home
Now, heat the milk and let it cool.
Then give the feed to your baby using a cup, the way you saw the nurse do it at the earlier feed.
Don't use a bottle. It is too difficult to clean and will make your baby ill.
Were you watching when the nurse fed your baby with a cup this morning?

Mrs L:
(meekly) Yes, ma'am.

Health Worker:
Now you should be able to prepare the feeds properly. Take your baby to the health center next week so that the nurse there can check that he is putting on weight and that you are feeding him properly and doing everything right.

Mrs L:
(meekly) Yes, ma'am.
Discuss the demonstration

*Ask:* *What did you observe about how the health worker taught Mrs L?*

Wait for a few replies, which should include the following points:

- the health worker demonstrated very quickly;
- she did not explain exactly what she was demonstrating;
- Mrs L did not practise preparing a feed herself;
- the health worker did not give Mrs L a chance to ask questions;
- she did not check if Mrs L understood the instructions;
- she did not use counselling skills –
  - she did not use ‘Listening and learning’ skills. She used closed questions and judging words, so that all Mrs L said was “yes, ma’am”;  
  - she did not use ‘building confidence and giving support’ skills. She was critical, and gave commands.

Explain any points that the participants did not think of.

*Ask:* *Will Mrs L be able to make up the feeds correctly at home?*

Wait for a few replies. There should be general agreement that Mrs L will probably not be able to make up feeds easily or correctly.

- So, just telling a mother and showing her very quickly is not sufficient to ensure that a mother can do it herself.

Point again to the flipchart with the Counselling Skills lists and make the following points:

- These counselling skills are not only for mothers who are breastfeeding – they are important and useful when you teach a woman to prepare replacement feeds.
  - Use open questions to find out if the mother understands.
  - Avoid judging words, and praise the mother.
  - Praise the mother and avoid sounding critical.
  - Explain things in a simple way to help her to understand clearly.

- Now, we will look at another more gentle and supportive way of helping a mother to learn how to prepare replacement feeds.

Ask the 2 participants whom you prepared to give **Demonstration 15/2.** The table and the utensils and ingredients for preparing a feed are the same as for **Demonstration 15/1.** There are two chairs, on the same side of the table. To start with, Mrs M and the health worker are standing.

Conduct the demonstration as realistically as possible, so that the mother could use the feed for her baby. If possible wash the utensils and heat the milk. Make a 60 ml feed because the baby is newborn.
Demonstration 15/2: Supportive teaching

The trainer introduces the story:

Mrs M is HIV-positive and following counselling she decided not to breastfeed. Her baby was born last night. Earlier this morning a nurse prepared a feed and helped Mrs M to cup feed her baby. Now a health worker is helping Mrs M to learn how to prepare the feeds herself. Mrs M will stay in the hospital until she is confident that she can prepare and give the feeds.

Health Worker: Good morning Mrs M. What a lovely baby you have. Would you like to sit down while we talk?

Mrs M: (sits down) Thank you.

Health Worker: When we talked before the baby was born, you decided to use cow’s milk for your baby. How do you feel about that decision now?

Mrs M: Yes, that is what I think would be best, because I can get cow’s milk near home.

Health Worker: Fine. You saw the nurse prepare the baby’s feed this morning. Would you like me to go through it again, to see if you can remember it all?

Mrs M: Yes please – I am not sure about how much milk and sugar to mix.

Health Worker: OK – it is a bit complicated, so let’s do it step by step.

Gives Mrs M paper with written instructions and pictures.

The instructions are also written on this paper, with some pictures, to help you remember when you go home. We will look at the paper later.

You remember that we talked about using a jar to measure the milk and water, and a spoon to measure the sugar. Were you able to bring a jar and spoon with you?

Mrs M: Yes, here they are.

Health Worker: They will be very good. We will mark the jar so that you can use it for measuring. Let’s do that.

Marks cup with permanent marker or cuts with a knife.

This is my measure, with the right amount of water in it. I will put the water into your measuring jar. You see where it comes to? Let us mark that on your jar, like this. Is it all right for me to make a mark? It should stay there, and not come off.

Mrs M: Yes, I can keep that jar to use as a measure.
Health Worker: Now you can use your jar to measure the right amount of water and milk. Now please fill the jar with water to the line, to show me. (Mrs M fills jar to the line) That's just right – now we can start to make the feed. Now, to start, you need to make sure everything is clean. How will you do this?

Mrs M: I will have a clean place to prepare the feed (spreads a cloth), a clean pot, cup, spoon and my measuring jar (puts them in a basin and washes them with soap) and clean hands (washes her hands).

Health Worker: Good. Clean hands, clean utensils and a clean place are important. What will you do then?

Mrs M: I will need to measure the milk for the feed. How will I do that?

Health Worker: Use your measuring jar, the same as for the water. You will need to put in 2 measures of milk and 1 measure of water.

Mrs M: So I put in one measure of milk and two measures of water. (Measures and pours into the pot). Then I boil it. (puts on heat)

Health Worker: Shows piece of paper with directions You are using your measuring jar well, but can we go over it again? Let us look at the pictures and the instructions on the paper that I gave you. (they look at the paper together)

Mrs M: Oh yes, TWO of milk and ONE of water. That’s important – I must get that right. (measures 2 of milk and one of water)

Health Worker: Very good – you corrected yourself and measured it well! A feed made from cows milk also needs some sugar added. We will use your spoon to do this. (they look at the paper again, to see how much sugar it says to add) You see on the instructions it says that with this size spoon, you need to put in one level spoon of sugar. (use a suitable size spoon)

Mrs M: Like this? (puts in sugar and stirs it)

Health Worker: Yes, that's right.

Mrs M: The milk is bubbling, so I will put it to cool now before I add the micronutrient powder. (they put the milk to cool, with a cover on the pan.)

Health Worker: While the milk is cooling, tell me about how you found cup feeding your baby this morning.

Mrs M: Well, it was a little difficult. Some of the milk ran out of his mouth and that bothered me. Then he didn't finish all the feed.
Health Worker: Yes, it can be a little difficult the first time. You are both learning how to do it. And they do take different amounts at different feeds. When your baby is ready to feed, call me and we will do it together.

Mrs M: Thank you. Then I can ask if I don't understand.

Health Worker: Ask anytime that you want to. You will be able to prepare feeds and cup feed your baby well by the time you go home.

