**Summary of our last Ethics for Lunch:**
**HIV and breastfeeding in the United States: Medical and Ethical Analysis**

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Panelists: Marielle S. Gross, Jenell Coleman Fennel, Christopher Golden, Lorraine Milio, Allison Agwu, Lakeisha Rodney, Nadine Rosenblum

The December 2018 Ethics for Lunch involved the ethics of breastfeeding for U.S. women living with HIV (WLHIV). The panel discussion created a forum for clinicians to contextualize the current recommendation against breastfeeding within the broader medical and social context of present-day HIV medicine, including current evidence relevant to women who maintain an undetectable viral load and sensitivity to underlying health disparities. Recent updates to Department of Health and Human Services’ recommendations were reviewed and three cases were presented to highlight different aspects of this issue: (1) significance of an undetectable viral load for risk of breastmilk transmission and health benefits of breastfeeding for infants and women; (2) the socioeconomic and personal factors influencing feeding decisions; and (3) challenges that must be navigated whether the woman avoids breastfeeding or pursues breastfeeding with clinician support.

Key points from the session included:

1. The historical context described how HIV has evolved from a “death sentence” to a manageable chronic condition, with many more WLHIV pursuing pregnancy as a result. Because HIV can be passed via breastmilk from mother to child, and because breastmilk alternatives are reliably available in high income countries like the U.S., the recommendation has been for U.S. WLHIV to strictly avoid breastfeeding. Notably, this stands in contrast to World Health Organization recommendations for WLHIV worldwide, for whom breastfeeding is recommended in addition to combined antiretroviral therapy due to the improved survival for breastfed infants than those who receive either formula or a combination of breastmilk/formula.

2. Maintaining an undetectable viral load on combined antiretroviral therapy can virtually eliminate risk of both horizontal and vertical transmission of HIV (between sex partners or mother/child, respectively). This is referred to as undetectable=untransmissible, or “U=U,” and raises important questions for the balance of risks/benefits of breastfeeding for HIV-exposed infants, particularly given increasing knowledge of breastfeeding’s relevance to morbidity and mortality for children in high income settings and current favorable outcomes for perinatally HIV-infected U.S. children.

3. Specific harms of not breastfeeding relevant to U.S. infants include increased risk of SIDS, necrotizing enterocolitis, severe infections, and acute otitis media, as well as long term risks of diabetes, obesity, asthma, and leukemia. The virtual elimination of breastmilk HIV transmission when WLHIV are taking combined antiretroviral therapy, as well as the health reasons supporting breastfeeding as the normative infant feeding method, suggest that avoiding breastfeeding may not minimize health risks for infants whose mothers maintain an undetectable viral load. Studying breastfeeding outcomes for HIV-exposed infants in high income settings has not been possible as a result of current recommendations; however, there are substantial data from low income settings where breastfeeding is the norm and HIV prevalence is high, and this data can help inform policy.

4. the panel reviewed the excess maternal morbidity and mortality attributed to not breastfeeding, including cancer of ovary, breast, and uterus; obesity; diabetes; cardiovascular diseases such as hypertension, stroke and myocardial infarction; and obstetric risks related to unintended short interval pregnancy. The psychosocial dimension of infant feeding for U.S. WLHIV was reviewed by a patient representative, who illustrated how avoiding breastfeeding may compromise maternal-child bonding, and how feeding choices are situated in complicated domestic/community environments which may pressure women to breastfeed, or where avoiding breastfeeding in some cultures may be tantamount to disclosing one’s HIV status.

5. Due to concerns that some women will breastfeed despite recommendations against doing so, and that a complete hardline stance against breastfeeding could increase harm by making women more likely to conceal their feeding choice or drop out of care, a harm reduction protocol was added to U.S. guidelines in 2018. The guidelines continue to emphasize that breastfeeding is NOT recommended; however, the harm reduction protocol acknowledges the challenges women may face from current recommendations and provides guidance for providers for managing dyads where the woman chooses to breastfeed “despite extensive counseling.” Recent research about U.S. HIV healthcare providers’ experience found that at least 1/3 of providers were aware of their patients breastfeeding despite recommendations, supporting the move to include a harm reduction approach to this issue. The panel also discussed how the U=U movement has factored into shifting perspectives among healthcare providers regarding the issue of breastfeeding for U.S. WLHIV.

6. Given clinical equipoise regarding the optimal feeding method for infants in the setting of an undetectable maternal viral load, respect for maternal autonomy and a shared decision-making approach were discussed. The panel reviewed how current recommendations might compromise women’s autonomy when they result in withholding of immediate postpartum lactation support or excessively forceful counseling while inpatient postpartum, especially if women are afraid that breastfeeding may jeopardize child custody due to providers reporting concerns about the baby’s well-being. The significant personal and health-related importance of breastfeeding for many women emphasizes the point that the decision regarding infant feeding under these (and other) circumstances is complex, and should not be regarded as “merely an expression of autonomy” that may otherwise be at odds with the best interests of the child/family.

