

Is Breast Still Best? A Narrative Review of Current Literature on HIV & Infant Feeding in the Developing World

Tyra T. Gross, MPH

Health Promotion & Behavior
University of Georgia
ttgross@uga.edu

Alex K. Anderson, PhD, MPH

Foods and Nutrition
University of Georgia
fianko@uga.edu

Presenter Disclosure

Tyra T. Gross, MPH

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Background

- Breastmilk is the most adequate form of nutrition for infants and young children. (WHO, 2003)
- Breastfeeding traditionally practiced throughout developing world. (WHO, 2012)
- HIV can be transmitted from mother-to-child through breastfeeding. (WHO, 2003)
- **DEBATE:** Do the benefits of breastfeeding outweigh the risk of mother-to-child transmission (MTCT) of HIV or the risks of replacement feeding? (Couratids, 2005; Fletcher et al, 2008)

Infant feeding & HIV free survival



WHO HIV & Infant Feeding Guidelines

- To improve HIV free survival of infants born to mothers known to be HIV-infected, while not harming the mother's health
- Highlighted evidence on effectiveness of ARV therapy in decreasing MTCT of HIV
- National authorities decide infant feeding strategy for greatest chance of HIV-free survival
 - Breastfeeding + ARV therapy
 - Replacement feeding



WHO HIV & Infant Feeding Guidelines

Mothers known to be HIV-infected

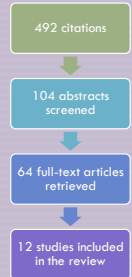
- should be provided with lifelong ARV therapy
- should exclusively breastfeed for the first 6 months of life
- who decide to stop should stop breastfeeding gradually within 1 month
- should provide infants with safe and adequate replacement feeds
- should only give commercial infant formula milk as a replacement feed when specific conditions are met
- may consider expressing and heat-treating breast milk as an *interim feeding strategy*
- follow guidelines for general population for HIV-infected infants

Methods

- Questions guiding this review:
 - What are the infant feeding trends in developing countries where HIV is prevalent?
 - What influences HIV-positive mothers' decisions to or to not breastfeed?
- PubMed search July 2011
- **Search strategy:** (breastfeeding or "infant feeding") and HIV
- **Limits:** 2006-2011, English language, Human subjects, abstract available
- **Inclusion criteria:** original research studies, developing country

Findings

- 12 studies included
- Infant feeding practices
 - Exclusive breastfeeding vs. other infant feeding
 - Weaning
- Determinants of Infant feeding



Infant Feeding Practices

South Africa (Ladzan et al, 2011)

- 50% exclusively formula fed 3-6 mos.
- 12% mixed fed

Zambia (Changweya, 2011; Kahn et al, 2009, 2010; Forey et al 2011)

- 55% ceased breastfeeding by 6 mos.,
- median age of cessation was 3 mos.
- RCTs indicate abrupt weaning:
 - ↑ diarrheal episodes
 - does not improve rates of HIV-free survival
 - ↑ mortality in HIV-infected children

Tanzania (Young et al, 2010)

- 95% initiate breastfeeding
- median duration of EBF was 3 mos.
- porridge most common complementary food (introduced around age 4 mos.)

India (Reed et al, 2010)

- 1/3 used replacement feeding
- median duration of breastfeeding was 3 mos.
- 70 % EBF at 1 wk.
- 20% EBF at 6 mos.

Determinants of Infant Feeding

South Africa

- 38.7% of the formula-feeding mothers met criteria for safe replacement feeding (Khidra et al, 2011)
- 67.4% of those intending to formula feed did not meet criteria (piped water, electricity/gas/paraffin, disclosed HIV status) (Doherty et al, 2007)

Determinants of Infant Feeding

Burkina Faso, Cameroon & Cambodia (Desclaux & Alfieri, 2009)

- Health workers driven by economic aspects, mothers driven by social aspects
 - "I was told it is forbidden to breastfeed" -HIV+ mother
 - "Breastfeeding is for mothers who do not have money. If the mother has money, she must give formula." -midwife
- Driven to be perceived as "good mothers"
- Cultural norms on infant feeding, HIV stigma, and fathers' attitudes

Determinants of Infant Feeding

Malawi (Levy et al, 2010)

- Confusion about exclusive breastfeeding
 - "They just told me to exclusively breastfeed for six months, but they didn't tell me the reason why"
- Early weaning found challenging
 - "We heard the advice that we should stop breastfeeding our babies at six months, and the message is in our ears. But I think that to stop breastfeeding the baby at six months is difficult"
- Stigma, culturally acceptable to breastfeed age 3
- Psychological burden of downloaded responsibility
 - "We feel bad thinking that, as the baby is being breastfed, he or she can contract the virus in the process"
 - "I think there is unfairness because, if they know that the baby is to stop breast milk, then they should find us an alternative solution. Because, on our own, we can't manage"

Discussion

- Infant feeding practices in areas burdened by HIV do not currently follow WHO guidelines
- HIV-infected mothers face confusion, stigma, and other challenges in infant feeding decisions
- Breastfeeding embedded in “biological, social, cultural, economic and political contexts
- Despite the risks, breastfeeding is still best
- HIV-infected mothers require additional support to achieve the WHO recommendations.

Breast-Feeding Can Be Worth HIV Risks In Developing World

by [unreadable]

10/22/12 10:00 AM

Facebook 12
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Thank You

Photo 10/22/12 10:00 AM
A woman in a pink shirt is holding a baby. The text 'Thank You' is overlaid in yellow on the image.

In the WHO, 2012 and breast-feeding has generally remained controversial. HIV-positive women are told to avoid breast-feeding all together, to give food, which is the greater danger of passing HIV from. But in the developing world, to complete that lack of clean water and an alternative, including sugar or other sweeteners, like World Health Organization's recommendation for HIV-positive mothers to breast-feed their babies for the first six months.

The thinking is that the benefits -- the antibodies found in breast milk and the boost to the infant's immune system -- outweigh the potential risk of HIV transmission.

Mary Mota, a 36-year-old mother from Malawi, who is HIV-positive, says she is breastfeeding her 18-month-old son, according to the United Nations.

While breastfeeding should not be a substitute for antiretroviral therapy, it is still a positive option to reduce the transmission of HIV from mother to child, according to a positive message to widely breast-feed is about to change that's being processed in developing countries.

It's believed that safe breast-feeding is complementary with the steps to substantially reduce the likelihood that an infant will become infected. If the HIV-positive mother is on antiretroviral therapy and the child is followed, the chance of transmission falls to 1 percent, according to a recent study. Some from an estimated 10 percent if nothing was done.

<http://www.washingtonpost.com/2012/10/22/breast-feeding-can-be-worth-hiv-risks-in-developing-world/>