Questions and Answers

Infant Feeding in the context of HIV in South Africa

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Exclusive breastfeeding means giving a baby no other food or drink – not even water – except breast milk. It does, however, allow the infant to receive drops and syrups (vitamins, minerals and medicines) if needed. (WHO)

What is the best way to feed a baby?

Exclusive breastfeeding for the first six months is the most beneficial way to feed all babies; if the mother is HIV-negative she should ideally continue breastfeeding until the baby is two years old, or longer according to the mother's wishes, with complementary foods added from six months. If the mother is HIV-positive, breastfeeding should be accompanied by antiretroviral treatment for the mother or prophylaxis (daily nevirapine) for the baby. When HIV-positive mothers stop breastfeeding, they should do so gradually over a period of one month.

From the age of six months breast milk alone is no longer sufficient to meet a baby's nutritional needs. Age-appropriate, safe and nutritionally adequate complementary foods and liquids should, therefore, be given in addition to breast milk[1]. When the baby is between the ages of 6-8 months, complementary foods should initially be given 2-3 times a day.[i] These guidelines are from the National Department of Health Clinical Guidelines for PMTCT (Prevention of Mother-to-Child Transmission) 2010[ii] and the National Department of Health Infant and Young Child Feeding Policy.

Exclusive breastfeeding contributes to building healthy babies and children, and ensures that babies do not get sick as it strengthens their immune system and protects them against death from illnesses such as diarrhoea and pneumonia.[iii] These benefits are true even in areas where HIV is a common problem, and even though breast milk carries HIV and can transmit HIV. The section below explains why HIV positive mothers should breastfeed.

1. A few examples of complimentary foods are raw fruits, vegetables, protein (meat, milk, cheese, beans) and carbohydrates (potatoes, rice, porridge).

If the mother is HIV-positive should she exclusively breastfeed?

YES. Recent evidence shows that mothers who are HIV-positive should exclusively breastfeed because of the many health and survival benefits to babies, so long as the mother or baby receives antiretroviral treatment or prophylaxis. We now know that there is reduced risk of HIV transmission through breastfeeding if antiretroviral treatment or prophylaxis is used by either the mother or baby. Research has also shown that when HIV-positive mothers exclusively breastfeed rather than using mixed feeding (which is a combination of breast milk and formula feeding); there is much less transmission of HIV.

Exclusively breastfed babies whose mothers are HIV-positive thrive and benefit, as do all babies, from the many nutritional benefits of breast milk. They are also at less risk than mixed-fed babies of developing and possibly dying from diarrhoea and malnutrition.

How can HIV transmission through breast milk be avoided?

New evidence shows that if a mother or baby is on antiretroviral treatment or prophylaxis throughout the period of breastfeeding, the chances of HIV transmission to the baby through breastmilk is significantly reduced. The likelihood of HIV transmission increases when there are higher viral loads in the blood or breast milk, antiretroviral treatment or prophylaxis decreases the viral loads in the blood and breast milk. This significantly reduces the likelihood of mother-to-child-transmission of HIV.

Should a breastfeeding mother who is HIV-positive or her baby be on antiretroviral treatment?

YES. In order to significantly reduce the chances of HIV being transmitted to the baby, either the mother or the baby should be on antiretroviral treatment (for mother) or prophylaxis (for baby).

- If a mother is already on lifelong antiretroviral treatment (ART) she must continue taking the treatment as normal throughout the breastfeeding period. ***In addition***, the baby must receive antiretroviral prophylaxis daily for six weeks after birth.

- If the mother's CD4 count is above 350 she will probably not be on antiretroviral treatment (ART). She then has two options. Either:

  1. She must go on to antiretroviral prophylaxis for as long as she breastfeeds, and for one week after breastfeeding stops. ***Or***,

  2. The baby must get antiretroviral prophylaxis throughout the breastfeeding period, and for one week after breastfeeding stops.

The second option (daily nevirapine prophylaxis for breastfeeding babies until one week after breastfeeding stops) is part of the current South African PMTCT guidelines.

What is the South African Government's guidelines on HIV and breastfeeding?

In 2010 the Government adopted a new strategy (as part of the revised PMTCT guidelines) which encourages exclusive breastfeeding for all HIV-exposed babies until six months old.

The new guidelines state that:

- All babies with mothers who are HIV-positive must receive antiretroviral prophylaxis daily for six weeks after birth, ***and***

- If the HIV-positive mother is not on lifelong antiretroviral treatment and the baby is breastfeeding, then the baby must be given antiretroviral prophylaxis (PMTCT regime – infant component – daily nevirapine), **throughout** the breastfeeding period, up until one week after breastfeeding stops.

- If the HIV-positive mother is definitely not breastfeeding and will never breastfeed then the daily antiretroviral prophylaxis (nevirapine) can be stopped six weeks after delivery

- All women who are HIV-negative, of unknown HIV status, and/or have HIV-positive infants should be advised to exclusively breastfeed their babies for the first six months of life and to continue breastfeeding with complimentary foods up to at least two years.

