A summary guide for health workers in South Africa

It has been known for decades that breastfeeding significantly reduces infant illness and death. Breastfeeding is acknowledged to be the best way of feeding and caring for infants and is critically important for infant development, while also providing benefits to the mother. The discovery of the human immunodeficiency virus (HIV) in breastmilk of HIV positive mothers and the increasing awareness of the risk of transmission of HIV through breastfeeding by HIV positive mothers has now cast doubt on the suitability of breastfeeding by HIV positive mothers. Even without HIV, only 10% of infants in South Africa are being exclusively breast-fed at 3 months of age and many of the potential benefits are being lost. We also know that very few mothers understand the meaning of exclusive breastfeeding and lack the support to do it.

Feeding of infants with breastmilk substitutes may be especially dangerous in poor communities. This is highlighted by a recent analysis by the World Health Organisation (WHO) that shows that infants who are not breast-fed have a 6-times greater risk of dying from infectious diseases in the first 2 months of life compared to those who are breast-fed. Recently, South African researchers published research that found that HIV positive mothers who exclusively breast-fed their infants for the first 3 months had similar rates of transmission of HIV to those who gave only breastmilk substitutes to their infants.

The risk of HIV transmission was highest in those who practiced mixed feeding i.e. gave breastmilk and other fluids/feeds.

The aim of this information guide is to provide health workers with objective and sound information about breastfeeding and HIV.

When counselling HIV-positive mothers on breastfeeding, the guidelines given should be based on the potential risk of transmission of HIV to the infant through breastfeeding and the potential risk of death as a result of not being breast-fed.

The role of the health worker is to provide this information and the support needed to make the mother’s choice as safe and as appropriate to her circumstances as possible.

Ultimately, the choice of the infant feeding method is the mother’s. The mother’s decision must be respected. The mother should also be appropriately trained to implement her decision safely.

1 How does mother-to-child transmission of HIV occur?

Mother to child transmission (MTCT) of HIV is the major means of HIV infection in children. MTCT occurs during pregnancy, delivery and breastfeeding. Using the most widely available tests it is not possible to tell whether a newborn infant has already been infected with HIV. The child of an infected mother may have maternal antibodies in his/her blood until 12 months of age. Therefore, testing of the child at birth cannot be used to help make decisions about whether or not to breastfeed. However, it is important to promote the availability and use of confidential testing of mothers for HIV. Knowing her HIV status will assist a mother in deciding how to feed her baby.
2 How many infants are at risk of HIV through breastfeeding?

- Mother HIV+ infant HIV-
- Mother HIV+ infant HIV+ at birth
- Mother HIV+ infant HIV+ through breastfeeding

In South Africa, now, 20 out of every 100 women are HIV-positive. What will happen to the infants of these 20 HIV-positive women?

- Four children will be infected with HIV during pregnancy and delivery if no anti-retroviral medication is given. These HIV-infected children will have better growth and health if they are breastfed instead of artificially fed.

- One child will be infected with HIV if all these mothers exclusively breastfeed their children for the first 6 months only. If the mothers continue breastfeeding for up to 24 months another 2 children may be infected with HIV.

3 Should mothers with HIV be advised not to breastfeed?

It might seem obvious to advise a mother with HIV not to breastfeed, but IT DEPENDS . . .

- If a mother knows she is infected, and
- If breastmilk substitutes are accessible & affordable and can be prepared safely with clean water & utensils and
- If adequate health care is available and affordable and
- If not breastfeeding at all is accepted in the community and household,

THEN the infant’s chances of survival are greater if fed breastmilk substitutes.

HOWEVER,

- If there is a lot of infectious diseases such as diarrhoea and pneumonia in the community, or
- If hygiene, sanitation, and access to clean water are poor, or
- If the cost of breastmilk substitutes is very high, or
- If access to adequate health care is limited and
- If breastfeeding exclusively is accepted in the community and household,

THEN breastfeeding may be the safest feeding option even when the mother is HIV-positive.

