

HIV AND INFANT FEEDING COUNSELLING CARDS IN NIGERIA



FMOH



IHVN-ACTION



HIV AND INFANT FEEDING FLIP CARDS

These flip cards are based on current United Nations policies and guidelines which state that:

All HIV infected mothers should receive infant feeding counselling, which includes provision of general information about the risks and benefits of various infant feeding options and specific guidelines in selecting the option mostly likely to be suitable for their situation. Whatever a mother decides, she should be supported in her choice.

Nigeria over the years has been training breastfeeding counsellors using WHO/UNICEF Breastfeeding Counselling: A Training Course. With the introduction of the programme on Prevention of Mother-to-Child Transmission of HIV (PMTCT), Nigeria has added HIV and Infant Feeding counselling course for the counsellors using the WHO/UNICEF/UNAIDS HIV and Infant Feeding Counselling: A training course.

These flip cards have been created to help health workers trained in HIV and Infant Feeding Counselling to support HIV infected mothers in the choice of infant feeding. This counselling tool begins with detailed instructions on how to use the flow chart and consists of the following sections:

1. Mother-to-Child transmission of HIV infection
2. Commercial infant formula
3. Home prepared formula
4. Exclusive breastfeeding up to 6 months
5. Exclusive breastfeeding and stopping early
6. Expressing and heat treating breastmilk
7. Breastfeeding by another woman [Wet Nursing]
8. Assessing the mother's situation
9. Positioning for breastfeeding
10. Attachment for breastfeeding
11. Cup feeding
12. Feeding of babies aged 6-24 months
13. How to introduce other foods from 6 months
14. Food hygiene
15. Safe storage of foods
16. Follow up care of children 0-6 months
17. Follow up care of children over 6 months

HOW TO USE THE FLOW CHART

IF THIS IS THE MOTHER'S FIRST INFANT FEEDING COUNSELLING SESSION:

And she is pregnant:

- Follow steps 1-5. If she needs time to decide which feeding option to choose, follow steps 1-4 and ask her to return to discuss step 5
- If she is early in her pregnancy, ask her to return to the clinic when her delivery date is closer to review how to implement the feeding method

If she is already nursing a baby:

- Follow steps 1-4. If the mother is not breastfeeding at all, however, do not discuss the advantages and disadvantages of breastfeeding
- Continue with Steps 5 and 6

IF THE MOTHER HAS ALREADY BEEN COUNSELLED AND CHOSEN A FEEDING METHOD, BUT SHE HAS NOT YET LEARNED HOW TO IMPLEMENT IT:

And she is pregnant:

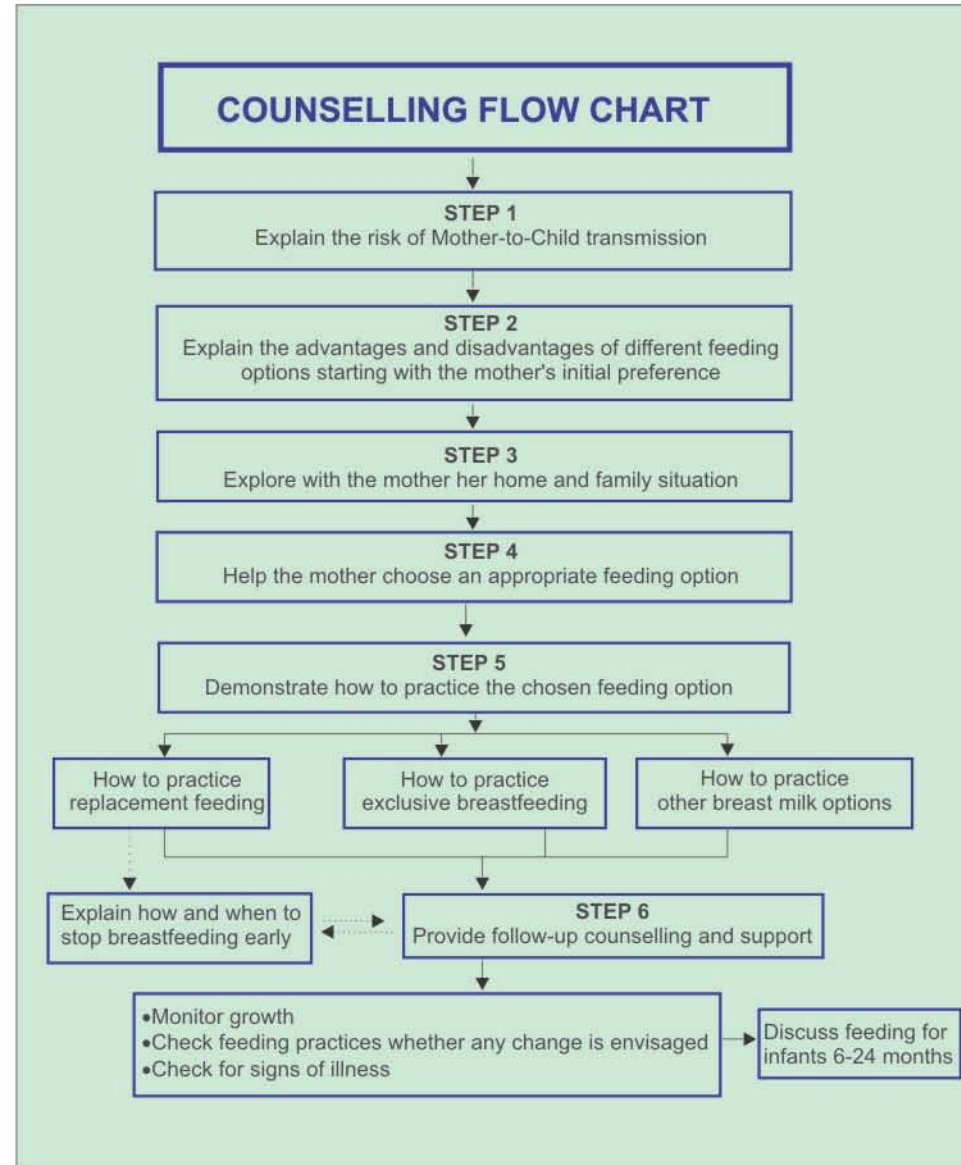
- Do Step 5 only

And she already has a child:

- Begin with Step 5 and then continue with Step 6

IF THIS IS A FOLLOW-UP VISIT:

- Begin with Step 6
- Review how to implement the feeding method





Babies infected with HIV in pregnancy and delivery



Babies infected with HIV through breastfeeding



Babies not infected with HIV

MOTHER-TO-CHILD TRANSMISSION OF HIV INFECTION

SEE WITH:-All HIV-positive women being counselled on Infant feeding.