Ask: What did you observe about how the health worker taught Mrs M?
Wait for a few replies, which should include the following points:
- The health worker let Mrs M practise preparing a feed herself.
- She explained points carefully.
- She gave Mrs M opportunities to ask questions now and later.
- She checked if Mrs M understood the instructions.
- She used counselling skills –
  - She used ‘listening and learning’ skills: open questions, empathy, and no judging words.
  - She used ‘Building confidence and giving support’ skills: she praised Mrs M, she did not criticise mistakes, and she used simple language.

Explain any points that the participants did not think of.

Ask: Will Mrs M be able to make up the feeds correctly at home?
Wait for a few replies.
There should be general agreement that Mrs M probably will be able to make up feeds correctly by the time she goes home.

Continue the discussion with the following points:

- Remember to use the counselling skills when you teach a mother. This supportive teaching can help to build her confidence as well as making it easier for her to learn.

- It is important that a mother prepares feeds herself, with the support of the health worker, until she is confident and competent. She may have to do it several times to achieve this. Watching a health worker prepare feeds is not enough.

- Before a mother leaves the care of the hospital or health center, she should demonstrate that she is able to make a feed correctly. Gentle supervision can increase her skills.
III. Discuss when to teach preparation of feeds

- Make these points:

- Now we will discuss *when* to teach a woman about replacement feeds.

*Ask: When do you think is the best time to teach a mother to prepare feeds?*

- Let participants give some suggestions, and write them on a flipchart or board. You may want to ask another question to stimulate thinking such as:

*Ask: Would you teach a woman before or after her baby is born?*

- Continue to collect more ideas.
- When someone has thought of the answer “both”, then proceed with the following points.

- A woman needs instruction both before and after her baby is born. There is a sequence of steps that are needed to enable her to prepare feeds correctly and with confidence.

- Let us think of what happens when a woman has received VCT in pregnancy, and it is possible for her to follow all the steps. We have discussed many of the points in earlier sessions.

- Ask participants to turn to page 96 in their manuals, and to find the section STEPS FOR INFANT FEEDING COUNSELLING. Ask them to read the section aloud, taking turns point by point.

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**STEPS FOR INFANT FEEDING COUNSELLING**

- First, a woman should receive *antenatal education*, where she hears about HIV in general, and about breastfeeding in general. There should not be a demonstration of replacement feeding – it would be inappropriate for women who do not know their HIV status, and contrary to the Code of Marketing of Breast-milk Substitutes.

- She may go for *pretest counselling* – she may hear that HIV-positive women can consider alternatives to breastfeeding, and this may be one of the reasons for taking a test. Women who ask can be given general information to enable them to decide about taking a test, but they should not be given details about replacement feeding at this time.
If she takes the HIV test, and receives post-test counselling, she may learn that she is HIV-positive. She may be too overwhelmed at that time to think much about how she will feed her baby. First she has to think about herself, and how she can cope with all the other aspects of her life.

When she is ready, she can receive infant feeding counselling. First, she has to learn about the feeding options and decide which method she will choose. As we have seen in Session 2 and in Session 14, many mothers are not ready to make a decision immediately. They need to think about it and if possible talk to their families and friends about what to do.

However, if a woman knows that she is HIV-positive and decides to give replacement feeds, she must be prepared before her baby is born – because her baby needs to start feeding immediately after delivery. She will need:

- first, to watch a demonstration of how to prepare the kind of feed she has chosen;
- second, to practice preparing it herself with the gentle supervision of an infant feeding counsellor.

In the first few hours after giving birth a mother may be tired and sore from the birth and have difficulty concentrating. However, she is there in the hospital without the other duties of her household and her baby needs to be fed, so this may be a good time to learn.

Within a week of delivery she needs to prepare another feed with gentle supervision to make sure that she is able to make feeds adequately. She may have been able to make up one or two feeds in hospital but find it difficult to do at home. Or she may not have understood completely, and need supportive teaching again. This check cannot be left too long, because if there are problems, the baby could get ill very quickly. This is the time of greatest danger from artificial feeding.

If all is going well at 1 week, the next follow-up check can be at 4-6 weeks. If she is having difficulty, follow-up should be earlier. However, a mother should be encouraged to seek help if she is worried at any time.

Follow-up should also include counselling a mother about family planning, or ensuring that she is referred for family planning help. A woman who is not breastfeeding is at risk of becoming pregnant again very quickly.

Some mothers may start breastfeeding and then change to another method later. They need to learn how to prepare feeds when they decide to change, and this could be in their home or at the health facility.

Now close your manuals.
Ask: *Is it possible to follow all the steps of infant feeding counselling with all mothers?*
Let participants discuss the difficulties such as:
- mothers do not come for enough antenatal visits;
- there are not enough staff for all this supervision;
- it is difficult to supervise a mother preparing a feed – where can this be done?
- there may not be stoves and utensils in health facilities to do this;
- mothers may live far from a health facility, and be unwilling to come back for supervision one week after delivery, and it may be difficult to visit them;
- who can visit mothers at home to help them prepare feeds there?

Make these points:
- It is very difficult to ensure that mothers receive enough help and supportive teaching with replacement feeding. This should be considered in the early counselling sessions, before a decision is made about how to feed a baby.
- It may be possible for two or three steps to be done on the same occasion: for example, a demonstration of how to prepare a feed immediately followed by the mother practising it herself. This would shorten the process.
- Possibly mothers who are motivated enough to try replacement feeds will be willing to come for help – they may be willing to come if they are being given free or subsidised formula. Provision of formula should be linked to gentle supervision and follow-up.
- Possibly some teaching could be done in a group – if women are willing to share their confidentiality. This could be one way to help them to start a support group, which could have many advantages for the women, in addition to infant feeding. They could help each other to learn to prepare feeds correctly, and to overcome practical difficulties, in the same way that breastfeeding support groups do. Possibly they could help each other to obtain reliable supplies of milk or formula.

**Ask: Who could help a mother to learn how to prepare feeds?**
Wait for a few replies then continue.
- The question of who can help a mother to learn this skill depends on the situation. The person may be a health worker in a hospital, in a first level health facility or in the community; or a specially trained peer support person.
- The existing health care service may be able to provide help, but if many women are affected, the amount of work may be more than existing staff can manage, and more staff with additional training will be needed. It will be a challenge for health care managers to organise effective infant feeding counselling for mothers, and supportive teaching for preparing replacement feeds.
- Perhaps a supportive family member or friend could also be taught about preparing feeds, and they could help the mother to do it correctly, and encourage her to come back for help if she has difficulties.

- Perhaps women from community groups such as AIDS support groups could be trained to help mothers with replacement feeding, and could work with health workers. An HIV-positive mother whose own baby is doing well on replacement feeding could take on this role.