7. The limits of harm reduction as a strategy for addressing breastfeeding among U.S. WLHIV were discussed, namely that it treats breastfeeding essentially as a harm. The argument was advanced that this was not consistent with evidence regarding risks/benefits of breastfeeding for infants and women in the setting of an undetectable viral load. Another major critique of a harm reduction strategy was that while it distances itself from the hardline stance, it may fail to achieve its goal as it continues to assert that breastfeeding is undesirable, which may jeopardize honest physician-patient communication and may undermine genuine, informed, shared decisions. Additionally, a truly comprehensive harm reduction strategy would aim to address the harms of formula that are imposed upon many HIV-exposed infants if their mothers do not breastfeed (e.g., by providing access to donor human milk).

8. The health and socioeconomic disparities affecting U.S. WLHIV and their infants were reviewed, specifically that they suffer greater risks of nearly all health problems that may be ameliorated by breastfeeding. Here, the cost of formula, WIC penalties for not breastfeeding, and increased loss of productivity from child/maternal illness are relevant considerations, as are the lower IQ/educational attainment of children who were not breastfed.

9. The panel discussed recent experience with WLHIV desiring to breastfeed over the past year, as well as current Johns Hopkins Hospital policy, which currently states that WLHIV are not allowed to breastfeed while they are admitted after delivery. The importance of interdisciplinary communication and coordination of care for optimally managing these patients, both during pregnancy and postpartum was emphasized, as was the need for collaboration in the development of formal policies that accommodate the updates to DHHS recommendations.

10. WLHIV differ significantly in terms of their medical condition and comorbidities, personal beliefs and social circumstances. It is important to consider all these factors and in individualizing the counseling and support the inter-disciplinary peri-partum team provides, especially regarding the issue of infant feeding. For example, many WLHIV would never consider breastfeeding for multiple reasons. Most pregnant WLHIV acquired HIV through heterosexual transmission and are extremely motivated to maintain an undetectable viral load throughout pregnancy. A substantial minority of WLHIV, however, have risk factors that make it more difficult to reliably control HIV viral load, in which case breastfeeding would be especially risky for infants. These risk factors include current or previous injection drug use, active use of other illicit substances, hepatitis co-infections, or exposure to partners with these co-infections. These risk factors and epidemiological evidence could be used to inform the development of more nuanced clinical guidelines regarding which WLHIV may be good candidates for breastfeeding and for whom we should continue to recommend against breastfeeding.

11. There are unique challenges in supporting women to safely breastfeed after hospital discharge. There are open questions about what to do if a woman’s milk supply is insufficient to provide complete nutrition for the infant. Evidence suggests that there is potentially increased HIV transmission in the setting of mixed breast and bottle-feeding. There are also concerns about mastitis and cracked/bleeding from nipples--both common in breastfeeding women--which temporarily increase risk of transmission to infants. Importantly, these challenges can occur 24/7, and robust support networks would have to be in place to help women and their clinicians respond to these challenges in real time. There are also challenges for supporting patients who do not breastfeed. For example, providers have helped patients explain why they are not breastfeeding to their families/communities by providing medically plausible reasons (unrelated to HIV). Importantly, the excuses that have been used are not always medically accurate (e.g., not being able to breastfeed in the setting of gestational diabetes). At times, medical interventions are even given to help substantiate these excuses (e.g. administering cabergoline to suppress milk production in a woman who is using the excuse that she had an insufficient milk supply and was instructed to switch to formula because the baby was losing too much weight).

12. Under current standard of care, U.S. infants receive 4-6 weeks of post-exposure prophylaxis against HIV after birth. Importantly, robust evidence from low income settings in which breastfeeding is practiced demonstrates that infants who are continued on prophylaxis during breastfeeding (e.g., for 6 or 12 months) do not experience any additional medication side effects than infants who only receive the standard short course neonatal prophylaxis. On the other hand, when women are adherent with their own combined antiretroviral therapy, there is no evidence that continuing the infant on prophylaxis offers any additional protection. Thus, whether infants should be on antiretroviral prophylaxis throughout the duration of breastfeeding remains an open question.

13. Legal concerns regarding liability for healthcare workers who support WLHIV in breastfeeding in the event of a subsequent HIV diagnosis in that child were raised during the session. This was especially relevant to the hospital setting, where the potential role of a “breastfeeding waiver” or “informed consent for breastfeeding” was discussed. This notion was challenged as a practice that reflected stigma against HIV out of proportion to risk, especially when compared to other practices/preferences regarding newborn care for which we do not require similar contracts. If clinicians have engaged in a shared decision-making process with WLHIV and the woman has chosen to breastfeed because she thinks it more beneficial than harmful for her infant, then it is unlikely she would be challenged as medically neglectful or that the healthcare team would be held culpable.

**Expanded References:**

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