ASK:

- **What have you heard or known about HIV?**
- **How many mothers and babies can you see in this picture (Picture 1)?** All these mothers are HIV infected

Key messages:

- An HIV infected woman can pass the virus to her baby during pregnancy, delivery and breastfeeding
- Not all babies born by HIV infected mothers get infected with the virus
- Without any intervention, of the 20 babies in that picture, 4 babies [coloured blue] can get infected during pregnancy and delivery and, 3 babies [coloured purple] during breastfeeding; 13 babies [coloured yellow] will however not get infected
- Some factors can reduce the risk of transmission of HIV during pregnancy, delivery and breastfeeding e.g. the use of antiretroviral drugs and short duration of breastfeeding
- Until a baby is 18 months it is not possible to confirm if the baby is infected with HIV using the facilities routinely available. However where DNA-PCR is available, diagnosis can be made earlier

ASK: What questions or concerns do you have about what we have just discussed?

Baby's age	 <p data-bbox="1035 151 1522 315">450g tins needed per month</p>
1 month	 <p data-bbox="1273 444 1367 496">= 5</p>
2 months	 <p data-bbox="1335 601 1429 654">= 6</p>
3 months	 <p data-bbox="1551 758 1646 811">= 8</p>
4 months	 <p data-bbox="1551 886 1646 939">= 8</p>
5 months	 <p data-bbox="1551 1029 1646 1082">= 8</p>
6 months	 <p data-bbox="1613 1186 1707 1239">= 9</p>

COMMERCIAL INFANT FORMULA

USE WITH: HIV- positive mothers who are being counselled on infant feeding

ASK:

- What do you understand by commercial infant formula?
- Describe what you see in this picture [Picture 2]?

Key messages:

- Commercial Infant formulas are ready-made and do not need modification
- The manufacturer's instructions should be followed in order to ensure adequate nutrition for the child
- Give ONLY formula. Do not give breast milk as mixed feeding increases HIV transmission

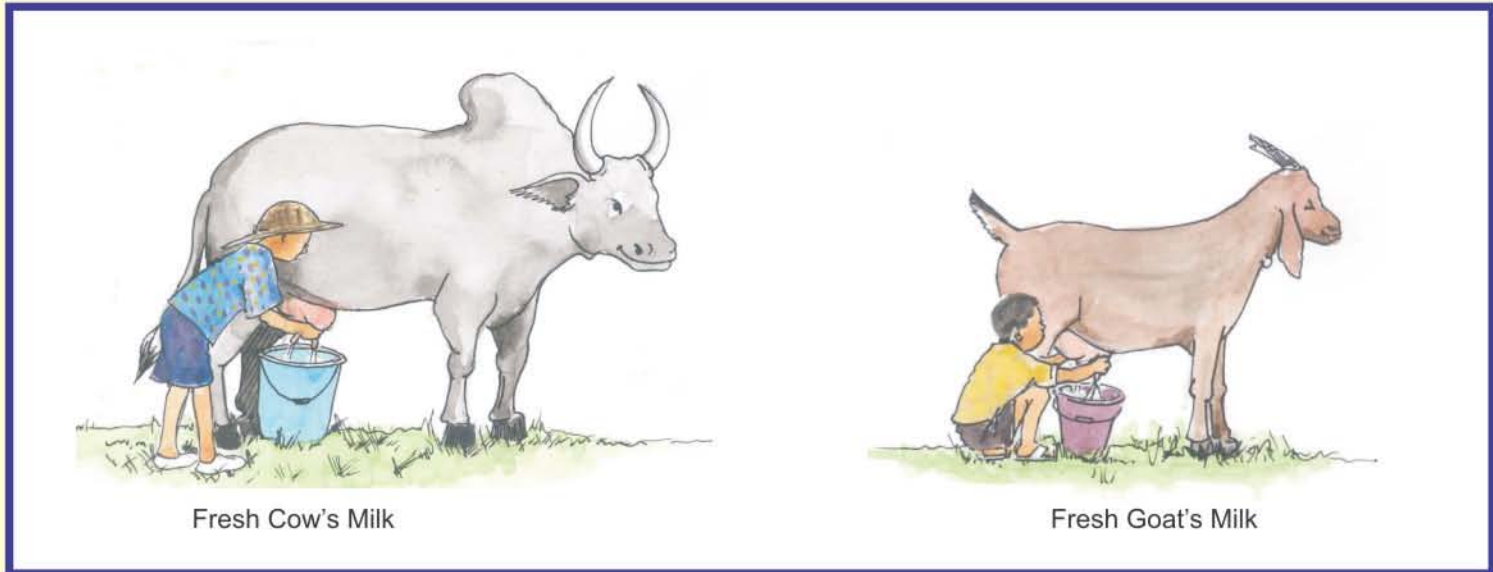
ADVANTAGES

- There is no risk of HIV transmission to the baby
- Others can help mother with feeding of the baby

DISADVANTAGES:

- High cost of commercial infant formula for 6 months and other milks till the child is aged 2 years
- Less protection from infections especially diarrhoea and pneumonia
- Less nutritious than breastmilk
- Risk of earlier pregnancy for the mother

- ASK:**
- Can you mention examples of commercial infant formula that are available where you live?
 - How much does each tin cost?



Fresh Cow's Milk

Fresh Goat's Milk

HOME-PREPARED FORMULA

KEY MESSAGE WITH:-All HIV positive women being counselled on infant feeding.

QUESTION: What do you see in this picture [Picture 3]? What is home-prepared formula? What are the other milks given to newborns in your area?

Key Messages:

- Home-prepared formula: these are made from:
 - Fresh animal milk e.g. cow, goat, e.t.c.
 - Powdered milk (full cream)
 - Evaporated full cream milk
- These are modified by adding water, sugar and micronutrients
- The steps for preparing feeds from these milks should be followed as shown in picture 3
- Skimmed and condensed milks are unsuitable for use in this period. Other unsuitable products are fruit juices, glucose water, herbal drinks, e.t.c.

ADVANTAGES

- No risk of HIV transmission after birth
- Others can help mother with feeding of the baby

DISADVANTAGES:

- Cost of home-prepared formula for 2 years
- Less protection from infection
- Less nutritious
- Risk of earlier pregnancy for the mother

QUESTION: Which of these milks can you use? Do you have any concerns or questions about these milks?