- However, it is not appropriate for employees of infant food manufacturers to give this instruction, as we discussed in Session 12. It is not allowed by the Code.

IV. Summarize the session

3 minutes

☐ Conclude with these points:

- In this session, we discussed:

- If mothers decide not to breastfeed, they need to learn how to prepare replacement feeds cleanly and safely and in the correct quantities. Most will need to be taught how to do this.

- To be effective, teaching should be supportive, using counselling skills. The method of preparation should be clearly demonstrated and explained.

- In addition to watching a demonstration, women should practise preparing feeds under the gentle supervision of the teacher, until they are competent and confident.

- Written instructions should be provided to reinforce what has been learned through demonstration and practice.

- Women should be taught to prepare feeds only after they have been counselled and tested and have decided not to breastfeed. If possible, they should be taught both antenatally and immediately after delivery, and supervised checks should be made at one week and four weeks after delivery, or more often if there are difficulties.

- When possible, supportive family members or community groups should be involved in helping mothers to prepare and give replacement feeds.
Session 16

Follow-up Care of Children of HIV-positive Mothers

Objectives:

At the end of this session, participants should be able to:
– Recognise good and poor growth of children;
– Decide possible causes of poor growth, and if referral is necessary;
– Give on-going counselling about infant feeding to an HIV-positive mother.

Outline:

Total time - 90 minutes

I. Introduce the session 2 minutes
II. Review the skills of checking understanding and arranging for follow-up 13 minutes
III. Explain growth monitoring 15 minutes
IV. Practice follow-up counselling for infant feeding (groups) 55 minutes
V. Summarize the session 5 minutes

Before the session

You will need:
Overheads 16/1, 16/2
Flipchart pages with Counselling Skills lists from Session 7
Write the two new counselling skills on another sheet on the flipchart:
  Check that the mother understands
  Arrange for follow-up or referral

Copy the Follow-up Stories A, B, C, D and E and the growth charts that go with them. Make one set for each group. Cut the growth chart from each story

A doll can be used during the counselling practice if wished.
Discuss with trainers what to do during group work.

Ask two participants to assist with Demonstration 16/1 and to practise.
I. Introduce the session 2 minutes

☐ Make these points:

- Children whose mothers are HIV-positive are at higher risk than other children of illness and malnutrition because:
  - they may be infected with HIV, and become ill, even if they receive adequate feeding;
  - if replacement fed, they lack the protection of breastfeeding;
  - they are at increased risk of malnutrition during the first six months, if commercial or home prepared formula feeds are not adequate;
  - they are at increased risk of malnutrition between 6 and 24 months if complementary feeds are not adequate;
  - their mothers may be sick, and have difficulty caring for them adequately.

- In this session we will consider:
  - what follow-up care for children of HIV-positive mothers should include;
  - the use of growth monitoring; and
  - how to do follow-up counselling on infant feeding.

II. Review skills of checking understanding and arranging for follow-up 13 mins

☐ Show the flipchart with the Counselling Skills lists from Session 7.

- It is important to remember that mothers will have many worries about their children’s health, whether they are breastfeeding, using modified breastfeeding, or giving replacement feeds. It is important to remember to use all your ‘listening and learning skills’ and your ‘building confidence and giving support skills’ that we discussed earlier.

☐ Show flipchart page with the two new skills.

- We have added two more skills:
  - **Check that the mother understands** the information you have given her, answer any questions; and explain further if necessary.
  - **Arrange for follow-up or referral** as needed.
Check that a mother understands the information

Make these points:

- When you have given a mother some information about what she needs to do, or how to do it, it is important to check that she understands clearly.

- It is not enough to ask her if she understood, because she may not realise that she understood something incorrectly.

- Ask open questions to find out if further explanations are needed. Avoid asking closed questions, because they suggest the answer and can be answered with a simple yes or no. They do not tell you if the woman really understands.

Ask the two participants whom you prepared before the session to give Demonstration 16/1. The trainer makes the comment indicated after each example.

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Demonstration 16/1 Checking questions

<table>
<thead>
<tr>
<th>Health Worker:</th>
<th>Now, (name), have you understood everything that I've told you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs S:</td>
<td>Yes, ma'am.</td>
</tr>
<tr>
<td>Health Worker:</td>
<td>You don't have any questions?</td>
</tr>
<tr>
<td>Mrs S:</td>
<td>No, ma'am.</td>
</tr>
</tbody>
</table>

Comment: The mother would need to be very determined to say that she had questions to this health worker. Let us hear this again with the health worker using good checking questions.

<table>
<thead>
<tr>
<th>Health Worker:</th>
<th>Now, Mrs S, let's go over what we have discussed. What foods will you give (name) now that she is ten months old?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs S:</td>
<td>I will give her porridge and some milk and some of the food we are eating.</td>
</tr>
<tr>
<td>Health Worker:</td>
<td>Those are good foods to give your child. Where do you get the milk?</td>
</tr>
<tr>
<td>Mrs S:</td>
<td>The market near me always has good milk in the morning so it is not difficult.</td>
</tr>
<tr>
<td>Health Worker:</td>
<td>That is good. How many times a day will you give food to (name)?</td>
</tr>
<tr>
<td>Mrs S:</td>
<td>I will give her something to eat 5 times a day. I will give her porridge in the morning and evening, and in the middle of the day I will give her the food we are having. I will give her cups of milk in between.</td>
</tr>
<tr>
<td>Health Worker:</td>
<td>That sounds good. Young children need to eat often. Will you come back to me in 2 weeks to see how the feeding is going?</td>
</tr>
</tbody>
</table>

Comment: This time the health worker checked the mother’s understanding and found that the mother knew what to do. She also asked the mother to come back for follow-up.
If you get an unclear response, ask another checking question. Praise the mother for correct understanding or clarify your advice as necessary.

You can also ask the mother or other caregiver to repeat back the points that you explained. For example, if you explained how much milk, water and sugar to use to mix a feed, ask her to tell you the amounts. If you explained how to clean utensils, ask her to say how she will to clean her utensils. You saw examples of this skill in Demonstration 15/2.

Follow-up or referral

Make these points:

- All children should receive regular follow-up, to check their health and feeding, and to help with difficulties. If a child has a problem that you are unable to help with, you may need to refer him or her for more specialised care.

- It is especially important for children whose mothers are living with HIV to receive regular follow-up care from health workers, as they are children at special risk. This follow-up care should continue throughout childhood, but is particularly important during the first two years of life, until the child can be fully fed from the family diet.