This treatment is available, free of charge, from government clinics and hospitals.

Note:
In light of WHO 2009 recommendations and the South Africa context, there needs to be further clarity in policy/guidelines about when breastfeeding should be stopped for HIV-positive mothers.

What are the benefits of exclusive breastfeeding for the BABY?[iv]

- Breast milk contains important antibodies which strengthen the baby's immune system, leading to optimal growth, development and health.
- Breast milk reduces the chances of babies dying from common childhood illnesses such as diarrhoea or pneumonia, and leads to quicker recovery during illness.
- Exclusive breastfeeding protects the baby's stomach lining (intestinal mucosa) making it an effective barrier to infections.
- Breast milk is the best food for babies as it gives them all the nutrients they need and reduces the risk of malnutrition.
- Breast milk is readily available, affordable and safe, which helps to ensure that infants get adequate sustenance.
- Breastfeeding promotes a vital bond between mother and child, which is important even if a mother may be returning to work.

...and for the MOTHER?

- Breastfeeding reduces risks of breast and ovarian cancer later in life.
- Breastfeeding promotes a vital bond between mother and child.
- Breast milk is always available, reducing possible difficulties in accessing supplies.
- Exclusive breastfeeding can reduce the chances of early conception (though it should not be used as a contraceptive method), reducing the risks associated with having children too close together.
- Breastfeeding helps women return to their pre-pregnancy weight faster, and lowers rates of obesity.

Not Exclusively Breastfeeding - what are the risks?

If a mother chooses to exclusively formula feed her baby or to use a combination of breast milk and formula (mixed feeding), possible risks for the baby include:

- Formula feeding is linked to higher risks of illness for the baby, such as water-borne diseases like diarrhoea. These arise from mixing powdered formula with unsafe water and not sterilizing bottles and teats properly.
- A baby who is not breastfed in the first six months is 14 times more likely to die than a baby breastfed exclusively for six months.[v]
- Malnutrition can result from over-diluting formula to "stretch" supplies. Malnutrition leads to illness and in many cases this leads to stunted growth rates.
- Mixed feeding can increase the risk of HIV transmission.
- If breastfeeding is not done regularly the breast milk may dry up.

A study in Botswana (which is a middle income country like South Africa) looked at baby deaths from diarrhoea and malnutrition, and showed there were higher survival rates among HIV-positive babies who were breastfed. The study also revealed that 7.5% of six-month-old babies who were breastfed died from pneumonia and diarrhoea, **whereas 33% of babies who only had infant formula (no breast milk) died from pneumonia and diarrhoea**[vi].

- what are the missed benefits?

Research shows that babies who are not exclusively breastfed for six months miss out on a number of important benefits. In particular, breast milk contains antibodies that support the baby's immune system; builds up the baby's digestive system and helps with brain development; infant formula does not contain any of these, which may affect the child's health and wellbeing.

If a mother does not wish to breastfeed, what options are there for feeding the baby?

If a mother asks about different infant feeding options, she should be counselled by a healthcare worker about her options, and be assessed to see if she can safely meet all seven conditions for safe formula feeding (see below). A mother must be advised that she should only use formula if she can ensure that her baby will get it consistently and that it will always be correctly prepared. The list below offers an indication of whether she will be able to do this.

Before deciding to use formula, a mother must meet **ALL SEVEN** of the following criteria which provide an indication as to whether or not she will be able to provide formula consistently and correctly:

1. The mother is clinically well; **AND**
2. Safe water and sanitation are assured at the household level and in the community; **AND**
3. The mother, or caregiver, can reliably provide sufficient formula milk to support normal growth and development of the baby; **AND**
4. The mother or caregiver can prepare the formula hygienically and frequently enough so that it is safe and caries a low risk of diarrhoea and malnutrition; **AND**
5. The mother or caregiver can, in the first six months, exclusively give formula milk, **AND**
6. The family is supportive of this practice; **AND**
7. The mother or caregiver can access health care that offers comprehensive child health services.

Whether a mother or caregiver chooses to breastfeed or formula feed, it is important that no solids are introduced before the baby is six months old. However, the baby may continue to receive drops and syrups (vitamins, minerals and medicines) if needed.

Does a baby whose mother is HIV-positive need additional care and treatment?

YES. All babies whose mothers are HIV-positive must receive antiretroviral prophylaxis daily for six weeks after birth. They must also be seen by a healthcare worker on the third day after birth, and then weekly during the first month of life, then monthly for the first year, then once every three months between the ages of 12 – 24 months[vii]. The baby must also be tested for HIV at six weeks using a PCR Test (blood taken from the heel), again at six weeks after stopping breastfeeding, and at 18 months. In addition, special attention should be given for screening for developmental delays.