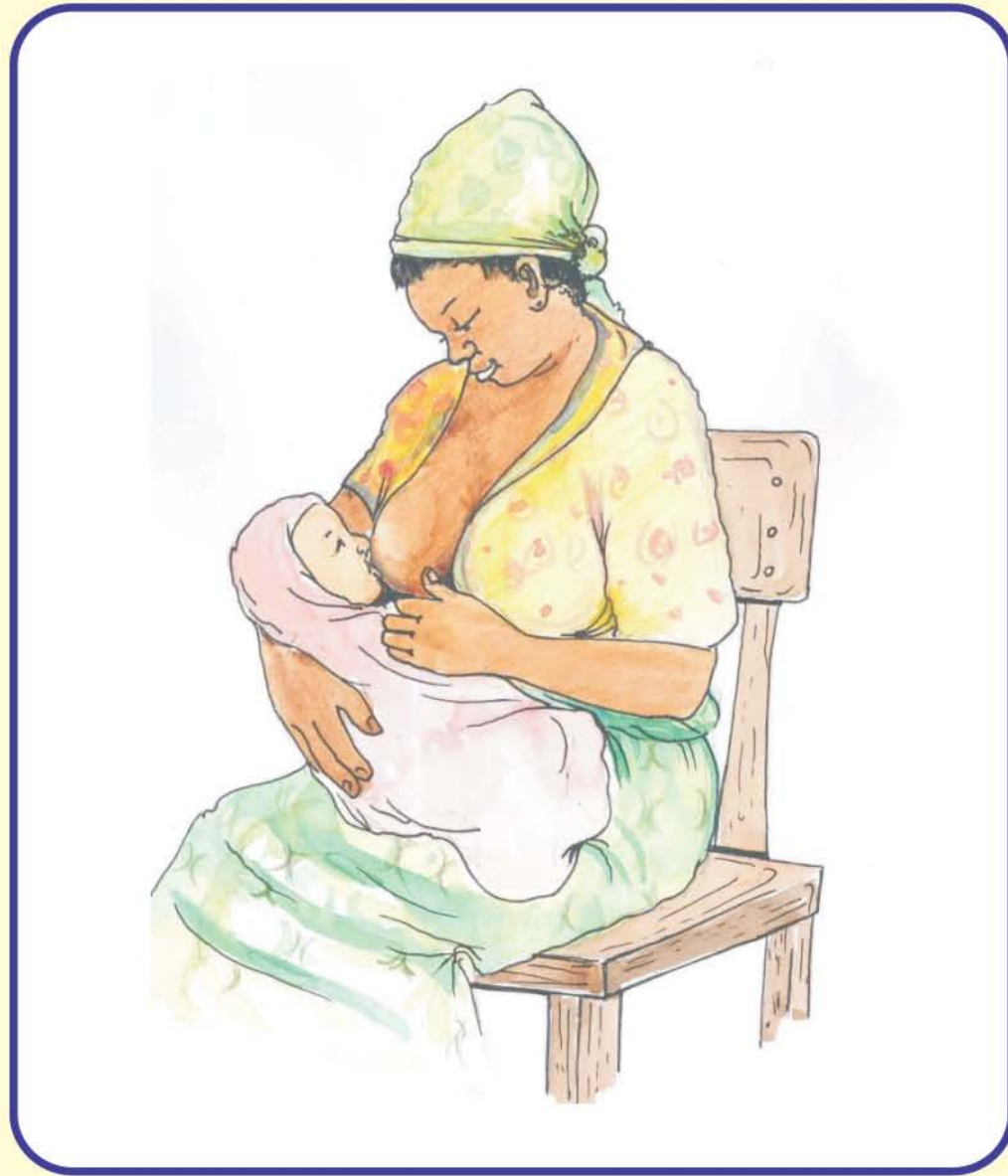
TABLE 1: APPROXIMATE QUANTITY OF MILK REQUIRED FOR HOME PREPARED FORMULA FOR THE FIRST 6 MONTHS

Age (months)	Total Volume per day	Number and Volume of feeds per day	Fresh Cow's or Goat's milk (per day) Milk + Water + Sugar	Evaporated milk (per day) Milk+ Water +Sugar	Powdered full cream milk (per day) Milk + Water + Sugar
1	450ml	8 X 60ml	300 ml + 150 ml + 30 g	120ml + 330ml + 30g	3.75g + 450ml + 30g
2	600ml	7 X 90ml	400 ml + 200 ml + 40 g	160ml + 440ml + 40g	50.0g + 600ml + 40g
3	750ml	6 X 120ml	500 ml + 250 ml + 45 g	200ml + 550ml+ 50g	62.5g + 750ml + 50g
4	750ml	6 X 120ml	500 ml + 250 ml + 45 g	200ml + 550ml+ 50g	62.5g + 750ml + 50g
5	900ml	6 X 150ml	600 ml + 300 ml + 56 g	240ml + 660ml +50g	75.0g + 900ml + 60g
6	900ml	6 X 150ml	600 ml + 300 ml + 56 g	240ml + 660ml +50g	75.0g + 900ml + 60g

ADD MICRONUTRIENTS TO THE FEEDS ON DAILY BASIS. (Total feed for 6 months is approximately 92 litres of milk + 9kg of sugar.)

NOTE: Full cream evaporated and powdered milks should first be reconstituted to the strength of full cream milk before being diluted to make a feed

Picture 4



EXCLUSIVE BREASTFEEDING UP TO 6 MONTHS

USE WITH: All HIV-positive women being counselled on Infant feeding.

ASK: What does this picture [Picture 4] show? What does exclusive breastfeeding mean?

Exclusive breastfeeding means that the infant is given only breast milk and no other food or drinks at all, including water. However, vitamin drops or medicines can be given when medically indicated.

Key messages:

- Start breast feeding within half an hour of birth

- Ensure skin-to-skin contact at birth

- Give the first milk [colostrum] to the baby

- Breastfeed on demand and frequently (at least 8 times in 24 hours). Breastfeeding must not continue beyond 6 months

- Ensure good positioning and attachment for breastfeeding

- Give ONLY breastmilk. Do not give other milks as mixed feeding increases HIV transmission

ADVANTAGES

- Ideal nutrition for the baby

- Protection against many infections

- Has child spacing effect

- Easily available

DISADVANTAGES

- Has risk of HIV transmission

- May be difficult to practise if the mother becomes very sick

ASK: What are your concerns about exclusive breastfeeding?



WITH:-All HIV-positive women being counselled on Infant feeding.

What do you see in this picture [Picture 5]? What does *stopping breastfeeding early* mean?

A mother who is HIV-positive may decide to breastfeed exclusively for less than 6 months and change to replace feeding.

MESSAGE

Stopping breastfeeding early reduces the risk of transmission of HIV by reducing the length of time the infant is exposed to the virus in breast milk.

ISS: Advantages and Disadvantages as in exclusive breastfeeding

Process of transition is as follows:

While you are breastfeeding, teach your baby to drink expressed breastmilk from cup. This milk may be heat-treated to destroy the virus

Once the baby is drinking comfortably, replace one breast feed with one cup feed using expressed breastmilk
Increase the frequency of cup feeding every few days while decreasing that of breastfeeding

Ask an adult family member to help cup feed the baby

Stop putting your baby to the breast completely as soon as you and your baby are accustomed to frequent cup feeds
From this point on, it is best to heat treat your breastmilk

If your baby is only receiving milk, check that your baby is passing enough urine [at least 6 wet diapers in 24 hours]
This means that she/he is getting enough milk

Gradually replace the expressed breastmilk with formula or home prepared animal milk

To avoid breast engorgement [swelling], express a little milk whenever your breasts feel too full. Use cold compresses
to reduce the inflammation, wear a firm bra to prevent breast discomfort. Do not begin breastfeeding again, once
you have stopped. If you do, you can increase the chances of passing HIV to your baby. If your breasts become engorged
express the milk by hand

Begin using the family planning method of your choice, if you have not already done so, as soon as you start receiving
breastfeeds

Picture 6



EXPRESSING AND HEAT-TREATING BREASTMILK

USE WITH: All HIV-positive women being counselled on Infant feeding.

