

HIV and Infant Feeding Counselling: A training course



Participants' Manual



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WHO/FCH/CAH/00.4
UNICEF/PD/NUT/(J)00-3
UNAIDS/99.57E
Distribution: General
Original: English

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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.

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, by 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 & post-test counselling for HIV, and follow-up support for general living with HIV. This course covers only aspects specifically related to infant feeding.

During the course you will be asked to work hard. You will be given a lot of information and asked to do a number of activities to help you develop your skills. Hopefully you will find the course interesting and enjoyable, and the skills you learn will help you in your work with mothers and babies.

Course participants are expected already to have a basic knowledge of breastfeeding counselling, as in the *Breastfeeding Counselling: A Training Course (WHO/UNICEF)* or an equivalent level of knowledge and skills. Course participants who are not familiar with breastfeeding counselling will need to acquire this knowledge first.

The course and manual

HIV and Infant Feeding Counselling: A training course (HIVC) consists of 16 sessions. Your Course Director will plan the order of sessions and give you a timetable.

This book, the Participants' Manual, is your main guide to the course. Keep it with you during all sessions. It contains summaries of main information and overheads from each session, copies of the worksheets and checklists for practical sessions, texts for demonstrations that participants help with, and the exercises you will do during the course. The manual can be used for reference after the course, so it is not essential for you to take detailed notes.

You will also receive a copy of the following reference materials:

- 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

Session 1

Overview of HIV and Infant Feeding

The epidemic of HIV and AIDS has become a major problem in many countries. A very sad aspect of the epidemic is the number of young children who are infected. This is a cause of an increasing number of child deaths.

It is important to remember that the best way to prevent infection of children is to help their fathers and mothers avoid becoming infected in the first place, and to avoid infecting each other. Men's responsibility for protecting their families must be emphasised.

In this session we 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.

Defining HIV and AIDS

1/1

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

Mother-to-Child Transmission of HIV

1/2

Most children who get HIV are infected through their mother

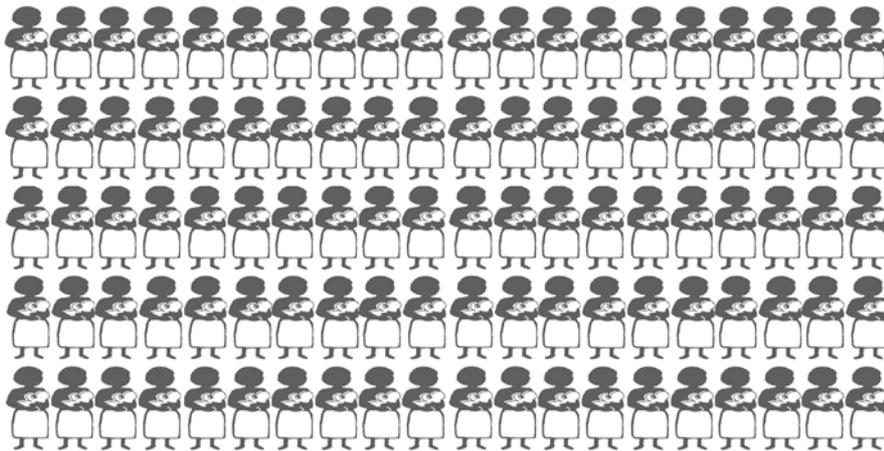
- during pregnancy across the placenta
- at the time of labour and birth through blood and secretions
- through breastfeeding.

This is called mother-to-child transmission of HIV or MTCT.

Risk of mother-to-child transmission of HIV

100 mothers and babies

1/3



If the *prevalence*¹ of HIV infection among the women in your district is known to be 20% and you see 100 women, 20 of these 100 women are likely to be HIV-positive. The other 80 will probably be HIV-negative. We used a prevalence rate of 20% for this example. Use your local rates when talking with the mother.

¹ Prevalence means the percentage of mothers with HIV

The mother-to-child transmission rate is about 20-25% during pregnancy and delivery. We use 25% for this example. Five infants of the 20 HIV-positive mothers will probably be infected during pregnancy or delivery.

The transmission rate through breastfeeding is about 15% of the infants who are breastfed by HIV-positive mothers. Assuming all the infants are breastfeeding, about 3 of the infant, of the HIV-positive mothers, are likely to be infected by breastfeeding.

In a group of 100 mothers in an area with a 25% prevalence of HIV infection among mothers, only about 3 babies are likely to be infected with HIV through breastfeeding. The overall risk of an infant being infected through breastfeeding is quite small, even if the prevalence of infection in mothers is high. In many situations, the risk of illness and death from not breastfeeding is greater than the risk of HIV infection through breastfeeding.

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

She should also be assisted to protect herself against infection with HIV

When you are explaining the risk of transmission to an individual mother it may be easier to use a card with 20 women, all of whom are HIV-positive, than talking about 100 mothers of unknown HIV status.

20 mothers and babies

1/4



The 20 mothers pictured have had an HIV test and were found to be HIV-positive. Transmission rate is about 25% during pregnancy - 5 infants are likely to be infected before or during delivery.

Transmission rate is about 15% through breastfeeding - 3 infants are likely to be infected if they all breastfeed.

Factors which affect mother-to-child transmission of HIV

Factors which affect Mother-to-Child Transmission of HIV

1/5

- Recent infection with HIV
- Severity of HIV infection
- Infection with sexually transmitted diseases
- Obstetric procedures
- Duration of breastfeeding
- Exclusive breastfeeding or mixed feeding
- Condition of the breasts
- Condition of the baby's mouth

A number of strategies that could reduce the risk of transmission do not depend on knowing which mothers are infected with HIV.

Other strategies, such as the avoidance of breastfeeding, can be harmful for babies, so they should only be used if a woman knows she is HIV-positive.

FACTORS WHICH AFFECT MTCT OF HIV

○ *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 the 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 who has 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.

○ *Exclusive breastfeeding or mixed feeding*

Exclusive breastfeeding means that the infant has only breastmilk and no other food or drinks at all, including water. 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. Most infants do not need other food or fluids before 6 months.