All babies whose mothers are HIV-positive must also take co-trimoxazole. The length of time a baby is on this treatment must be determined by a healthcare worker according to the Paediatric Treatment Guidelines.

Ideally, the baby should be breastfed, with either the mother on lifelong antiretroviral treatment (ART) throughout the breastfeeding period, or the baby should continue with daily antiretroviral prophylaxis, up to one week after breastfeeding stops.

How are other mothers around the world feeding their babies?

Globally there has been a recent shift back to exclusive breastfeeding. A growing number of countries, especially in sub-Saharan Africa, are showing increases in rates of exclusive breastfeeding, including countries like Zambia and Lesotho with high HIV prevalence, and countries that initially had very low rates of exclusive breastfeeding. These countries have managed to increase their rates of exclusive breastfeeding by implementing comprehensive nationwide programmes to protect, promote and support breastfeeding. It has been estimated that if we had world-wide coverage with exclusive breastfeeding for six months, and continued breastfeeding up to one year, this could prevent 13% of deaths of children under five globally.[viii]

How should newborn babies be fed if they are admitted to an intensive care unit or high care unit?

- Newborn babies admitted to an intensive or high care unit are very sick and are at risk of getting serious diseases of the digestive system. Sometimes this serious illness (called necrotising enterocolitis - NEC) can result in the baby having surgery.
- Exclusive breastfeeding helps to protect against NEC and other serious infections in newborn babies.
- Thus newborn babies in an ICU or high care unit should be exclusively breastfed.
- If the mother is HIV positive and the milk is stored in a refrigerator then the milk should be pasteurised
- If the milk is not stored in a refrigerator then there is some debate about whether it should be pasteurised or not. Some intensive or high care units pasteurise the milk whilst others do not.

What can you do?

If you know someone who is pregnant:

- Support her to exclusively breastfeed for the first 6 months.
- However, if she expresses a wish not to, or cannot, breastfeed, she must receive individual counselling and be assessed against seven criteria to assess whether she can ensure that her baby will get formula consistently and that it will always be correctly prepared (see above). She must be supported in whichever infant feeding choice she makes.
- If she is HIV-positive and breastfeeds she must either remain on life-long antiretroviral treatment or ensure that her baby receives antiretroviral prophylaxis **throughout** the breastfeeding period, up until one week after breastfeeding stops.
- If she is HIV-positive and breastfeeding, she must gradually, not abruptly, wean her baby over a period of one month. Support her to get the support of her partner and family for her chosen infant feeding method.
- Encourage all mothers to hold their baby skin-to-skin within 30 minutes of birth, to facilitate wellness and bonding. Breastfeeding mothers should ensure her baby starts to suckle immediately, getting the full protective benefit of the first colostrum breast milk (the "first immunization"). Non-breastfeeding mothers should also have skin-to-skin contact within 30 minutes of birth.

If you are a healthcare worker:

- Become familiar with the new guidelines, make sure you understand them, and actively promote them.
- Make sure your local maternity facility implements the "Ten Steps to Successful Breastfeeding[2]" and is "baby friendly".
- Ensure you counsel every mother correctly (according to the new guidelines).
- Support and respect mothers in whichever infant feeding choice she makes.
- Where babies have been HIV-exposed, ensure they receive additional monitoring, care and support.

In your workplace or organisation you could:

- Share correct information and raise awareness about infant feeding with colleagues, other organisations and in your community.
- Monitor what is happening around infant feeding in the antenatal clinics in your area.
- Make sure your local maternity facility implements the "Ten steps to successful breastfeeding" and is certified "baby friendly".
- Ensure workplace practices and policies support exclusive breastfeeding for the first six months, including adequate maternity leave, suitable spaces to feed and care for babies or pump breast milk, and adequate breastfeeding breaks.

2 These ten steps were developed by UNICEF and the World Health Organisation to provide guidance to facilities providing maternity services and care for newborn infants. They can be accessed at http://www.unicef.org/newsline/tenstps.htm

Where in South Africa can mothers get help with exclusive breastfeeding?

All clinics and hospitals that offer antenatal, labour and postnatal care should provide advice on infant feeding. Mothers can ask any nurse, midwife, lactation consultant, healthcare worker (including HIV counsellors), or dietician for advice if they are not sure about their feeding options. In addition:

- In Durban, people can contact **iThemba Lethu** – pennyreimers@wol.co.za.
- In Cape Town, people can contact **Milk Matters** – Lgoosen@pgwc.gov.za.
- The **Human Milk Banking Association of South Africa** also has a mandate to support breastfeeding and has information on its website – www.hmbasa.org.za.

Queries can also be directed to the unit responsible for the "protection, promotion and support of breastfeeding", within the Nutrition Directorate of the Department of Health Tel: 012 395 8509.

References

Cover picture: Brothers for Life

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