ASK: What do you see in this picture [Picture 6]? Have you heard about it? Do you think you can do it?

Expressing breastmilk means removing it from the breast usually by hand. The milk is heated in a saucepan and brought to boil in order to kill the virus. The milk is allowed to cool and cup fed to the baby. Heat treated breast milk should be used within one hour of preparation; unheated breastmilk can be kept for 8 hours at room temperature and 24 hours in a refrigerator.

ADVANTAGES:

- Reduced risk of HIV transmission
- Ideal nutrition as most nutrients remain in the milk after heating
- Other caregivers can assist with infant feeding
- Some protection against infections
- Availability of milk is ensured

DISADVANTAGES:

- Time needed to express and heat treat
- Cost of fuel for heat treating
- Need for clean water and soap to wash baby's cup and container used for heat treating
- Heat-treated breastmilk is not as effective as unheated breastmilk in protecting the baby against infection
- The heat-treated breastmilk needs to be stored in a cool place and used within an hour of preparation

- ASK:**
- How do you feel about expressing and heat treating breastmilk?
 - What will your family/community think of this method of feeding?
 - What concerns do you have about what we have just discussed?

Picture 7



BREASTFEEDING BY ANOTHER WOMAN [WET NURSING]

WITH: All HIV positive women being counselled and their wet nurse

What do you see in this picture [Picture 7]? In what situations do women use a wet nurse in your community?

A wet nurse is a woman who breastfeeds a baby for another woman.

Messages :

The wet nurse should be HIV negative

She should practise safer sex

She should be taught the techniques of positioning and attachment of the baby to the breast

The baby's mother should do every other thing for the baby, including sleeping with the baby, cuddling the baby to encourage bonding

The wet nurse should exclusively breastfeed for 6 months and continue with breastfeeding until the child is at least two years old

ADVANTAGES:

Breast milk is free and readily available

Ideal nutrition

Protection against many infections

Low risk of HIV transmission to the baby

DISADVANTAGES:

Baby may bond with the wet nurse

Risk of earlier pregnancy for the mother

The wet nurse must be tested for HIV

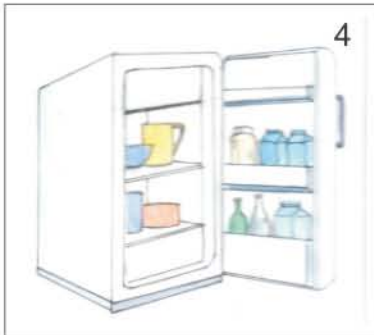
The wet nurse must be available to breastfeed the baby day and night

People may ask why the mother is not breastfeeding

Small risk of transmission of HIV to the wet nurse if the baby is infected

How do you feel about wet nursing? What will people in your community think about this? What are your concerns about wet nursing?

Picture 8



ASSESSING THE MOTHER'S SITUATION

E WITH: All HIV positive mothers who are being counselled for the first time on infant feeding or who are thinking of changing their feeding option.

K: What can you see from this picture [Picture 8]? Which of these do you have at home?

Ask the questions in the left hand column while pointing to the drawing that corresponds to each question. Combined replies to these questions can help the woman or the mother to choose the most suitable method for her situation, after she has learned the advantages and disadvantages of each method.

TABLE FOR ASSESSING THE MOTHER'S SITUATION

QUESTIONS	BREASTFEEDING/WET NURSING	REPLACEMENT FEEDING OR EXPRESSED AND HEAT TREATED BREAST MILK
What is your source of drinking water?	River, stream, pond or well	Piped water at home or can buy clean water
What type of toilet do you have?	None or pit latrine	Flush toilet
Where do you throw away your refuse?	Indiscriminate dumping	Incinerator/covered refuse disposal unit
How much money can you afford for formula each month?	Less than needed for formula per month	Enough for formula each month
Do you have money for transportation to buy formula when you run out of stock?	No	Always [unless expressed and heat treated milk]
Do you have refrigerator with reliable power?	No, or irregular power supply	Yes
Do you prepare each feed with boiled water and clean utensils?	No	Yes
How would you arrange the night feeds?	Preparation of milk feeds at night difficult	Preparation of milk feeds at night possible
Does your family know you are HIV positive?	No	Yes
Is your family supportive of milk feeding and are they willing to help?	Family not supportive and not willing to help, don't know or can't discuss	Family supportive and willing to help

Picture 9



POSITIONING FOR BREASTFEEDING

E WITH: HIV positive mother who has chosen to breastfeed or a wet nurse

K: What do you see in this picture [Picture 9]? Which of them can you practise?

mother's Position:

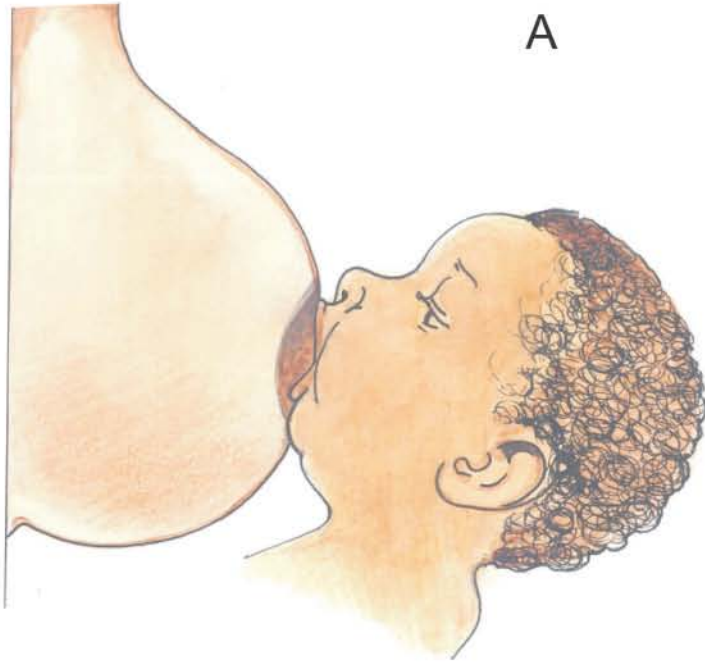
A woman can successfully breastfeed in a number of positions such as sitting and lying down position. **In any position the woman chooses, she should be comfortable and relaxed with her back and feet [if necessary] supported.** She should not lean forward to put the child to her breast. She should support her breast with her:

- fingers against her chest wall below her breast;
- first finger supporting the breast;
- thumb above the breast and
- her fingers should not be too near the nipple.

