The Controversy Surrounding Breastfeeding Among Women Living with HIV in High Resource Countries

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Objectives

- Explain why the current U.S. guidelines recommend that a woman with HIV not breastfeed
- Review current data on breastfeeding & HIV transmission
- Identify reasons why a woman living with HIV in a high resource country might consider breastfeeding
- Discuss a woman-centered approach to infant feeding counseling in the setting of HIV
• Breastfeeding is not recommended for HIV-infected women in the United States, including those receiving combination ART

• Women who test positive on rapid HIV antibody assay should not breastfeed unless a confirmatory HIV test is negative
Avoidance of breastfeeding has been and continues to be a standard, strong recommendation for HIV-infected women in the United States, because maternal ART dramatically reduces but does not eliminate breastmilk transmission. Further, safe infant feeding alternatives are readily available in the United States. In addition there are concerns about other potential risks, including toxicity for the neonate or increased risk of development of ARV drug resistance, should transmission occur, due to variable passage of drugs into breastmilk. However, clinicians should be aware that women may face social, familial, and personal pressures to consider breastfeeding despite this recommendation. It is important to address possible barriers to formula feeding beginning during the antenatal period. Similarly, there are risks of HIV transmission via premastication (prechewing) of infant food.
Review of the data
What is the thinking behind the guidelines?

• Prior to the availability of antiretroviral therapy, the risk of HIV transmission from a breastfeeding mother to baby was 16%.

• If formula is available, feasible, affordable, safe, sustainable (AFASS)—such as the U.S., then not breastfeeding usually makes sense.

Nduati et al. JAMA 2000; 283(9):1167-1174
Thior et al. JAMA. 2006;296(7):794-805
What are the risks of formula feeding?

- In low resource areas of the world, formula feeding has been associated with higher rates of infant death than death from HIV.

- Mixed feeding (alternating breast and formula feeding) has a higher risk of HIV transmission than exclusive breastfeeding.

What is the HIV transmission rate associated with antiretroviral therapy? What is the evidence?

- Kesho Bora study
- Mma Bana study
- Breastfeeding, Antiretrovirals, and Nutrition (BAN) trial
Kesho Bora study: maternal treatment while breastfeeding

Risk of HIV Transmission

- Triple ARV Therapy (12-month follow-up): 5.4%
- Prophylactic ARVs (1st week of life): 9.5%

Mma Bana study (Botswana): maternal treatment while breastfeeding

Maternal ARV use among 560 women (zidovudine/lamivudine BID with a) abacavir OR b) lopinavir/ritonavir OR c) nevirapine) during pregnancy, and up to 6 months of breastfeeding was associated with a 1.1% cumulative risk of transmission.

95% of all women had VL<400

BAN Trial: Infant prophylaxis vs. maternal treatment while breastfeeding

Compared infant ARV prophylaxis (daily nevirapine in increasing doses according to infant weight) vs. maternal ARV therapy (the majority received zidovudine/lamivudine with lopinavir/ritonavir BID) for the duration of breastfeeding vs. a control group of 1 week of neonatal ARV prophylaxis.

BAN Trial: Infant prophylaxis vs. maternal treatment while breastfeeding (cont.)

Cumulative HIV Incidence - 6 months postpartum

- Infant ARV: 1.7%
- Maternal ARV: 2.9%
- Control: 5.7%

Treat mother with ARVs until baby fully weaned

OR

Treat baby with ARVs until fully weaned
2016 update on breastfeeding

- PROMISE trial
- Maternal three-drug antiretroviral therapy, as well as infant nevirapine, offered protection against HIV transmission from mother to child
- The rate of perinatal transmission did not differ between the two study arms and was very low — 0.3 percent at 6 months of age and 0.6 percent at 1 year of age. The longer an HIV-infected mother breastfeeds, the greater the risk for HIV transmission to the infant. In comparison, in the absence of any intervention, rates of HIV transmission from a HIV-infected mother to her child during either pregnancy, labor, delivery or breastfeeding historically have ranged from 15 to 45 percent, according to WHO.
- 99 percent of babies lived to see their first birthday.

TE Taha et al, 21st International AIDS Conference, Durban SA 7-2016
Cases
Who wants to breastfeed in the U.S.?

• Case 1: A 32-year-old woman, originally from Nigeria, was diagnosed with HIV during her current pregnancy. During prenatal care, she communicated to her obstetrician her desire to breastfeed.

• She feared that not breastfeeding would raise suspicion in her community about her HIV status.
Case 1 (continued)

- The patient was referred to the local pediatric HIV specialist, who explained the risks of HIV transmission via breastfeeding. The patient expressed relief to discuss her concerns with a provider. Knowing she had options provided a space for her to contemplate the best decision for her situation.

- She opted to breastfeed for 6 weeks, both to “prove” to her community that she did not have HIV and in response to public messages that “breast is best.” Both she and her baby remained on ARVs while she breastfed.
Who wants to breastfeed in the U.S.?

- Case 2: A 35 year old woman recently diagnosed with HIV discloses not breastfeeding is the hardest part of adjusting to her diagnosis.
- She’d breastfed her first child for 2 years and planned to do the same with this infant, feels breastfeeding provides the best nutrition, immune support and optimal bonding.
- After discussing all the options including the risks of HIV transmission, unknown safety of infant exposure to ARVs through breast milk and other alternatives for infant feeding, she ultimately decides to bottle feed.
Our approach to infant feeding discussion

• Ask: “In the U.S. it is recommended not to breastfeed if a woman has HIV. Is that an issue/problem for you?”

• If, after hearing the risks, the woman still wants to breastfeed, then what?
Harm reduction strategy: theory behind our practice

• “People will make more health-positive choices if they have access to adequate support, empowerment, and education.”

• An example of harm reduction is needle exchange programs (better not to use IV drugs but if you are going to, then use clean needles to reduce your risk of HIV, hepatitis, and bacterial infections)

Risk Reduction Framework

• **Validate** her desire to breastfeed

• **Seek** to understand her motivation to breastfeed

• **Explore** alternatives

• **Offer** harm reduction
Harm Reduction Approach

1. **Discuss** timing of and methods of weaning with options
2. **Discuss** what is known and not known about reduction in lactational HIV transmission
3. **Explain** that exclusive breastfeeding appears safer than mixed formula/breastfeeding
4. **Ensure** the woman is receiving a suppressive ARV regimen
5. **Discuss** the option of infant ARV prophylaxis beyond the standard 6 weeks of zidovudine syrup
6. **Monitor** maternal viral load monthly

7. **Conduct** HIV polymerase chain reaction (PCR) testing for the infant monthly while breastfeeding and at 1, 3, and 6 months after weaning

8. **Monitor** the infant for evidence of hematologic toxicity depending on ARV regimen and pediatric recommendations

9. **Educate** the woman about presenting for care immediately for signs of mastitis

Collaborative Harm Reduction Strategy

- Ensures optimal maternal treatment
- Prenatal referral to Pediatrician
- Coordinates feeding with birth hospital
- Educates mother on risks/benefits
- Guides nursery pediatricians
- Addresses feeding/weaning issues
- Infant testing

- Obstetrician
- Pediatrician
- Mother

- Understands risks
  - Virologic suppression
- Prepares ahead for complications
- Family support
Woman-centered printables about HIV and infant feeding:

- Bonding with your baby without breastfeeding
- Infant Feeding & Women Living with HIV

http://www.hiveonline.org/for-you/hiv-women/
THANK YOU

- Feel free to contact me: jlevison@bcm.edu