- Follow-up is especially important if there has been any difficulty with feeding, or any change in the feeding method. Ask the mother to visit the health facility within 2 weeks, bringing her feeding utensils.

- If the mother is worried or the child is not doing well, you can discuss testing the child for HIV, if testing is available. Explain that up to about 18 months of age, a child may test positive yet really be free of HIV. It may be better to wait until the child is 18 months old to have a test.

Ask: What should a follow-up visit include?

- Write participants’ replies on the flipchart. Refer to their replies as you make the following points. Ask participants to keep their manuals closed at this time.

  Encourage participants to think of the following points:

Check how the mother is feeding the child:

- An infant under about six months who is breastfeeding:
  - breastfeeding exclusively with no other milks or water;
  - with no restrictions on duration or frequency;
  - observe a breastfeed and check the mother’s breasts.

- An infant under about six months who is replacement fed:
  - using a suitable type of milk;
  - able to get enough of the milk that she planned to use;
  - measuring the milk and other ingredients correctly;
  - giving an appropriate volume and number of feeds;
• preparing the feed cleanly and safely;
• feeding it to the baby by cup;
• breastfeeding or replacement feeding exclusively, not giving both;
• giving no additional water;
• teach again how to prepare and give feeds if there are any problems.

- An infant over about six months of age:
  • check complementary feeding using nutrient rich foods including milk if possible;
  • frequent feeding 3 times a day if also given milk, 5 times a day if no milk is given;
  • using active feeding practices;
  • preparing foods cleanly and safely.

**Check the child’s growth and health**

- the baby’s health, stools, any mouth sores;
- the baby's weight if possible, to ensure that he is taking enough milk;
- the child’s development and care;
- refer for treatment or HIV testing if necessary;
- arrange for the child to be immunized.

**Check how the mother is coping with her own health and any difficulties**

- use listening and learning skills to learn about the mother’s difficulties;
- use ‘Building confidence and giving support’ skills to help her to find ways to overcome difficulties and to clarify any points that she does not understand.

☐ Conclude this discussion by writing up the following points on the flipchart and leave it displayed:

  ➔ Follow-up visits should include:
  Check how the mother is feeding the child;
  Check the child’s growth and health; and
  Check how the mother is coping with her own health and any difficulties.

*Ask: Who does this follow-up and where does it occur?*  
Let participants comment.

- Follow-up care can be done in any health facility that provides outpatient care for children, such as hospital outpatients, health centres, or outreach clinics.
- In some situations, a home visit by a community health worker may be possible, though special visits may also be associated with stigmatisation of the family.
III. Explain growth monitoring 15 minutes

Make these points:

- Looking at a child and talking to the mother will give you a useful idea about the health of the child. Weight is also a useful indicator of a child’s health. If a child is gaining weight well, this is a sign that the child is probably healthy. If a child is not gaining weight well, this means that the child may be either sick or not eating well.

- Regular weighing and plotting a child’s growth line on a chart is called growth monitoring.

- Growth monitoring should start as soon as possible after birth and continue until the child is no longer at risk of poor nutrition. This is for 2 years, and for some children it is for 3 to 4 years. Parents can keep the growth chart and bring it whenever the child visits a health facility for immunisations or illness, or any other reason.

- Infants should be weighed every month for the first year and then every 2-3 months after the first year. Weigh more frequently if there is a growth problem.

- For a child whose mother is HIV-positive and especially a child who is not breastfed but receiving replacement feeds, it is even more important to be weighed regularly.

- We will now look at the growth charts of some children whose mothers are HIV-positive, and who, after counselling, chose to give replacement feeds. We will consider how growth monitoring is of special importance for these children.

Show Overhead 16/1 and make the following points:
This is the chart of a child called Susan who is now 12 months old. Her mother is giving her three meals and two nutritious snacks daily, using a mixture of foods from the family meals, and including five 100 ml cups of milk each day.

For her first 6 months, Susan’s mother gave her 6-8 feeds a day of home-prepared formula, prepared in the recommended way, and fed by cup.

Ask: What do you think of her growth?
Wait for a few replies, then continue.

Susan is growing well. The health worker has weighed her and filled in her chart regularly. All her weights are above the lower line so she is a healthy weight for age. Also, her growth line is going up which shows that she is growing satisfactorily.

Ask: What can you say about Susan’s replacement feeding?
Replacement feeding is quite adequate. She is having five meals a day including milk.

Ask: What would you say to her mother?
Wait for a few replies and then continue. Encourage participants to think of the following points:
You could
- praise the mother for Susan’s good growth,
- praise her for managing replacement feeds with home-prepared formula well,
- encourage her to continue giving Susan three meals and two snacks each day from the family food, and for including milk,
- discuss active feeding, and how to encourage Susan to feed herself,
- discuss the importance of Susan having her own plate of food,
- ask checking questions to see if Susan’s mother understands the information,
- arrange a date for Susan to come again for follow-up,
- ask if she would be willing to help other mothers who are HIV-positive and choose to give replacement feeding.
Follow-up Care of Children of HIV-positive Mothers

Show Overhead 16/2 and make the following point:

This is the chart of a child called Mary who is nine months old. Her mother brought her for follow-up regularly. She received low cost formula for the first six months.

*Ask: What do you think of Mary’s growth?*
   Wait for a few replies, then continue.

- Mary grew very well for the first six months, while her mother had subsidised formula. But since the age of 6 months, Mary has not grown at all.

*Ask: What would you want to ask Mary’s mother?*
   Wait for a few replies, then continue.

- You would want to know if Mary is well or if she has symptoms of any illness. You would want to know what foods she is able to give Mary and how many times a day she is able to feed her.
- Mary has no symptoms of illness but her mother is very worried that she may have HIV already. She has great difficulty feeding Mary from the family foods. She has no milk and no meat or other animal foods. Mary has 3 meals a day, mostly thin maize porridge with some vegetables.
Ask: What could you say to Mary’s mother?

Wait for a few replies, then continue. Encourage participants to think of the following points:

You could:
- praise the mother for her regular attendance with Mary.
- listen to her worries about Mary, and her fears that Mary may have HIV. Empathise with her worries. Do not say that Mary is free of HIV, because infection is a possibility. In a few months, you can arrange for Mary to have a test to see if she has HIV.
- explain that the slow weight gain is more likely to be because Mary needs more food to grow well.
- discuss with her how she can feed Mary more often. If Mary does not get milk, she needs to eat five times a day, at least 3 meals and two snacks.
- try to help her to find ways to enrich Mary’s diet. Perhaps her porridge could be made thicker, and some oil or fat-rich food such as margarine or groundnuts could be added, and some beans.
- discuss again if there is any way to give Mary some milk or other food of animal origin such as egg or fish sometimes.
- you could also recommend a micronutrient supplement.
- ask checking questions to see if Mary’s mother understands the information.
- arrange a date for Mary to return for follow-up.