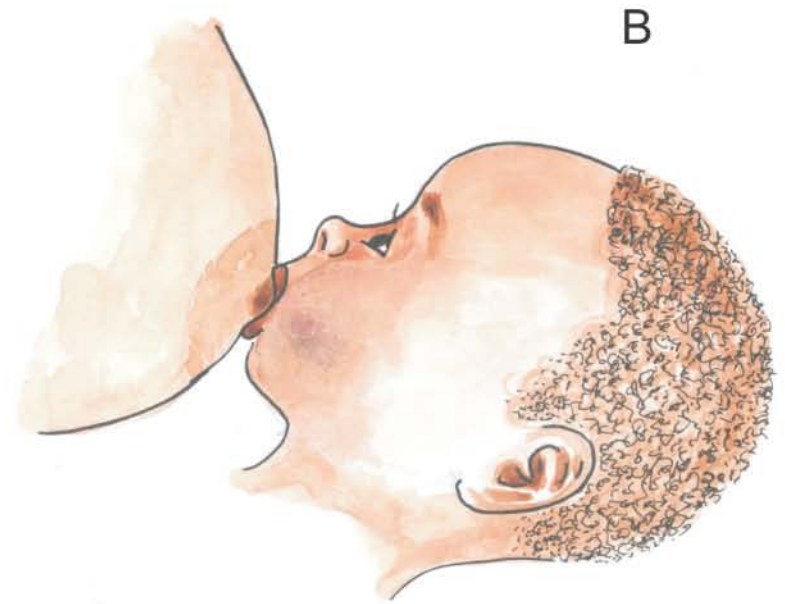
baby's Position: The four key points are:

- The baby's head and body should be in a straight line
- Her/his face should face the breast, with her/his nose opposite the nipple
- The woman should hold the baby close to her body
- If the baby is a newborn, she should support the bottom, and not just the head and shoulders

K: Which of these positions can you practise?



Correct Attachment



Poor Attachment

10. ATTACHMENT FOR BREASTFEEDING

USE WITH: HIV positive mother who has chosen to breastfeed or a wet nurse

ASK: What do you see in this picture [Picture 10]?

Where should a baby's mouth be on the breast?

Key messages:

CORRECT ATTACHMENT OF BABY [Picture 10.A]

Mouth wide open

Lower lip turned outwards

Tongue cupped around breast

Cheeks round

More areola above baby's mouth

Slow deep sucks, bursts with pauses

Can see or hear swallowing

PROBLEMS RESULTING FROM POOR ATTACHMENT OF BABY [Picture 10.B]

Inadequate emptying of the breasts

Breast engorgement, mastitis and abscess

Fissures and cracks

Not enough milk

Refusal of feeds by baby because baby is frustrated

Frequent demand for breastfeeding

Picture 11



11. CUP FEEDING

USE WITH: All HIV positive mothers

ASK: What do you see in this picture [Picture 11]?

Have you ever seen babies fed this way? Can you feed your baby this way?

Advantages of cup feeding:

- Cups are easily available
- Cups are easy to clean
- Cup feeding is associated with less risk of diarrhoea, ear infections and tooth decay
- Cup feeding ensures social contact during feeding and adult attention

Disadvantages:

- Time consuming
- Can be messy when spillages occur

Note: The use of feeding bottles for replacement feeds can be associated with increased risk of infection.

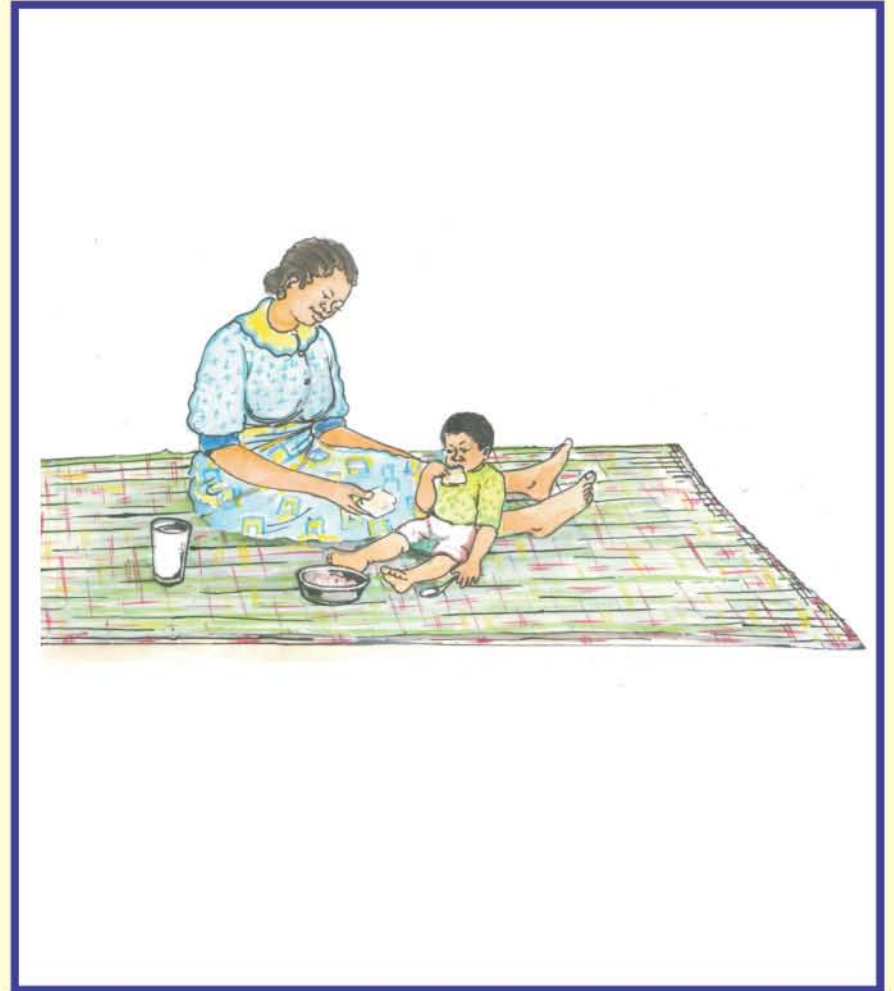
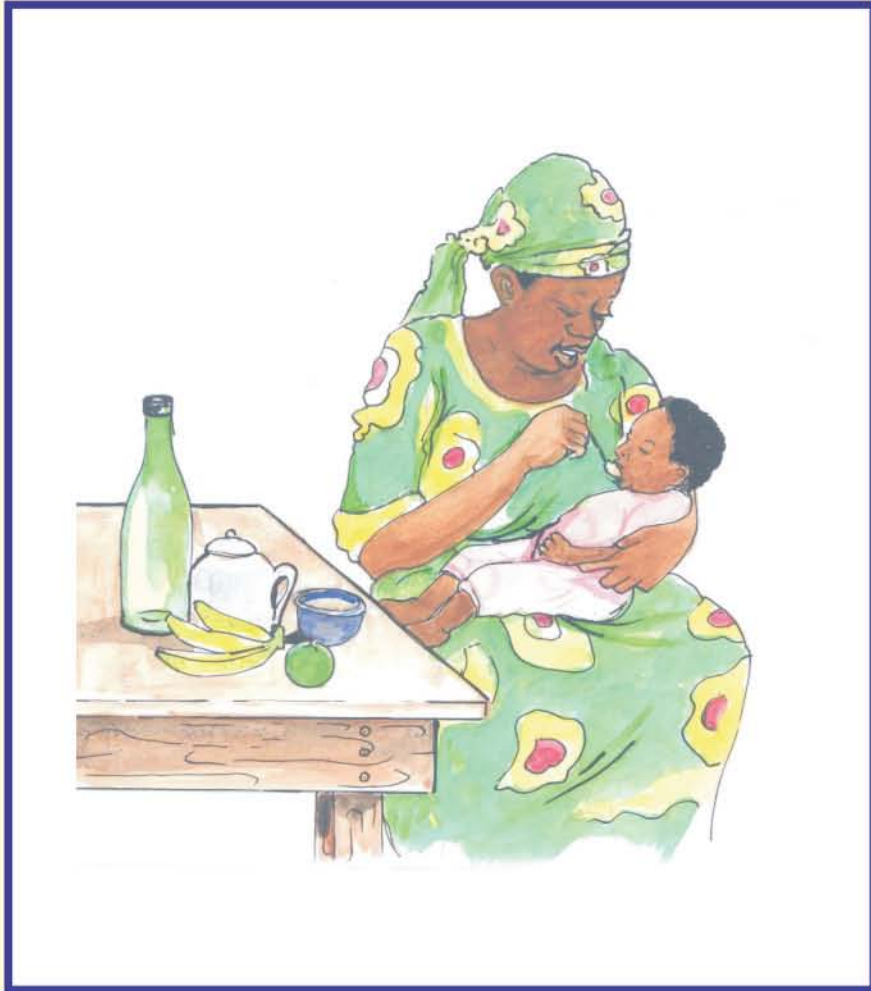
They are therefore not encouraged