○ *Condition of the breasts*

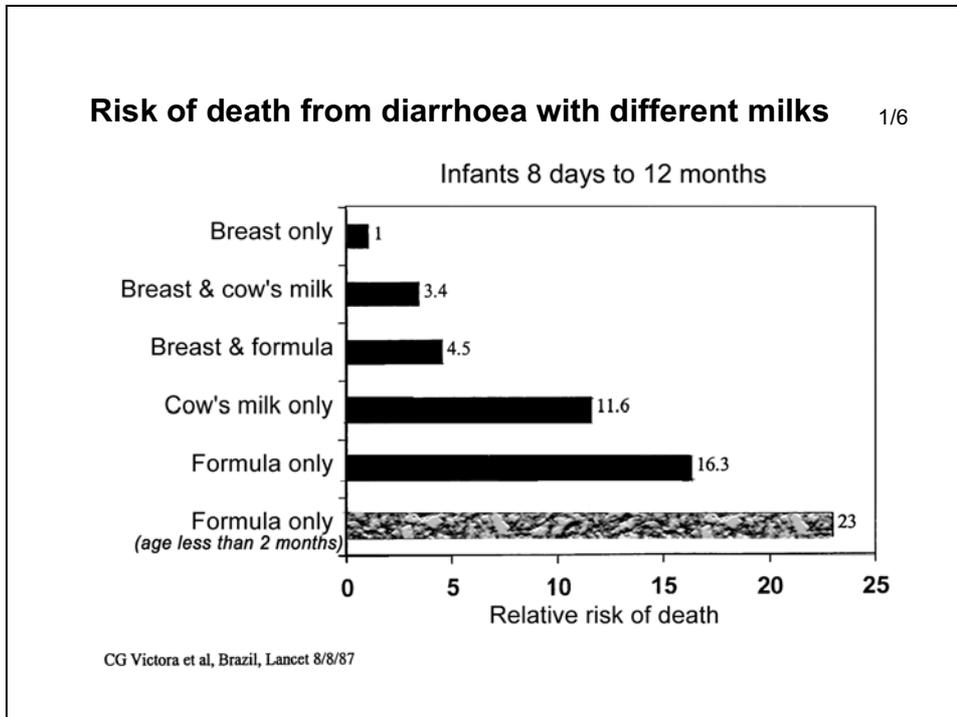
Nipple fissure, particularly if the nipple is bleeding, mastitis or breast abscess may increase the risk of HIV transmission through breastfeeding. Good breastfeeding technique helps to prevent these conditions, and may also reduce transmission of HIV.

○ *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.

The risks of NOT Breastfeeding

Infants who do not breastfeed are at increased risk of gastro-enteritis, 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.



In this group of Brazilian infants, The infants who received no breastmilk at all were at much higher risk 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 HIV and Infant Feeding Policy Statement by WHO, UNICEF and UNAIDS

In the *Guidelines for decision makers*, on page 20 there 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 it. The policy statement starts with three points:

Point 1: The human rights perspective

“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.”

Point 2: Preventing HIV infection in women

“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.”

Point 3: The health of mothers and children

“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.”

1/7

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

Session 2

Counselling for HIV Testing and for Infant Feeding Decisions

In this session we:

- discuss counselling related to HIV testing and making infant feeding decisions;
- outline infant feeding options to discuss with a mother.

Counselling can help people

- to decide about having the special blood test for HIV
- to make plans about their lives if they know their HIV status
- to find ways to cope with their problems
- to make decisions on how to feed their infants

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.

What is counselling?

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, nor to push her towards a particular course of action, nor 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.

Are these health workers counselling?

Demonstration 2/1: Informing, advising or counselling

What to do:

Three participants each read the words of one of these health workers. Another participant is the mother to whom they are speaking, but she does not need to say anything.

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?

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.

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?

Counselling stages in relation to HIV

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

Stage 1 - 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.

Stage 2 - Post-test counselling may involve one or many sessions depending on the test result.

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

If the **test 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.

Stage 3 - On-going counselling helps a woman/couple 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.

Stage 4 - Infant feeding counselling comes when a woman has accepted her test result and is ready to discuss infant feeding options

Voluntary Confidential Counselling and Testing – VCT

Voluntary

Men and women must not be forced to take an HIV test. A test should only be done with *informed consent*.

Are the health workers in these demonstrations helping the woman to give voluntary informed consent?

Demonstration 2/2: No voluntary informed consent
What to do:

Two participants will be asked to give this demonstration. One participant plays the part of the health worker and one plays Mrs. A. You need to practice reading the parts with each other, but you do not need to learn the words. You can read them from your manual. The Trainer reads 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.
-

Demonstration 2/3: Yes, voluntary informed consent

What to do:

Two participants will be asked to give this demonstration. The participant who played Mrs A in Demonstration 2/2 continues for Demonstration 2/3. Another participant plays the part of the health worker. You need to practice reading the parts with each other, but you do not need to learn the words. You can read them from your manual. The Trainer reads 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.

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.

Confidential

When we keep information confidential it means that we do not tell anyone else. For example, “confidentiality” in relation to testing means that no-one else except the counsellor knows the result of the test. Confidentiality in relation to counselling means that the counsellor does not tell anyone what is said during discussions.

Look at these pictures and think what they show about confidentiality.

Confidentiality

2/1



Confidentiality

2/2



Testing for HIV

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 the person has been infected.

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.

Testing for HIV antibodies in children



Antibodies
from mother

The 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.



Antibodies may be
from mother

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.



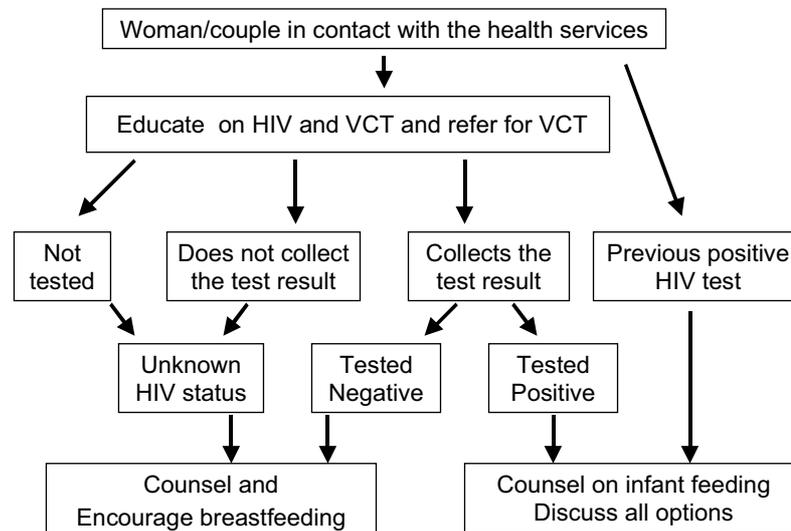
After 18 months,
child's own antibodies

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.

Counselling for infant feeding decisions

Counselling for infant feeding decisions

2/4



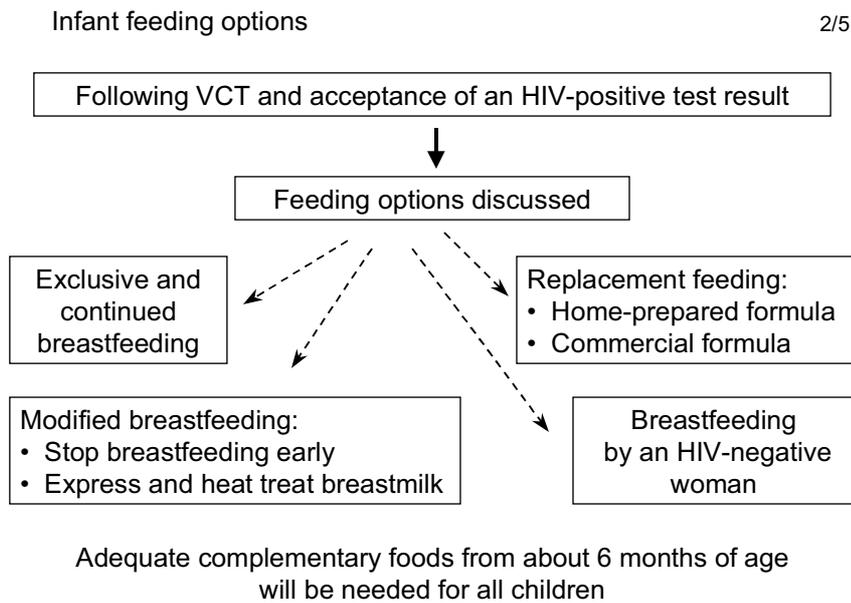
Infant feeding counselling may be needed:

- 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.