Make this point:

- If a child is not growing well, you need to:
  - check him or her for any illness and refer for treatment if necessary;
  - talk to the mother about what food she is giving, how she is feeding her child, and help her to find a way to feed the child adequately.

IV. Practise follow-up counselling for infant feeding

Divide the participants into their groups of four, each with a trainer.

Give each group a set of **Follow-up Stories A,B,C,D,E** and the growth charts for the children. Each participant in the group should have a different story. (There are five stories in case the group has extra time or more people.)

Explain how they will do the exercise as follows:

- You each have a **Follow-up Story**, and the growth chart of the child in the story. You will be the ‘mother’ for your story. All the mothers in the stories know that they are HIV-positive, and they are receiving general HIV counselling.
Take turns to work in pairs with one of the participants being a counsellor who counsels a mother about her story. The other two participants are observers. All participants should have a turn being a counsellor and being a mother.

If you are the mother, you give the counsellor a name for yourself and for your baby and tell her the reason why you have come. You show her the growth chart and answer the counsellor’s questions following the story on your card. Do not give all the information at once. Wait until the counsellor asks you suitable questions.

If you are the counsellor, you introduce yourself to the mother, ask her how she is getting on and why she has come to see you today. Ask how the child is and try to go through all the points that were discussed in “What should a follow-up visit include?” You listen to the mother using all the ‘listening and learning skills’, including empathy. Remember to use the additional skills of checking that the mother understands the information and arranging for follow-up or referral as needed.

The counsellor helps the mother to solve the feeding difficulty, using the ‘building confidence and giving support skills’. Help may include changing the feeding method.

In a real situation, the counsellor would examine the child in detail to assess health. In these stories, you are told if there is an illness that requires treatment or referral for further medical attention.

After each role-play, trainers encourage participants in their groups to discuss how they helped the mother and the counselling skills used. DISCUSSION NOTES are on pages 218-220.

Focus on the following points in the discussion:

What do you think of the child's growth?
How is the replacement feeding going?
What would you say to the mother? (listen to her; accept what she says, and praise good practices; give relevant information; offer suggestions. Use the exact words for the skills, rather than "I would build her confidence").
Did you ask checking questions to make sure that the mother understood what to do?
When would the child need to be seen again?
Did this counselling session help the mother?

At the end of the allocated time, bring the participants back together as a class and summarize the session (page 221).
**Follow-Up Story A: Poor growth 0-4 months**

The reason you have come: Hope is 6 weeks old. You have brought her for a routine follow-up check. Hope cries a lot and doesn’t seem to be growing. She weighed 3 kg at birth and when she was weighed today she still weighs 3 kg.

You decided to give Hope commercial infant formula. You watched a demonstration of how to prepare it, but you are a bit confused by the directions. You were given 1 tin of formula when Hope was born, and you have only just finished it. Luckily the tin has lasted longer than the infant feeding counsellor said it would.

You give 8 feeds a day with the measure of water (60 ml) you were shown and one scoop of formula powder. (The health worker may have said 2 scoops in 60 ml of water, but you are worried that would be too strong. The health worker told you that feeds that are too strong are dangerous.) You cup feed, and you prepare the feeds cleanly, washing with soap, and boiling all the utensils every day.

You were told to come back when Hope was 10 days old for a check but it was too far for you to travel, as you did not feel well. Anyway, you had enough milk so there did not seem to be any need to come. You do not read very well.
**Follow-Up Story B: Low weight 6-12 months**

**The reason you have come**: Maisie is 8 months old. She grew well for the first 3 months but her growth has slowed now.

You give Maisie 6 cups each day (900ml) of home-prepared formula made from fresh cow's milk when you have the milk. You also give her micronutrients every day. You make the milk up carefully the way you were shown, and were made to practise in the hospital when Maisie was born. Sometimes the milk runs out, and then you give her thin cereal feeds until you can get some more milk. You do not give any other foods.

You are very worried that Maisie may have HIV infection, and were frightened to come to the clinic. Maisie does not have any symptoms of illness, but you can see that she looks thin.

You are interested in learning more and trying new ideas. You are young and do not live near your family, so there is no one telling you about caring for your baby.
**Follow-Up Story C: Illness in a young baby**

The reason you have come: Sam is 3 months old, and often ill. He has had diarrhoea four times, and pneumonia once, and has been in hospital 3 times in his short life. He weighed 3.4 kg at birth and now weighs 4 kg.

You feed Sam on commercial formula. You work in a store and can usually buy enough formula to feed him the right amounts as the counsellor explained. You think that cup feeding takes too much time. In the morning, you make up a large jug of about 700 ml of formula with drinking water and 24 scoops of formula powder in it. This is enough for the day and the next night.

You do not have a fridge, but the mixture does not go sour because it is cool. Your helper fills up the baby’s bottle from the jug when the baby needs it. You do not have time to boil the bottle, and fuel is expensive, so you just rinse it out in soapy water when you wash the other things.

You are worried that Sam gets ill so often, and think that a different brand of formula might help – perhaps the special kind for babies with diarrhoea. You are also worried that he may have HIV, but you afraid to tell the health worker this.
Follow-Up Story D: Breastfeeding

The reason you have come: Anna is 2 months old. You decided to breastfeed, and so far have breastfed exclusively. Anna is healthy and gaining weight well. You will go back to work in a few weeks and are thinking of giving Anna some formula in a bottle for when you are not there.

Anna is your first child. You do not live in your own family’s village and you do not know much about different ways of feeding babies. Your husband’s sister who will be minding your baby suggested that you give some formula from a bottle. You are confused and frightened because the health worker in the hospital told you to give only breastfeeding and nothing else or your baby might get HIV.
Follow-Up Story E: Recurrent illness

The reason you have come: David is 12 months old. He has had many episodes of illness and you bring him regularly for follow up.

David had commercial formula for the first six months, and you made the feeds up very cleanly and safely, using the correct quantities. You continue to give milk, and also feed David five times a day from the family foods, though sometimes he has no appetite and eats little.