Demonstration of cup feeding:

- Wash the cup with soap and water before filling it with milk or formula
- Ensure baby is awake and hold him/her in an upright position
- Hold the cup to the baby's lips and tilt it just enough so that the milk touches the lips [do not pour the milk]
- Keep the milk tilted so that the baby can sip the milk
- Do not pour the milk or push on the baby's lower lip
- Let the baby take the milk at his or her own speed
- When the baby has had enough, she/he will close the mouth
- If the baby does not drink enough, offer more at the next feed or give the next feed earlier
- Establish social contact while feeding the baby

ASK: What do you think of cup feeding? Do you have any worries about this method of feeding?

Picture 12



2. How to introduce other foods from 6 months

USE WITH: All HIV positive women with babies older than 6 months of age

ASK: What do you see in this picture [Picture 12]?

KEY MESSAGES:

Introduction of other foods should be timely - from 6 completed months

Start with small quantities about 1-2 teaspoonful twice a day then gradually increase the variety and quantity of food as follows [see table]

Feed the child from her/his own bowl, give water after feeding and practice good hygiene

Practice active feeding

Avoid spicy foods and those that can cause choking e.g. unmashed groundnuts, grains e.t.c.

Give micronutrients [multivitamins and minerals]

Age(months)	Texture	Frequency	Amount at each meal
6 months	Soft porridge, well mashed foods	2 times per day	2-3 tablespoons
7-8	Mashed foods	3 times per day	2/3 cups
9-11	Finely chopped or mashed foods	3 meals plus 1 snack between meals	3/4 cups
12-24	Family foods, chopped or mashed if necessary	3 meals plus 2 snacks between meals	1 full cup

* 1 cup= 250mls

Give additional 1-2 cups of milk per day. If no milk, add 2 extra meals per day.

ASK: Do you have any question concerning what we have discussed?

Picture 13



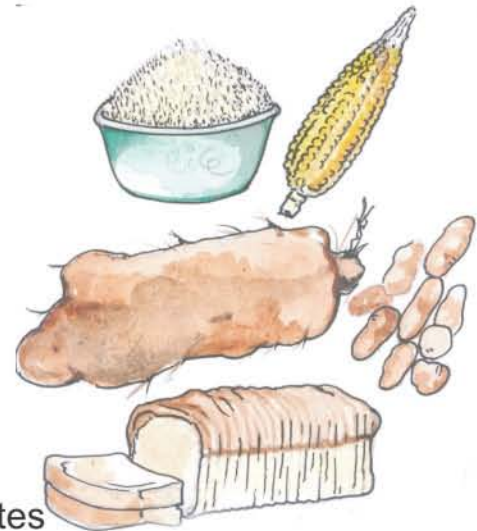
Fats and Oils



Protein



Vegetables and Fruits



Carbohydrates

6. FEEDING OF BABIES AGED 6-24 MONTHS

KEY WITH: All HIV positive women with babies approaching or older than 6 months of age

KEY: What can you see in this picture [Picture 13]?

What will you feed your baby when she/he is aged 6 months and above?

Key messages:

A baby needs other foods and drinks in addition to some form of milk from the age of 6 months

A good diet consists of a mixture of most of the following:

- 0) Staple foods such as cereal [rice, wheat, 'acha' (hungry rice), maize, guinea corn] roots [yam, potato, cassava] and other starchy foods e.g. plantain
- 0) Animal products such as meat, fish, eggs, liver, chicken
- 0) Milk products- milk, yoghurt, cheese
- 0) Green leafy and orange-coloured vegetables-pumpkins, spinach, carrots, sweet potatoes,
- 0) Legumes such as 'ukwa' [breadfruit], beans, soyabeans, peas, 'okpa' [bambara nuts] and pulses
- 0) Fats and oils such as red palm oil, vegetable oil, margarine, butter, cotton seed oil
- 0) Groundnut and other nut pastes, melon, beniseeds