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.

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.

Infant feeding options



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 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.

2/6

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.

Session 3

Integrated Care for the HIV-positive Woman and her Baby

Introduction

In this session we discuss:

- the 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.

While 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.

Integration of Prevention of Mother-to-Child Transmission of HIV into MCH

There are some practices that 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:

- 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 rupturing of membranes, and
- counselling women about exclusive breastfeeding, and helping them to use a good breastfeeding technique.

3/1

**Where prevention of MTCT of HIV
needs to be integrated into MCH care**

Health education activities
 Treatment of sexually transmitted diseases
 Family planning services
 Antenatal care
 Delivery and postpartum care
 On-going health and nutrition care for children

Health education activities 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.

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.

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.

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.

The main messages for antenatal women are:

- 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 it is relevant.

During **delivery**, all women need:

- a skilled attendant present;
- minimal use of invasive procedures, such as episiotomy.

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.

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.”

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.

The Baby Friendly Hospital Initiative

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.

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.

The Ten Steps to Successful Breastfeeding

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers to initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breastmilk, unless medically indicated.
7. Practise rooming-in. Allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give infants no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic.

Exercise 3.1 Importance of the Baby Friendly Hospital Initiative

NOTES FOR SMALL GROUP DISCUSSION

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 need information on preparation and use of adequate replacement feeding and the skill to teach this to mothers and other caregivers.
- Staff need 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.¹

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.

¹ This spread of artificial feeding is called “spillover”. It is discussed later in Session 12.

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

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.

- 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 who have 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.²
- 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.

² Cup feeding is discussed in detail in Session 8.

Session 4

Breastmilk Options

In this session we discuss feeding options which involve breastfeeding or using expressed breastmilk.

The advantages of breastfeeding

A mother who is HIV-positive may decide that breastfeeding is her best option and should be supported to establish and maintain it.

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 a her fertility**, helping to space the next pregnancy.
- Breastfeeding **provides closeness and contact** between her and her baby which 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
- 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.

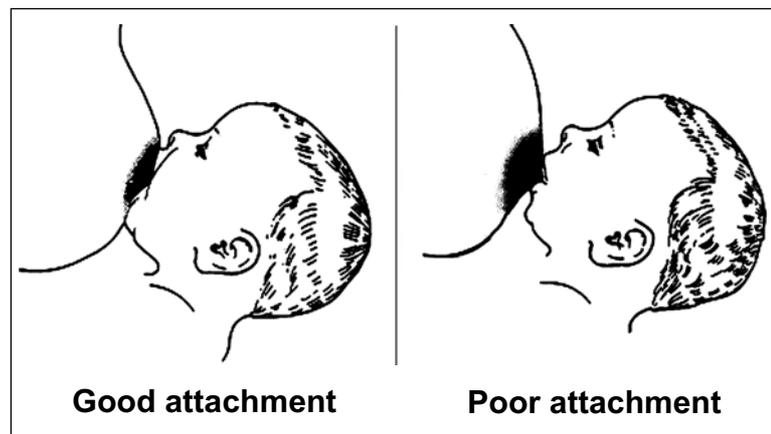
The management of breastfeeding

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.

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.

Attachment

4/1



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.

A young infant needs to breastfeed frequently - at least 8 times in 24 hours. There should be no restriction on the frequency or duration of feeds.

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 milk, drinks, or foods, as this may increase the risk of HIV transmission.

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.

Preventing and treating mastitis

Good breastfeeding technique with good attachment and frequent removal of milk help to prevent nipple fissure and mastitis. To treat these conditions, the usual recommendation is to improve the baby's attachment at the breast and to continue breastfeeding, 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.

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 technique¹, 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.

Antibiotic treatment will usually be indicated in the woman with HIV.² 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 boil 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.

¹ Warm bottle technique is explained in *Breastfeeding Counselling: A training course*, page 112, Participants' Manual.

² Generally oral antibiotics are used - erythromycin, flucloxacillin, dicloxacillin, amoxicillin, cephalixin. See *Mastitis: causes and management* WHO/FCH/CAH/00.13 for further information.

Stopping breastfeeding early

A mothers 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.

When a mother stops breastfeeding early, she needs counselling about replacement feeding and support for her decision. A mother need to consider a number of points:

- to find a regular supply of another kind of milk;
- to teach her baby to cup feed;
- to ensure continuing physical contact with her baby; and
- to think about family planning.

She needs help and support to do all these things.

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.

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.³ 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.⁴ The methods above are considered more effective in the long term.

³Aspirin should not be used by breastfeeding women.

⁴ 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.

Breastfeeding by another woman who is HIV-negative

Using breastmilk from another woman may be an option. When a woman breastfeeds a baby to whom she did not give birth to, it is called *wet nursing*. If a woman expresses her milk for another baby, it is called *donor breastmilk*. 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*.

**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.

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.

How to heat-treat expressed breastmilk

Mothers who are HIV-positive can express and heat-treat their own breastmilk to feed to their baby.

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. 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.**

If she is in hospital where there is a pasteuriser which can control the temperature, the milk can be heated to 62.5°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 in as cool a place as possible. 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.

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.

Session 5

Replacement Feeding in the First Six Months

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 defined replacement feeding as:

2/6

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.

In this session, we discussed:

- the milks that are available here,
- which milks are suitable so that it is *possible* to use them for replacement feeding, even with some modification, and
- which milks are *unsuitable* for an infant under six months.

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.

Locally available milks

Infants in the first six months can be fed on

- Home-prepared formula made from modified:
 - fresh liquid whole milk,
 - tinned evaporated milk,
 - full cream powdered milk.
- Commercial infant formula designed to meet the nutritional needs of an infant for the first 6 months of life.

The milk may come from cows, goats, buffalo, sheep or other animals. Formula and a liquid “milk” can also be made from soya beans.

WHEN YOU EXAMINE PACKETS OF MILK 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 they might want to use?
- Are these from the POSSIBLE or UNSUITABLE tables?

Check your local products regularly so that you are up-to-date with the constituents and directions and aware of any new products that become available.

How milks can be modified to make replacement feeds

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.

BOX 5.1**RECIPES 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

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. ¹

Stigma with replacement feeding

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.

¹Research 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.