David has had several attacks of diarrhoea, which take a long time to get better. Two months ago he had a severe cough with difficult breathing. The doctor at the hospital treated him. You are very worried that he may have HIV.
DISCUSSION NOTES

Follow-Up Story A: Poor growth 0-4 months

What do you think of Hope’s growth?
- Hope is not growing as well as she should. She has gained little weight since she was born.

How is the replacement feeding going?
- The mother is not clear about how to make up the feeds correctly. She is not putting enough milk powder into the feeds, so they are overdiluted, and the baby is hungry and not growing.

What can you say to Hope’s mother?
- You can praise her for travelling for this follow-up visit. Hope has not had any illness so her clean preparation of the feeds is probably adequate.
- You ask the mother if she can show you how she prepares the feeds, particularly how she measures the amounts.
- Give her a simple instruction sheet with pictures to help her to remember the directions for preparing commercial formula. Explain again that she needs to put 2 scoops of milk powder in each 60 ml feed. Check the instructions on the label of the formula with her.
- Ask checking questions to make sure that she has understood what to do.
- You may need once again to help her to make a feed while you supervise her.
- Soon Hope will need 7 feeds a day of 90 ml each - with 3 scoops of formula powder. Explain how many tins she will need to get for the next 4 weeks.
- You can ask her to return to you or arrange for another person to follow-up in a week (or less) to see how the feeds are going.

Follow-Up Story B: Low weight 6-12 months

What do you think of Maisie’s growth?
- Maisie is growing very poorly now. She came for weighing for the first three months, and was growing well at that time. At five months, her growth had slowed and now it is continuing very slowly.

How is the replacement feeding?
- Using replacement feeds of home-prepared formula has not worked well for Maisie. The supply of milk is not reliable and sometimes there is none. Maisie is not receiving adequate complementary foods for her age.

What would you say to the mother?
- First, listen to her worries about Maisie, and check to make sure that Maisie is not ill. Praise her for bringing Maisie to see you.
- Explain that although you cannot be completely sure at this age, there is no reason to think that Maisie is ill with HIV.
Follow-up Care of Children of HIV-positive Mothers

- If she can feed Maisie more, she will probably get better and grow well.
- Explain about feeding Maisie more often, with 3 meals a day and 2 snacks.
- Discuss how to use family foods to feed Maisie when she cannot get milk. Help her to think which family foods she can use to make enriched porridge for Maisie. If possible, she can add some energy rich food such as oil, margarine, or groundnuts; and beans and other vegetables; and foods of animal origin such as fish or eggs if she can get them. Explain how she can mash up the foods to make them easier for Maisie to eat.
- Explain that she should continue to give milk when she can get it. Maisie is old enough now for full strength cow’s milk. There is no need to make it into formula.
- Ask checking question to see if she understands the new feeding suggestions.
- Ask her to come back for follow-up in 1 week.

Follow-Up Story C: Illness in a young baby

What do you think of Sam’s growth?
- He is growing slowly, probably because he is ill so often.

How is the replacement feeding?
- His mother is getting enough formula for replacement feeds. However, she is not using it cleanly and safely. She does not boil the water. She keeps it for much more than an hour after preparing it, and she does not have a fridge to store it in. Even if the feed looks all right, it may have bacteria growing in it. Sam’s bottle and teat are not cleaned after every feed, or boiled or sterilised chemically.

What would you say to the mother?
- Praise the mother for getting enough formula, and for using the correct amounts.
- Explain that it is unlikely to be the formula that is the difficulty, but it may be the storage and cleaning of the bottle.
- Explain about the effect of leaving milk already mixed up when it cannot be put in a refrigerator, and the effect of not washing the bottle between feeds, and not boiling the bottle.
- Explain the advantages of cup feeding, especially now that Sam is older.
- Discuss whether she could find a way to prepare feeds more cleanly and safely. Could she mix the feeds one by one? Could she measure the amounts of milk and water and leave it for the helper to mix together? If she really feels that she has to use a bottle and not a cup, could she get six bottles so that a clean one could be used for each feed and they could be washed and boiled every day? Could she teach her helper to clean the bottle or cup thoroughly after every feed?
- Reassure her that there is no need to buy a different or more expensive brand of formula. It would be better to spend any extra money on more fuel to boil the utensils.
- Ask checking questions to make sure that she understood what you talked about.
- Ask her to come back in 1 week to see how Sam’s growth and health is.
Follow-Up Story D: Breastfeeding

What do you think of Anna’s growth?
- Anna is growing well on exclusive breastfeeding.

What would you say to the mother?
- Praise her for breastfeeding exclusively and encourage her to continue for another few weeks.
- Explain that she is right about mixed feeding. This is not a good option if she has HIV. It is better to either breastfeed exclusively or to stop completely if she can do that safely.
- Discuss what she can do when she goes back to work. Is it possible for her to see the baby during the day to feed her? If this is not possible, she could express the milk so that the caregiver could cup feed it to the baby.
- Give her other information as needed about expressing, cup feeding and keeping the utensils clean and safe.
- Check that she understands the information you have given her.
- You could also suggest that she consider stopping breastfeeding and giving replacement feeds after 3 months, if she can buy other milk then.
- Ask her to come back for follow-up before she starts work, to discuss these options further. She might like to bring her husband’s sister to learn to cup feed and have her questions answered too.

Follow-Up Story E: Recurrent illness

What do you think of David’s growth?
- David was a good weight at birth, but he keeps losing weight, then growing better for a few months and then losing weight again. This kind of chart could be due to HIV infection, but it is too soon for an antibody test to be sure.

How is the replacement feeding?
- David grows well sometimes so probably the family has sufficient food. His mother takes care preparing his food and giving him milk as well as good choices from the family foods.

Ask: What can you say to David’s mother?
- Listen to her worries, empathise, and praise her for doing so well with feeding him and encourage her to continue.
- Discuss with her the possibility of getting a test for David when he is 18 months old, to see if he has HIV or not. Help her to get treatment if David is ill.
- Discuss ways of encouraging David to eat when he is ill.
- Check that she understands how to get treatment and a test for David.
- Ask her to come back to see you in two weeks.
IV. Summarize the session [5 minutes]

☐ Conclude with these points:

- Follow-up is very important for children of mothers who are HIV-positive. At follow-up you check the child’s feeding, and check their growth and health. Monitoring the child’s growth will help you to know if the child’s feeding and health are satisfactory.

- You may provide information and make suggestions about feeding. This may be support for exclusive breastfeeding, replacement feeding, or adequate complementary feeding.

- You can check for signs of illness and you may be able to provide treatment, or refer the child for treatment or further care. Hopefully, you will be able to reassure some mothers who are worried that their children probably do not have HIV.