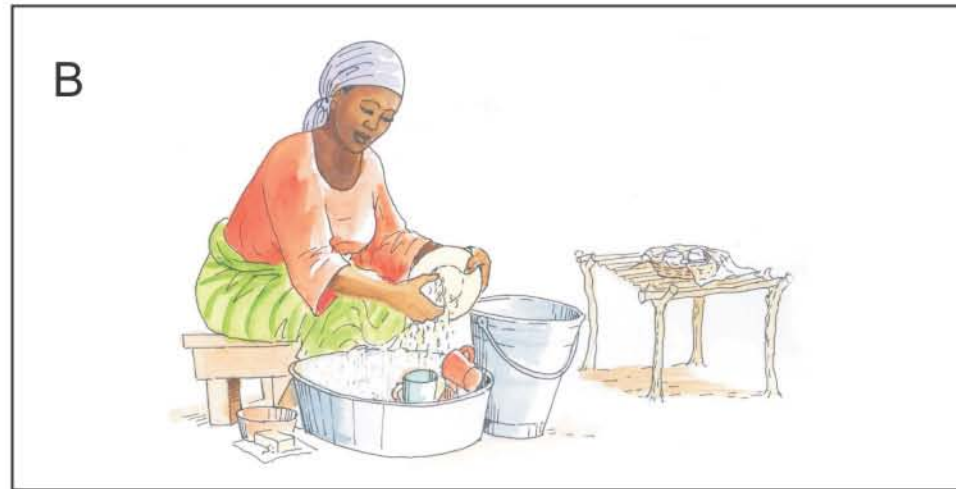
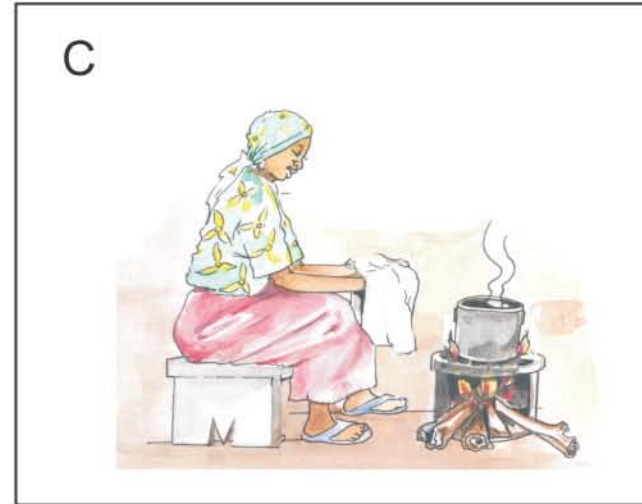
The consistency and frequency of the food should increase with age. From 8 months of age, add finger foods [e.g. banana, yam chips, e.t.c.] or snacks

Give a variety of foods from the various groups each day

Continue to give milk

Do not give soda or sugary drinks, tea or coffee, spicy foods

KEY: What are the common foods used for children aged from 6 months in your community?



14. FOOD HYGIENE

USE WITH: All HIV positive mothers

ASK: What do you see in this picture [Picture 14]?

What are some of the ways you can practise good hygiene when handling foods for babies?

KEY MESSAGES:

- Cleanliness during preparation of food will reduce the risk of contamination
- Wash your hands with soap and water after using the toilet and cleaning baby's bottom and before preparing and serving foods

Clean Utensils

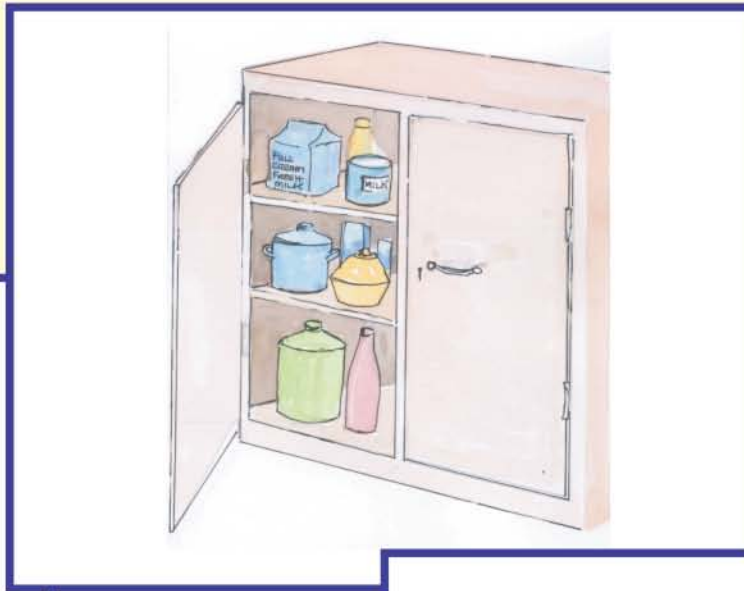
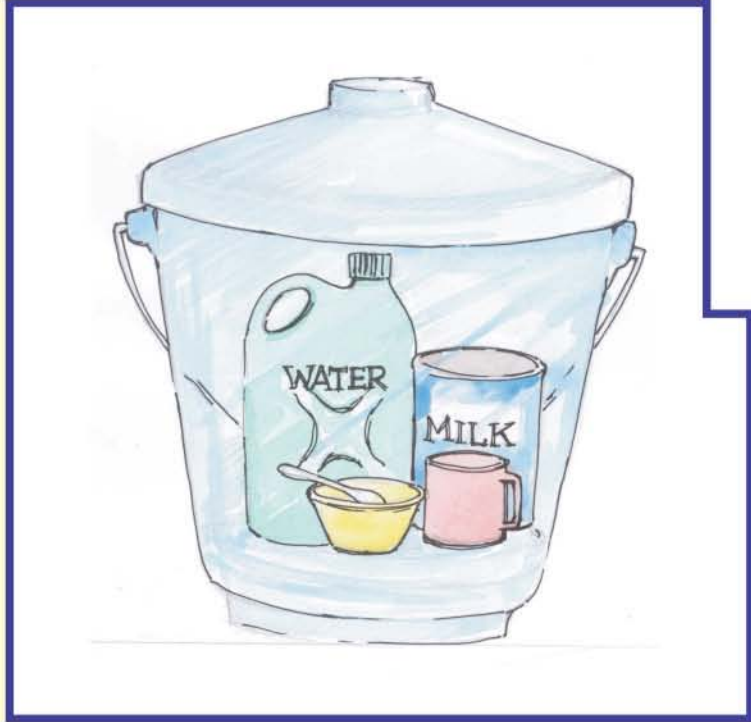
- Clean surfaces e.g. table, mat, cloth
- Wash utensils immediately after use and keep them covered
- Use clean utensils for baby

Safe Water and Food

- Boil drinking water vigorously
- Use boiled water for preparing foods for babies
- Keep water in clean covered container
- Avoid contact between raw food and cooked food
- Give freshly prepared foods
- Give unfinished food to older children instead of keeping it until the next meal
- Do not leave cooked food at room temperature for more than 2 hours
- Reheat cooked food thoroughly and bring soup and stews to boiling point before use

ASK: In what ways can you ensure good hygiene while handling your baby's food?

Picture 15



5. SAFE STORAGE OF FOODS

USE WITH: All HIV positive mothers

ASK: What can you see in this picture [Picture 15]?
How do people store foods in your community?

KEY MESSAGE

All foods should be safely stored to reduce the risk of contamination and infections.