Session 6

Preparation for Practical Exercise

WORKSHEET 6.1: Preparation for Practical Session

Ingredients for the group to purchase			
Item	Price paid	Cost per	Who will purchase:
Tin/carton or packet of commercial infant formula suitable for use from birth		/ 500g	
Packet or box of powdered full cream milk		/ 500g	
Fresh cow's milk (250 ml is enough)		/ litre	
Other milk			
Sugar (60 g is enough)		/ kg	

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

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

These skills help you to counsel a woman about her infant feeding options. 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 for this.

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 which 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

This list of skills is also on the inside of the back cover of this manual so that it is easy to refer to.

Demonstration 7/1: Empathize

Two participants will be asked to give this demonstration. One plays the part of the health worker; one plays the part of the mother. You need to practice reading the parts with each other, but you do not need to learn the words. You can read them from your manual.

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?

Pause for Comment by Trainer

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.

Demonstration 7/2 Listening and learning skills

One participant will be asked to give this demonstration and play the part of the pregnant woman Mrs E. The trainer will play the health worker. You need to practice reading the parts, but you do not need to learn the words. You can read them from your manual.

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. You can use each skill more than once.

Skills:

- Non-verbal communication
- Open question
- Respond showing interest
- Reflect back
- Empathize

Trainer reads this introduction:

Mrs E. is pregnant and she has asked specially to come to the ante-natal clinic to discuss a problem. 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.

Health Worker:

.....

(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.

.....

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)

.....

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.

.....

You feel unsure about breastfeeding this baby.

.....

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:

.....

Oh, dear. 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:

.....

It is a difficult decision.

I am glad that you came to talk about it.

Demonstration 7/3: Accepting and praising

The same participant that helped in Demonstration 7/2 will be asked to give this demonstration. It continues the counselling session started in Demonstration 7/2.

Again, listen to the demonstration and then fill in the spaces with the skill that was used. You can use each skill more than once.

Skills:

- Accept
- Open question
- Reflect back
- Empathize
- Praise

Trainer reads this 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:

..... You are wise to come and talk about it.

..... What thoughts have you had already about feeding this baby?

Mrs. E: I breastfed my son and it went well. He is four years old now and strong and healthy.

Health Worker:

..... Your son is strong and healthy.

Mrs E: Yes, I want this baby to be healthy too, so I will have to bottle feed.
(mistaken idea)

Health Worker:

..... I see, you want to bottle feed this baby.

..... You are worried about breastfeeding.

Mrs E: Yes, I am. I don't know what to do.

Practise your counselling skills

You will now use role-play to practise “Listening and Learning Skills” and the first two “Building Confidence and Giving Support Skills.” 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. Do not show your story to the others in your group. The ‘counsellor’ counsels you about your situation. The other participants in the group observe.

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.
- You do not need to bring the conversation to a conclusion. 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 Skill 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 players do right, and suggest what they could do better.

Demonstration 7/4: Giving information

Two participants will be asked to give this demonstration. One plays the part of the health worker, one plays the part of the pregnant woman, Mrs F. You need to practice reading the parts with each other, but you do not need to learn the words. You can read them from your manual.

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.

Health Worker continues: 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.

Pause to Discuss

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.

Pause to Discuss

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

Pause to Discuss

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

Discuss

Demonstration 7/5 Giving information

Two participants will be asked to give this demonstration. One plays the part of the health worker, one plays the part of the pregnant woman, Mrs G. You need to practice reading the parts with each other, but you do not need to learn the words. You can read them from your manual.

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.

Pause to Discuss

- 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.

Pause to Discuss

- 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

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.

1. Bring your husband with you to discuss how the baby will be fed.

2. Look at the leaflet and decide how you will feed your baby.

3. You must breastfeed exclusively and stop after 4 months.

4. Use a cup to feed your baby.

5. Do not use cereal or juice as a substitute for milk if your baby is under 6 months old.

Session 8

Food Hygiene and Feeding Techniques

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, and
- how to help a caregiver who is not the baby's mother.

Babies who are not breastfed are at increased risk of illness for two reasons:

- replacement feeds may be contaminated with organisms which can cause infection,
- a 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.

Requirements for clean and safe feeding

Point 1: Clean Hands

Clean hands

8/1



- After using toilet
- After cleaning baby's bottom
- Before preparing or serving food
- Before feeding children or eating

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;
- before preparing or serving food,
- before feeding children and before eating.

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

Clean utensils

8/2



- Clean surface (table, mat or cloth)
- Wash utensils immediately after use
- Keep clean utensils covered
- Use clean utensils for baby

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**Safe water and food**

8/3



- 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.

- 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. If the water has been stored for more than a day, re-boil it before use.
- 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.
- 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**Safe storage**

8/4



- 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

Safe storage of food is also important

- Keep food tightly covered, to stop insects and dirt getting into it.
- 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 milk can keep in a clean covered container at room temperature for a few hours. 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.

Disadvantages of feeding bottles

8/5



Disadvantages of feeding bottles

- 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.

Advantages of cup feeding

8/6



Advantages of cup feeding

- 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.

(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.¹

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 minutes²
 - 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.
-

¹Cups will need to be sterilised in the hospital setting if the infant is very small or ill and the cups are shared between infants.

² 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.

Teaching a mother to cup feed

When you teach a mother to cup feed you use some of the “Listening and Learning” and “Building Confidence and Giving Support” skills we discussed in a previous session. 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. See what skills you notice in this demonstration.

One participant is asked to assist with this demonstration. This participant takes the part of the mother with a doll as her baby. The trainer takes the part of the health worker teaching her how to cup feed her baby. The ‘mother’ needs to practice reading the parts, but she does not need to learn the words. She can read them from her manual.

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. You can use each skill more than once.

Skills:

Ask open question

Empathize

Praise

Give relevant information - given in a positive way

Suggest

Commands – acceptable because mother agreed to be instructed

Demonstration: 8/1 Teaching a mother to cup feed

The Trainer reads out this introduction:

(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:	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	
.....	Good - you remember. Would you like me to show you how?
Health Worker:	
.....	You're worried about it, aren't you?
.....	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:

.....

Yes, that is a good position.

.....

You may want to hold a cloth under his chin in case he dribbles.
You have some milk in a small cup, yes?

.....

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:

.....

Yes, he likes that, doesn't he?

.....

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.

.....

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:

.....

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.

.....

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.

.....

You and (baby's name) are doing very well.

.....

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.

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.

Caring for a baby who is not breastfeeding

Ways of comforting a baby

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.

- 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

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.