- If testing is available, you can discuss this with the mother. Explaining that it is best to do it after the child is about 18 months old. Up to that age a child may test positive yet really be free of HIV.

- Not all problems can be solved. Sometimes you can only listen to a mother's worries and empathize. If possible, refer her to a support group who may be able to give her continuing support and help.
Session 17

Community Support for Optimal Infant Feeding

**Objectives:**

At the end of this session, participants should be able to:
- Describe the role of the community in supporting optimal infant feeding for women who are HIV-positive;
- List possible resources in the community that could be involved in this support;
- Identify practices that need to change to provide good support.

**Outline:**

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<th>Total time - 60 minutes</th>
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<tr>
<td>I. Introduce the session</td>
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<td>II. Discuss the role of the community</td>
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<td>IV. Conclude the session</td>
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**Before the session**

You will need:
Extra flip chart pages for each group and markers

One copy of WORKSHEET 17.1 Community Support, for each group.

Divide participants into groups of 4-5 according to their type of work situation. For example, health workers from maternity hospitals can be grouped together and health workers from health centres together. If several participants are from the same health facility or from the same locality, ask them to work together.
I. **Introduce the session**  

- Make these points:
  
  - The health service can provide some of the services and support for a woman who is HIV-positive and her baby. However, the health service cannot provide for all her needs. Support is also needed from her community.
  
  - In this session, we discuss how a community can support optimal infant feeding, particularly for women who are HIV-positive.

II. **Discuss the role of the community**  

*Ask: How would you define a woman's community?*

  Wait for a few replies, then continue.

  - A community is a group of people who share aspects of their lives such as the neighbourhood that they live in, the people they work with, their religious or their cultural activities. They will often act together in their common interest.

  - Each woman is part of a social environment with a culture - beliefs, expectations, values and traditions - that affects how all the people in that community feel and behave.

*Ask: How could beliefs or customs affect counselling a woman who is HIV-positive on infant feeding options?*

  Wait for a few replies, then continue.

  - Beliefs and customs can affect counselling in many ways:

    - If people believe HIV infection is fate, a curse, or a punishment, they may feel there is nothing they can do to reduce transmission and thus be unwilling to discuss this.
    
    - People may have misconceptions, such as a belief that ordinary forms of contact transmit HIV. This may lead people to avoid anyone that they know is HIV-positive. This may lead women to avoid being tested, or getting help or making decisions that could benefit them and their babies.
    
    - Access to information and education may be limited to men or certain groups of women. It may be difficult for some women to obtain information on HIV, to negotiate safer sex, or to seek testing and treatment.
    
    - It may be difficult for a woman to visit a counsellor and talk on her own without her husband or a relative also present. This can make confidentiality difficult to obtain.
    
    - A woman may have little say in decisions about the use of time, income or how her baby will be fed.
Ask: How does a community normally affect how a mother feeds her baby?
   Wait for a few replies, then continue.

- Many mothers feed their babies in the way that is common and accepted in their family or wider community. If exclusive breastfeeding from birth is usual, then most new mothers will expect to do this and those assisting them will help to get this established.

- If supplementing with bottles and formula is common, or even if advertising implies that it is usual, many new mothers and the people helping them, will assume that this is an accepted way of feeding a baby.

- The community influences all attitudes such as how long a baby breastfeeds, where breastfeeding can take place, the other demands on a mother’s time, and how much support she receives.

- Communities can be critical and are an important cause of difficulties. They may stigmatise people who are HIV-positive, and this can affect how HIV-positive women decide to feed their babies. Women may try to hide the condition and be unwilling to consider replacement feeding because of fear that not breastfeeding would lead to stigmatisation.

- Communities can also be an important source of support for women with HIV – supporting different infant feeding options, such as replacement feeding, or exclusive breastfeeding and stopping early. Support from the community for an unusual way of feeding a baby – such as expressing and heat treating breastmilk - may encourage women to consider this option.

- Support from the community may include
  - psychological support,
  - financial support, and
  - practical support.

- Support for infant feeding may be linked with other projects. For example, a community project to generate income for women may assist those women who are HIV-positive to have more choice regarding infant feeding options.

- Support from the community may be provided by individuals, or by groups such as religious groups, which already exist, or peer support groups, specially formed for helping with the situation of HIV.

- In some places there will be a need to encourage further groups and resources to develop in order to provide adequate community support.

- We can look at five main areas in which support from the community could be important for helping women to feed their infants optimally.
As participants to turn to page 93 in their manual and find BOX 17.1. Ask them to read out the points one by one in turn.

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**BOX 17.1**

**COMMUNITY SUPPORT FOR OPTIMAL INFANT FEEDING**

Community support can:

- encourage better education about HIV and infant feeding
- reduce stigma for HIV-positive women
- support breastfeeding (exclusive, continued, or modified options)
- provide practical support for replacement feeding if chosen
- help prevent spillover and misuse of replacement feeding

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**III. Facilitate the group exercise 35 minutes**

- Explain what to do:
  - Sit in your groups of four participants with your trainer. Each group will discuss the five points of community support listed in BOX 17.1.
  - On page 93 in your manual, you will find WORKSHEET 17.1 Community Support. Use this list of questions to discuss the points from BOX 17.1.
  - For each question write a few words about what is done well or what needs to be improved.
  - Write your answers on the loose copy of the worksheet to hand into the course organisers. If you wish to keep a copy for yourself, copy the answers onto the worksheet in your manual. After the exercise, each group will give a brief report of their main conclusions.
  - Try to answer specifically. This means saying exactly what the community could do, and giving examples.

- Give each group a loose copy of WORKSHEET 17.1 Community Support.

- Trainers act as resource people, and let the groups do the work themselves as much as possible the DISCUSSION NOTES on pages 228 - 230 are a resource to use, if the group needs help to start the discussion, or to continue working. However, the trainer should not lead the discussion. Groups can record their main points on a sheet of flip chart paper to share with the class.
IV. Conclude the session  15 minutes

😊 Ask one participant from each group to give a brief report from their group.

☐ Summarize the main suggestions that have been made by the groups in their reports.

Point out that these ideas will be collected and considered in the on-going work in the area, and as possible follow-up to the training.

Ask participants to use the ideas and to encourage their implementation wherever they have an opportunity to do so.

Thank them for their efforts.
WORKSHEET 17.1 Community Support

Write your answers on the loose copy of the worksheet to hand into the course organisers. If you wish to keep a copy for yourself, copy the answers onto the worksheet in your manual.