How to store foods safely:

- Keep food tightly covered

- Store it dry if possible e.g. milk powder, sugar and biscuits

- Fresh milk can keep in a clean covered container at room temperature for a few hours [up to 8 hours for expressed human breast milk]

- Use all prepared feeds within one hour

- The formula prepared for one day can be stored in the refrigerator in a sterilized container with a tight lid. For each feed, some of the formula is poured into a feeding cup

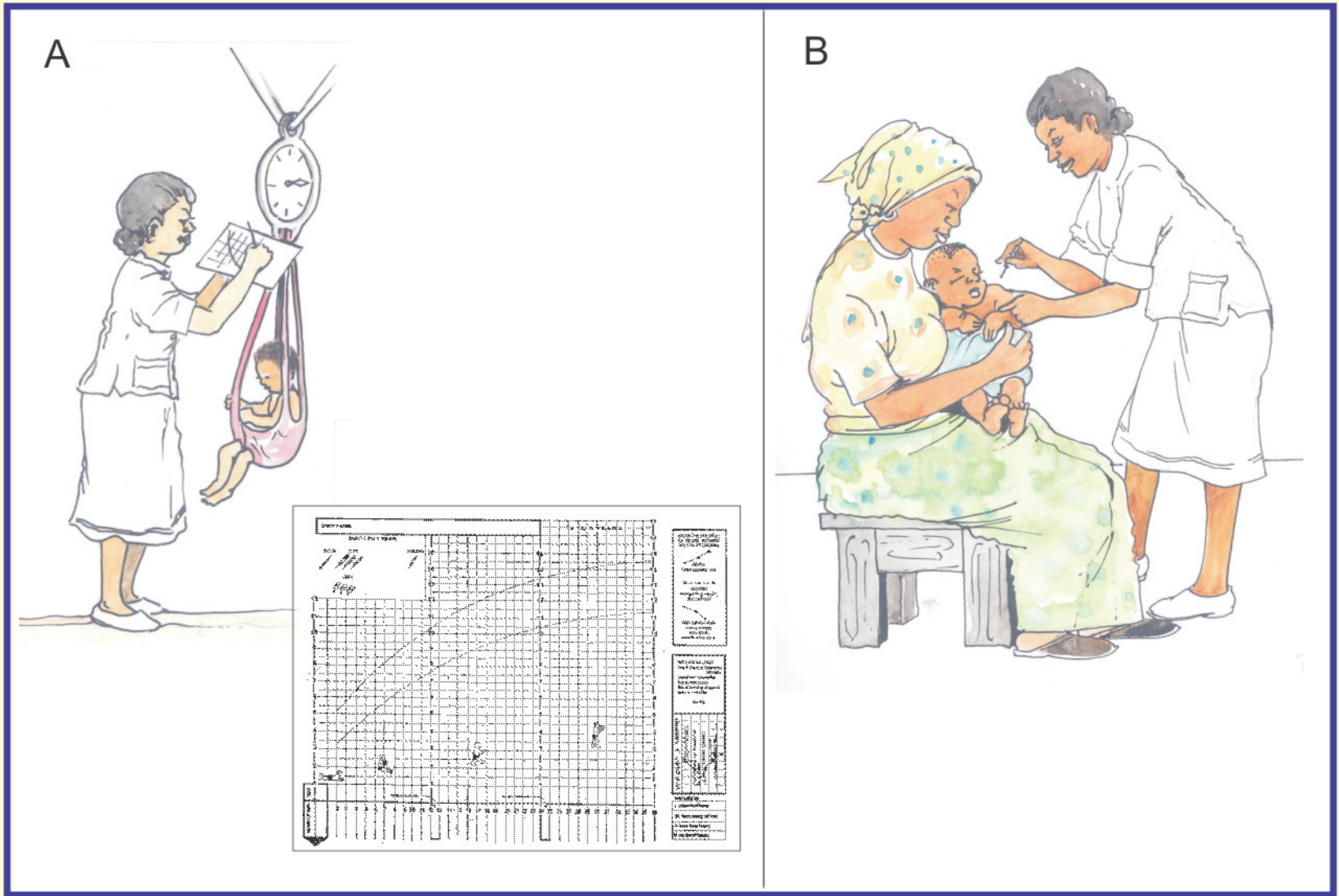
- Hot water can be safely stored in a thermos flask

- Warm milk should not be stored in a thermos flask or baby food warmer because bacteria grow more readily in warm milk

- Store cooked foods in a refrigerator (at 4°C) and reheat thoroughly before use. It is however preferred that fresh foods should be used

ASK: How can you store your baby's foods safely?

Picture 16



6. FOLLOW UP CARE OF CHILDREN 0-6 MONTHS

MEET WITH: All HIV positive mothers with babies 0-6 months

ASK: What do you see in this picture [Picture 16] ?

How do you feel about your baby's health and growth?

How have you been feeding your baby?

What vaccines has your baby received?

How is your health and how are you coping with caring for the baby and yourself?

What supports do you have in the house/community?

Key Message

It is important to bring baby for regular follow up for growth monitoring and promotion, immunization and other medical care. e.g Cotrimoxazole prophylaxis and HIV testing.

SHE IS BREASTFEEDING, Check:

If she is breastfeeding exclusively and discuss possibility of stopping early when AFASS is fulfilled

Frequency and duration of breastfeeding and observe a breastfeed

SHE IS PRACTISING REPLACEMENT FEEDING, Check that she is:

Using a suitable type of replacement milk and is able to get new supplies before she runs out

Measuring the milk and other ingredients correctly

Giving the right volume and number of feeds according to baby's age as recommended

Preparing the milk clearly and safely and cup feeding

Review the appropriate take home flier and mothers understanding of the key message(s).

FOLLOW-UP CARE OF CHILDREN OVER 6 MONTHS

WITH: All HIV positive mothers with babies over 6 months

MESSAGE

Important to bring baby for regular follow up for growth monitoring and promotion, immunization and other medical services, cotrimoxazole prophylaxis and HIV testing.

FEEDING

How well has your child been feeding? What problems have you had?

What types of foods/snacks and quantity have you been giving him/her (check that the baby is receiving an adequate diet)?

How much milk/formula has your child been drinking each day (check that the baby is drinking enough milk)?

What utensils do you use to feed the child (check that the baby has his/her own bowl)?

How do you prepare the food and clean the dishes?

How is the food stored after it is prepared?

HEALTH CARE

How do you feel about your baby's health and growth?

What vaccines/immunizations has your baby received?

Is your baby receiving any drugs? Specify _____ (Cotrimoxazole, Antiretrovirals e.t.c)

Has your child been tested for HIV?

MOTHERS HEALTH

How is your health and how are you coping with caring for the baby and yourself?

What supports do you have in the house/community?

What questions do you have?

**All enquires to
Baby Friendly Office
Federal Ministry of Health
Abuja Nigeria**