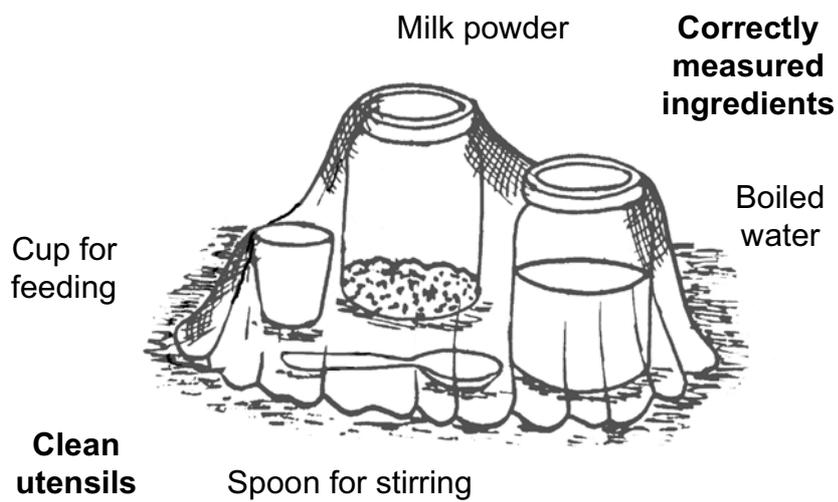
When a baby is cared for by other people

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. (This is discussed in Session 10)

For the caregiver

8/7



Session 9

Replacement Feeding from 6 to 24 months

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 months and if possible the first six months of life.

The provision of other foods and liquids in addition to milk is called *complementary feeding*, as the foods are additional or complementary to the milk rather than adequate on their own as the diet.

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.

Suitable foods for a child from 6 to 24 months

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.

Iron and zinc requirements are particularly difficult to meet unless there is fish or meat regularly in the diet. Micronutrient supplements may be needed if these foods are not eaten in sufficient quantity.

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 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.

TABLE 9.1 COST OF MICRONUTRIENT SUPPLEMENTS

Cost per pack/bottle	Cost per daily dose	Cost per month

Active feeding

9/5



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.

Child needs own portion

9/6



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.

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, the child may eat less.

Two participants give Demonstration 9/1 and 9/2. One participant plays the part of a child aged about 18 months; another participant is the 'parent'.

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.

Now give Demonstration 9/2. Again, one participant is the parent and one is the 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?"

BOX 9.2 COMMERCIAL BABY FOODS

Advantages:

- Quick and easy to prepare, and may not need cooking;
- Usually clean and safe when first opened;
- Most babies like them, as they are usually sugary;
- Some products contain a good mixture of nutrients and micronutrients.

Disadvantages:

- Expensive compared to home-prepared foods;
- Labelling may suggest giving them to babies before 6 months;
- Labelling may suggest giving the foods in place of milk feeds;
- Supply may be unreliable;
- If mixed with contaminated water it may make the child ill;
- Some products are low in important nutrients;
- Difficult to store safely once opened.

Feeding concerns related to HIV

Belonging to a family that is living with HIV may affect the nutrition of young children in a number of ways:

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.

Session 10

Preparation of Milk Feeds - measuring amounts

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 in the same way every time.

In this session, we discuss how:

- to make measures for liquids and powders;
- to make measures using utensils that a mother brings from home;
- to follow recipes using home measures and locally available milks.

When a mother makes replacement feeds, whether from commercial formula, 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.

The amount of milk to give if a baby is not breastfed

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.

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.

TABLE 10.1 APPROXIMATE AMOUNT OF FORMULA NEEDED PER DAY

Age in months	Weight in kilos	Approx. amount of formula per 24 hours	Approx. number of feeds*
1	3	450 ml	8 x 60 ml
2	4	600 ml	7 x 90 ml
3	5	750 ml	6 x 120 ml
4		750 ml	6 x 120 ml
5	6	900 ml	6 x 150 ml
6		900 ml	6 x 150 ml

*includes rounding up or down for ease of measurement

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, so that individual feeds are easier to measure in multiples of 30 mls. These amounts can be used as a starting point and then adjusted for the individual baby.

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.

TABLE 10.2 APPROXIMATE AMOUNTS OF MILK NEEDED BY MONTH

Age in months	Milk feeds ml/day	Cow's milk, sugar and water needed to make home-prepared formula per day	Commercial formula needed per month
1	450	300 ml milk + 150 ml water + 30 g sugar	4 x 500 g tins
2	600	400 ml milk + 200 ml water + 40 g sugar	6 x 500 g tins
3	750	500 ml milk + 250 ml water + 45 g sugar	7 x 500 g tins
4	750	500 ml milk + 250 ml water + 45 g sugar	7 x 500 g tins
5	900	600 ml milk + 300 ml water + 56 g sugar	8 x 500 g tins
6	900	600 ml milk + 300 ml water + 56 g sugar	8 x 500 g tins
Total for 6 months (approximately)		92 litres of milk + 9 kg sugar	40 x 500 g (20 kg)

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.

How to measure water and liquid milk

Ask a mother to bring a container from home that you can mark for her as a measure. The container should be

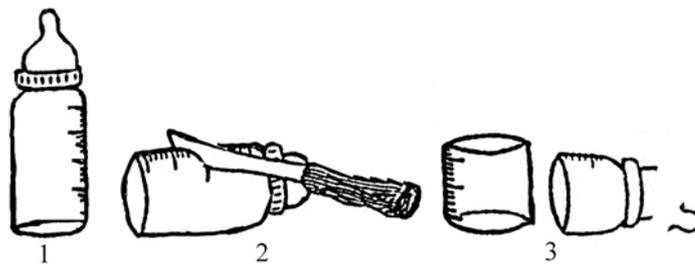
- easily available
- easy to clean
- see-through
- able to be marked with paint, permanent marker, or by scratching a line on it;
- or used as a measure simply by filling it to the top.

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.

It is not necessary to use a cut-off feeding bottle as a measure if other measures are commonly available.

Or you can make a measure from a feeding bottle by cutting off the top.

Figure 10-1 Making a Measure



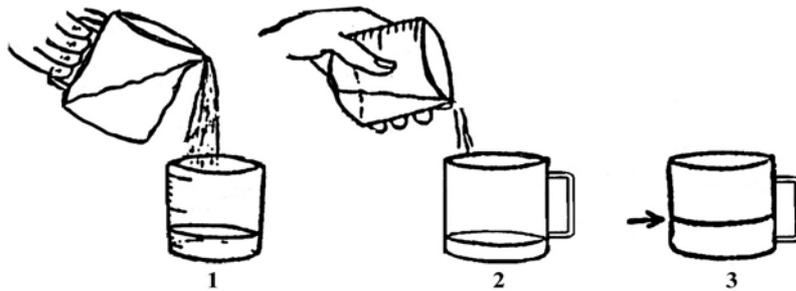
- Step 1.** Take a plastic feeding bottle which is straight up and down, and which has clear measures marked on the side.
- Step 2.** Cut off the top, at a place well above the mark for 100 ml.
- Step 3.** This leaves you with a straight-sided measure, which should be easy to keep clean. (No-one can be tempted to put a teat on it and use it to feed a baby. Cut up the teat before throwing it away.)

The cut-off bottle is a way for a health worker to show appropriate amounts using a mother's own container. The mother does not have to buy her own bottle to use as a measure.