The risk associated with not breast-feeding should be less than the potential risk of HIV transmission through infected breastmilk, to ensure that infant illness and death from other causes does not increase.
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<th>Situation</th>
<th>Health Worker Guidelines</th>
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| 1. Mother's HIV status not known (Mother should be counselled on breastfeeding as if her HIV status was negative.) | - Promote availability and use of confidential testing  
- Promote exclusive breastfeeding for the first 6 months and introduction of complementary foods at about 6 months and continued breastfeeding to 24 months and beyond  
- Discuss the dangers of mixed feeding  
- Teach mother how to avoid exposure to HIV |
| 2. Mother HIV-negative | - Promote exclusive breastfeeding for the first 6 months, introduction of complementary foods at about 6 months and continued breastfeeding to 24 months and beyond  
- Discuss the dangers of mixed feeding  
- Teach mother how to avoid exposure to HIV |
| 3. Mother HIV-positive who is considering her feeding options | - Discuss whether breastmilk substitutes are available, affordable, and safe to prepare and adequate health care is available and affordable  
- Discuss if not breastfeeding at all is acceptable in the local community or family  
- Help mother choose and provide safest available feeding method  
- Discuss the dangers of mixed feeding  
- Teach mother how to avoid transmission of HIV |
| 4. Mother HIV-positive and chooses to breastfeed | - Promote safer breastfeeding  
  - exclusive breastfeeding for three to six months,  
  - prevention, early detection and treatment of breast problems of mothers  
  - prevention, early detection and treatment of oral lesions in infants  
- Discuss the dangers of mixed feeding  
- Teach mother how to avoid transmission of HIV |
| 5. Mother HIV-positive and chooses NOT to breastfeed | - Counsel mother on safety, availability, and affordability of feeding breastmilk substitutes  
- Teach and show mother how to prepare and feed breastmilk substitutes in a safe and hygienic manner  
- Discuss the dangers of mixed feeding  
- Teach mother how to avoid transmission of HIV |
5 What are the issues to consider once an infant feeding option has been chosen?

a) For the breast-fed infant:
   - Teach the mother to inspect her infant’s mouth for thrush and breakages in the mucous membrane (an added risk for HIV transmission).
   - Emphasise the importance of not giving any other foods or fluids apart from breastmilk.
   - Inform the mother about the importance of checking her breasts for mastitis, breast abscesses, and bleeding or cracked nipples.
   - Check that the child is latching properly to the breast.
   - Monitor the growth and development of the child.

b) For the infant fed breastmilk substitutes
   - Ensure access to an adequate supply of breastmilk substitutes, with adequate funds to pay for them, adequate utensils for feeding, and fuel for sterilising equipment and heating the breastmilk substitute.
   - Educate the mother about safe preparation of the breastmilk substitute, correct cleaning of utensils, and methods of sterilisation.
   - Teach the mother appropriate care of her breasts to prevent engorgement.
   - Teach the mother to cup feed her child since bottle feeding is less hygienic.
   - Monitor the growth and development of the child.
   - Monitor the safe preparation of breastmilk substitutes.

6 How can a mother with HIV reduce the risk of transmission if she breastfeeds?

The safest way to breastfeed is to do so exclusively without adding any other foods or fluids to the infant’s diet. Such additions are not needed and may cause gut infections that could increase the risk of HIV transmission.

It is currently recommended that if the mother chooses to exclusively breastfeed she should do this for up to six months only. After this, if she can afford to provide safe breastmilk substitutes she should stop breastfeeding and switch to breastmilk substitutes together with complementary feeds. If however, she cannot provide breastmilk substitutes and the child is at risk of malnutrition the mother should continue to breastfeed or express and heat-treat her breastmilk (using a simple home method of pasteurisation) together with complementary feeds.

If an infant has oral lesions or if the mother has mastitis, cracked or bleeding nipples the risk of HIV transmission is greater. These conditions must be prevented by teaching the mother how to properly place the baby on the breast and promptly seek treatment if problems arise.

7 What are the dangers of mixed feeding?

Mixed feeding means giving the infant other foods or fluids apart from breastmilk. This way of feeding increases the risk of HIV transmission from infected breastmilk. This may be due to ingestion of contaminated water, fluids, and food and may lead to injury to the gut lining and disruption of immune barriers. This risk is lowered with exclusive breastfeeding. However, mothers need to be encouraged and supported to achieve this. Quite often they are not confident that their breastmilk is enough. It is important to remember that the production of breastmilk is dependent upon the number of times the baby is put to the breast for feeding and not on the mother’s nutritional status. The more time the baby is put to feed at the breast the more milk is produced for feeding the baby.