1. Encourage better education about HIV and infant feeding

What support can the community provide? Specifically

_____________________________________________________________________
_____________________________________________________________________

Who could provide this support? Individuals, leaders, special groups?

_____________________________________________________________________
_____________________________________________________________________

What additional supports or resources are needed?

_____________________________________________________________________
_____________________________________________________________________

What could you do to encourage support in the area?

_____________________________________________________________________
_____________________________________________________________________

2. Reduce stigma for HIV-positive women

What support can the community provide? Specifically

_____________________________________________________________________
_____________________________________________________________________

Who could provide this support? Individuals, leaders, special groups?

_____________________________________________________________________
_____________________________________________________________________

What additional supports or resources are needed?

_____________________________________________________________________
_____________________________________________________________________

What could you do to encourage support in the area?

_____________________________________________________________________
3. **Provide practical support for replacement feeding if chosen**

What support can the community provide? Specifically

Who could provide this support? Individuals, leaders, special groups?

What additional supports or resources are needed?

What could you do to encourage support in the area?

4. **Prevent spillover and misuse of replacement feeding**

What support can the community provide? Specifically

Who could provide this support? Individuals, leaders, special groups?

What additional supports or resources are needed?

What could you do to encourage support in the area?
5. **Support breastfeeding: (exclusive, continued and modified options)**

What support can the community provide? Specifically

_____________________________________________________________________
_____________________________________________________________________

Who could provide this support? Individuals, leaders, special groups?

_____________________________________________________________________
_____________________________________________________________________

What additional supports or resources are needed?

_____________________________________________________________________
_____________________________________________________________________

What could you do to encourage support in the area?

_____________________________________________________________________
_____________________________________________________________________

DISCUSSION NOTES FOR EXERCISE 17.1

1. **Encourage better education about HIV and infant feeding**

   The community could encourage people to have accurate information about HIV transmission and MTCT, and about different methods of infant feeding. Information should include the following:
   - The need for primary prevention, especially in young people and for keeping HIV-negative women negative.
   - That there is a need for men to be supportive and responsible.
   - The value of testing, including helping HIV-negative women to avoid using replacement feeds unnecessarily
   - The advantages of exclusive breastfeeding and of a good breastfeeding technique
   - The risks of replacement feeding, especially if not done carefully
   - How to choose, prepare and give replacement feeds as safely as possible
   - Importance of adequate feeding particularly in the first two years
   - Acceptance that some mothers may choose breastfeeding and that some may choose replacement feeding in the best interests of their child, it does not mean that they are a bad mother, whichever they choose.

   This support for giving information could be provided in schools, religious groups, women’s and other community groups especially those involving men; young people and in the media. Who specifically would be involved?

   What is needed for better education about HIV and infant feeding? Resources?

   In your area, what could YOU do to help the community to encourage support for HIV and infant feeding through better education?

2. **Reduce stigma for HIV-positive women**

   Groups and individuals in the community can help to reduce stigma for HIV-positive women when they:
   - encourage openness about HIV, so that it is no longer a secret. Openness may also protect women if they choose replacement feeding
   - accept that HIV can affect everyone, or their family, in some way, – and it must be talked about, even if an individual person’s situation remains confidential
   - encourage testing so that HIV-negative women do not avoid breastfeeding unnecessarily
   - encourage women to involve other family members in making plans for the future.

   Who specifically would be involved in helping to reduce stigma for HIV-positive women? Would it help if HIV-positive women formed a support group?
What is needed – resources, what? – to support actions to reduce stigma for HIV-positive women?

In your area, what could YOU do to help the community to reduce stigma for HIV-positive women?

3. **Provide practical support for replacement feeding if chosen**

Groups and individuals in the community can provide practical support for replacement feeding if chosen, when they help to:
- provide facilities for mothers to prepare and give replacement feeds in a clean manner when away from home
- facilitate availability and access to replacement feeding when needed
- encourage formation of support groups for mothers who are using replacement feeding and encourage women to join these groups.

Who specifically would be involved in providing practical help for replacement feeding? Shopkeepers, public premises such as government service offices, existing community groups?

What is needed in this community – resources, what? – to provide practical support for replacement feeding if chosen?

In your area, what could YOU do to help the community to provide practical support for replacement feeding if chosen?

4. **Prevent spillover or misuse of replacement feeding**

Groups and individuals in the community can prevent spillover or misuse of replacement feeding when they:
- continue to encourage breastfeeding for the majority of mothers and foster the establishment of breastfeeding support groups (Step Ten of the “Ten Steps to Successful Breastfeeding” – see Session 3).
- discourage use of replacement milk supplies by mothers whose infants do not need them. (Spillover both deprives infants of HIV-positive mothers of the supplies and reduces exclusive breastfeeding among other infants)
- notice any practices such as in shops or the market, which encourage mothers to choose replacement feeds unnecessarily. Report these practices to group leaders who may be able to inform district health officers or others who can take corrective action.
- shopkeepers could avoid marketing practices of formula manufacturers which suggest that using their product is the solution to the HIV problem
- discuss worries of women who want to avoid breastfeeding 'just in case' they are HIV but have not tested positive.
Who specifically would be involved to prevent spillover or misuse of replacement feeding? Shopkeepers, existing community groups?

What is needed in this community—resources, what?—to prevent spillover or misuse of replacement feeding?

In your area, what could YOU do to help the community to prevent spillover or misuse of replacement feeding?

5. **Support breastfeeding (exclusive, continued and modified options)**

Groups and individuals in the community can support breastfeeding when they:
- help people to understand the benefits of exclusive breastfeeding and the possibility that there is less risk of transmission of HIV with exclusive breastfeeding than mixed feeding
- help people to understand that using a good technique for breastfeeding may reduce the risk of transmission, by reducing the risk of mastitis and nipple damage
- help to provide breastfeeding counselling for mothers, so that they are able to breastfeeding exclusively for at least 4 and if possible 6 months, using a good technique
- help people to understand the dangers of replacement feeding if resources are not adequate
- encourage HIV-positive women for whom replacement feeding is difficult in the early months, to consider stopping breastfeeding early between 3 to 6 months, if resources then permit.
- help to provide facilities and utensils for mothers who want to express and heat-treat their breastmilk
- help communities to regard expressing and heat-treating milk as socially acceptable and responsible
- help people to accept the possibility of wet-nursing as an option, if it is culturally acceptable.

Who specifically would be involved to support breastfeeding? Community leaders, family members?

What is needed in this community—resources, what?—to support breastfeeding?

In your area, what could YOU do to help the community to support breastfeeding?