Decide which measure is most suitable and continue with these points to demonstrate to the mother how to measure the water, and then mark the mother's container:

1. Put water into your measure, to reach the 40ml 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.

Figure 10-2
Mark a measure



Explain to the mother that to make up a feed from cow's milk, she needs **one** measure of water and **two** measures of milk. (for example, 40 ml water + 80 ml milk).

How to measure evaporated milk

If a mother uses evaporated milk, she will need to dilute it with boiled water according to 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.

BOX 10.1 EVAPORATED MILK RECIPE

(LOCAL BRAND) needs:

___ ml water + ___ ml evaporated milk 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.

How to measure sugar and milk powder

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.

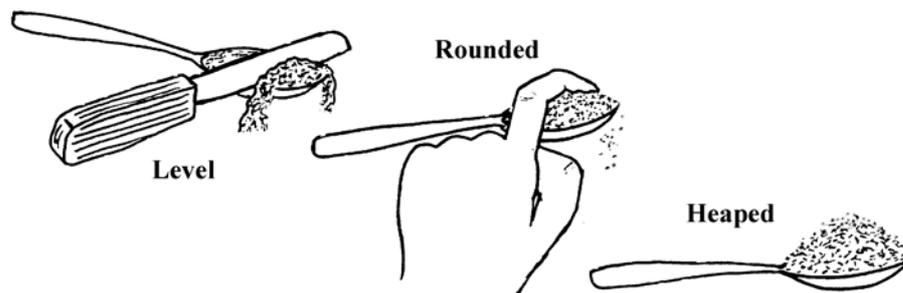
Ask a mother to bring a spoon from home so that you can show her how to measure with that spoon. She should try to keep this same spoon especially for making up feeds for her baby.

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.

You need to know how full to make each size of spoon to measure 8 g.¹ 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.

Figure 10-3 *Measuring with a spoon*



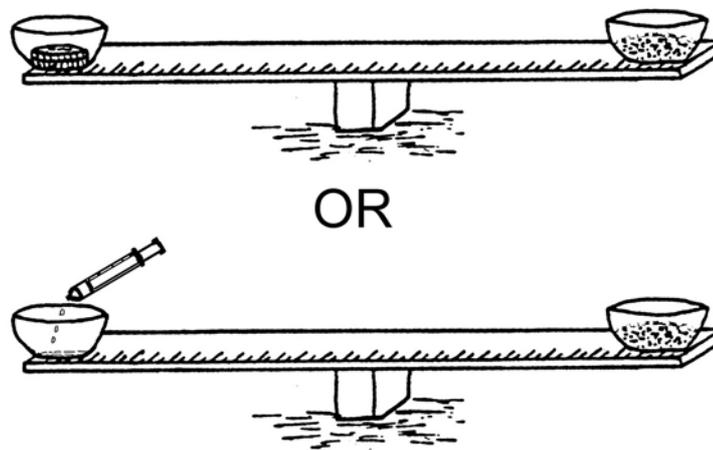
¹ 8 gm for a 120 ml feed

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*

If you are making your own balance, you will need weights such as coins, water in a syringe or other weights.

Figure 10-4 Simple Balance



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.

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 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.

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
40 ml more 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

Learn how to measure it with the mother's spoon in the same way as 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. Help the mother to learn how many spoons she needs to measure 10 g of powder. Write the number of spoons of milk powder to use on her instruction sheet.

The mother puts the 10 g of milk powder into the her container that is already marked to 120 ml. Add a small amount of boiled, cooled water to the powder, and mix to make a smooth cream with no lumps. Then add more water up to the 120 ml mark.

The mother also needs to measure the sugar with the spoon that she has learned to use. She should add the sugar to the formula and stir well. Write the number of spoons of sugar to use on her instruction sheet.

Micronutrient supplements are also added to home-prepared formula. Stir them in just before giving the infant the feed. They 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.

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 in to 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.

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.

BOX 10.3 COMMERCIAL INFANT FORMULA RECIPE

(LOCAL BRAND) needs:

120 ml water + _____ level scoops to make 120 ml of infant formula

Mark the mother's measure for:

120 ml of water

EXERCISE 10.1 How to prepare milk feeds

The following 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 them clearer.

In Session 11 "Preparation of milk feeds" each person in a group will prepare a different kind of formula or a different amount.

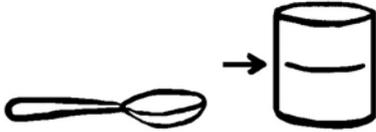
In this exercise, each of you will make an instruction sheet about the formula you will prepare, suitable to give to a mother when you teach her. Write the amounts in the spaces provided on each instruction sheet. Use the quantities written on the flipchart and in your manual on page 34 .

Prepare any additional measures if needed for a smaller amount of feed.

Fresh Milk

Feeds for (name) _____ (born) _____ from (date) _____

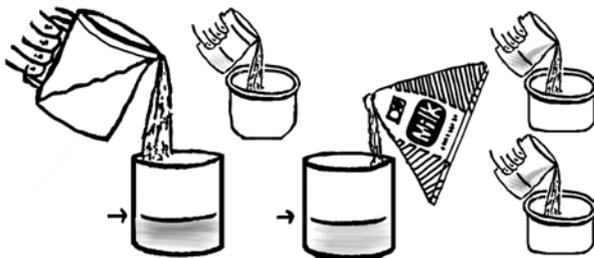
Make ____ ml for each feed. Feed the baby ____ times each day (24 hours)



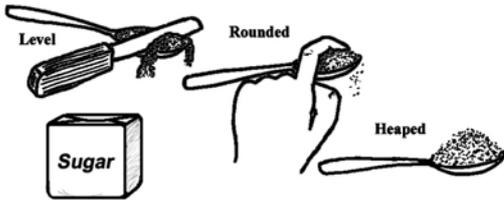
Always use the marked cup or glass and spoon to measure the feeds.



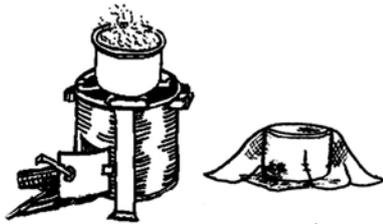
Wash you hands before preparing a feed



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.

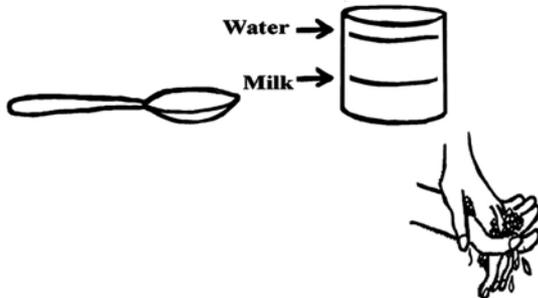


Come back to the health centre on _____

Evaporated Milk

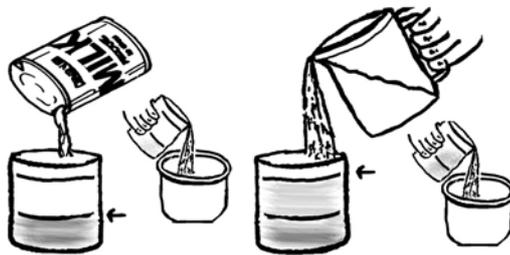
Feeds for (name) _____ (born) _____ from (date) _____

Make ____ ml for each feed. Feed the baby ____ times each day (24 hours)



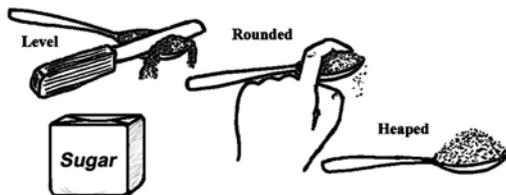
Always use the marked cup or glass and spoon to measure the feeds.

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.



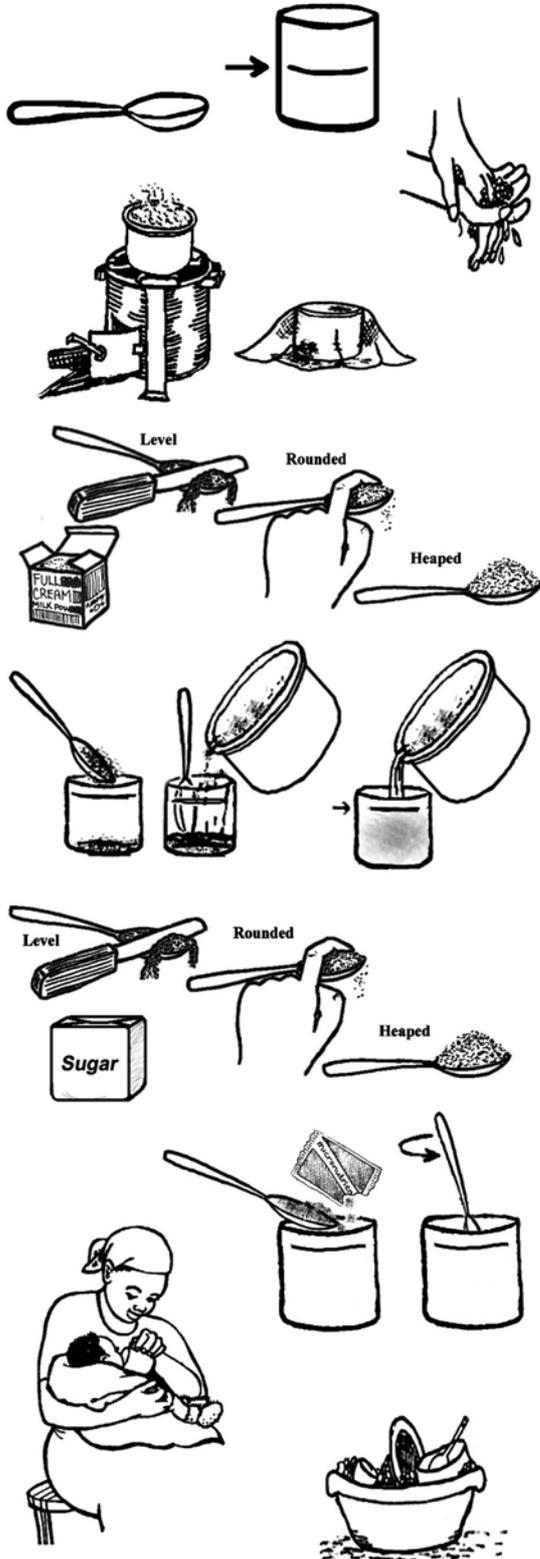
Wash the utensils.

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 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 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.

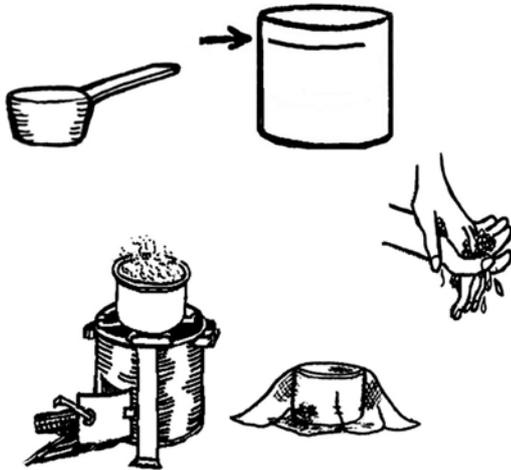
Wash the utensils.

Come back to the health centre on _____

Commercial infant formula

Feeds for (name) _____ (born) _____ **from** (date) _____

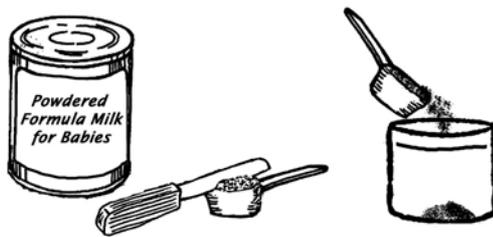
Make ____ ml for each feed. **Feed the baby** ____ times each day (24 hours)



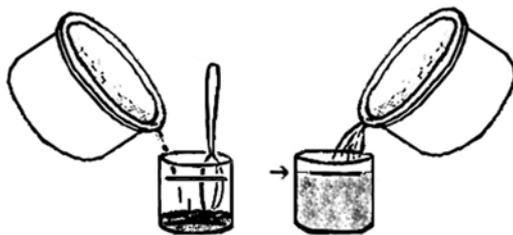
Always use the marked cup or glass and spoon to measure water and the scoop to measure the formula powder.

Wash 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 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

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;
 - collect information on what is needed for each preparation and on how much time it takes.



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

Group _____ cooking with _____ (kind of fuel)			
	Time started	Time ready to use	Time required
Fire			(a)
Kettle put to boil			(b)
<i>Fresh cow's milk formula</i> _____ ml			
<i>Powdered full cream milk formula</i> _____ ml			
<i>Commercial formula</i> _____ ml			
<i>Another formula made from</i> _____ ml			
<i>Another formula made from</i> _____ ml			

- Add the time needed to make the fire and boil the water (a) + (b) to the time required to prepare each type of feed.

Type of feed	Time to boil water (a) + (b)	Time required to prepare feed	Total time needed to prepare one feed
<i>Fresh cow's milk formula</i> _____ ml			
<i>Powdered full cream milk formula</i> _____ ml			
<i>Commercial formula</i> _____ ml			
<i>Another formula made from</i> _____ ml			
<i>Another formula made from</i> _____ ml			

Estimate of amount of fuel used: _____

**Bring this record sheet to
SESSION 13 - COSTS OF REPLACEMENT FEEDS**

Session 12

Making Breastmilk Substitutes Available

Mothers who are HIV-positive and who, following counselling, choose not to breastfeed, need replacement feeds for their baby. 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

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 needless spread of artificial feeding is called *spillover*.

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.

The International Code of Marketing of Breast-milk Substitutes

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; and also 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.

Take turns to read out some selected sections of the Code and discuss how they relate to the provision of breastmilk substitutes for mothers who are HIV-positive.

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.”

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.”

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.”

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.”

Difficulties with donations of formula

You may have heard that some manufacturers and distributors have offered to donate formula for women who are HIV-positive. 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,¹ 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 that 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 through infancy;
- the supply is not used as a sales inducement.

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.

¹ 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*.

Two participants give Demonstration 12/1. One plays the part of the charity worker and the other is Mrs P, the mother of a young baby. Practise the demonstration but you do not need to learn the words – you can read them from your manual.

Demonstration 12/1 Donations of infant formula

- Trainer reads out this introduction:

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?

Making breastmilk substitutes available

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.

Supplies, if provided, need to be

- available in a way that the mother's confidentiality and self-respect are maintained.
- reliable in the short term, so that they do not suddenly stop and leave the mother with nothing for a week or two.
- sustainable in the long term – so that they are not discontinued after a few months, leaving mothers without any form of help.
- sufficient, so that enough is kept in stock, without having so much that it is misused.

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.

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.

Notes on the Code:**Article 4.2:**

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.

Article 5:

- 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.
- 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.

Article 6:

- 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 breast-milk substitutes incorrectly, so that they are not tempted to economise by overdilution, or by not cleaning the utensils often enough.
- 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.

Article 9:

- 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.

Session 13

Costs of Replacement Feeding

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. There will be similar costs from 6-12 and about half these costs 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.

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.

You will need to re-calculate the costs at a later time if prices change or you are working in a different area.

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.

Importance of costs in counselling

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

Milk type	Average cost per unit	Number of units needed for 6 months ¹	Total cost for 6 months
Cow's milk	/ litre	x 92 litres	
Powdered full cream milk	/ 500 g	x 12 kg	
Other milk			
Sugar	/ kilo	x 9 kg	
Micronutrients	/ month	x 6	

Cost of cow's milk + sugar + micronutrients	+ + =	x 6	
Cost of powdered full cream milk + sugar + micronutrients	+ + =	x 6	
Other milk	+ + =	x 6	
Commercial infant formula - brand	/ 500 g tin	x 40 tins	
Commercial infant formula - generic	/ 500 g tin	x 40 tins	

Not included: Cost of fuel or water

CHART 13.2 TIME REQUIRED TO PREPARE FEEDS

Type of feed	For 1 feed	For 1 day
<i>Fresh cow's milk formula</i>		
<i>Powdered full cream milk formula</i>		
<i>Commercial formula</i>		
<i>Another formula made from</i> _____		
<i>Time to express</i> <i>(and heat and cool)</i>		

¹ From Session 10

CHART 13.3 COSTS AS A PERCENTAGE OF WAGES

Minimum wage	Agricultural worker	Domestic worker		
1 month				
6 months				

Type of feed	Cost of formula for 6 months	% of agricultural wage	% of domestic wage
<i>Fresh cow's milk formula</i>			
<i>Powdered full cream milk formula</i>			
<i>Commercial formula</i>			
<i>Another formula made from _____</i>			

Session 14

Making Infant Feeding Choices

Feeding Options cards may help you counsel a woman on how she will feed her baby. Your counselling skills are also very important.

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 which 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

Demonstration 14/1

One participant will be asked to help with this demonstration and to play the part of Mrs E, the mother. The trainer plays the part of the Health Worker. You need to practice reading the part but you do not need to learn the words. You can read them from your manual. Mrs E and the health worker are sitting beside each other.

This demonstration is a continuation of the counselling session (Demonstration 7/2 and 7/3) with Mrs E from Session 7 “Review Of Counselling Skills.”

We stopped with the Health Worker *accepting* Mrs E's mistaken idea that using infant formula was her only option. The Health Worker now needs to provide relevant information to Mrs E about different ways in which she might feed her baby.

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.

Show card 1 If you look at this card, you can see that it shows 20 mothers. 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: 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.

Show card 7 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:** Let us look at using fresh cow's milk in more detail.
Indicate points on card 8
- Mrs E:** 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:** Yes, I see. Telling them doesn't seem to be the answer at this time.
Show card 3
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.
-

Practice counselling using Feeding Options cards

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.

Session 15

Teaching Replacement Feeding

Just telling a woman how to prepare a feed or letting her watch you prepare a feed is not enough for her to learn how to do this task. You need to give her support 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.

Demonstrate how to help a mother to learn to prepare feeds

Two participants will 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

- Trainer introduces the story:

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.

Health Worker:

Measure quickly using measuring cup and unexplained measures

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.



Two participants will 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.

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: (also sits) 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'll 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 have to mark the jar for you, so that you can use it for measuring. Let's do that.
- Marks cup with permanent marker or cuts with a knife
Health Worker: 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.
 Tips water out of mother's cup
Health Worker: 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:** 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.

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.

When to teach preparation of feeds

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.

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.
-

It is very difficult to ensure that mothers receive enough help and supervision 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.

When possible, supportive family members or community groups should be involved in helping mothers to prepare and give replacement feeds.

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.

Session 16

Follow-up Care of Children of HIV-positive Mothers

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.

Skills of checking understanding and arranging follow-up

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.

We have added two more skills:

- **Check that the mother understands** the information that 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

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 wrongly.

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.

Demonstration 16/1 Checking questions

Health Worker: Now, (name), have you understood everything that I've told you?

Mrs S: Yes, ma'am.

Health Worker: You don't have any questions?

Mrs S: No, ma'am.

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.

Health Worker: Now, Mrs S, let's go over what we have discussed. What foods will you give (name) now that she is ten months old?

Mrs S: I will give her porridge and some milk and some of the food we are eating.

Health Worker: Those are good foods to give your child. Where do you get the milk?

Mrs S: The market near me always has good milk in the morning so it is not difficult.

Health Worker: That is good. How many times a day will you give food to (name)?

Mrs S: 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.

Health Worker: That sounds good. Young children need to eat often. I am sure you will feed her well. Will you come back to me in 2 weeks to see how the feeding is going?

Comment: This time the health worker checked the mother's understanding and found that the mother knew what to do.

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 clean her utensils. We saw examples of this skill in Demonstration 15/2.

Follow-up or referral

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.

Follow-up care should include:

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.

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.

Growth monitoring

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 a 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 a child is no longer at risk of poor nutrition. This is for at least 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 ideally be weighed every month for the first year and then every 2-3 months after the first year. Weighing may be needed 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.

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, and help her to find a way to feed her child adequately.

Practise follow-up counselling for infant feeding

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?”
- 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.



Session 17

Community Support for Optimal Infant Feeding

In this session, we discuss how a community can support optimal infant feeding, particularly for women who are HIV-positive.

Beliefs and customs within a community can affect counselling a women who is HIV-positive on infant feeding options.

Support from the community may include

- psychological support,
- financial support, and
- practical support.

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

EXERCISE 17: Community Support

Sit in your groups of four participants with your trainer. Use WORKSHEET 17.1 Community support 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.

Try to answer specifically. This means saying exactly what the community could do, and giving examples.

After the exercise, each group will give a brief report of their main conclusions.

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?
