Commentary

Canadian guidance should present formula and breast- or chestfeeding as equivalent options for parents with virally suppressed HIV

Mona Loutfy MD MPH, V. Logan Kennedy RN MN

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Canadian guidance still recommends formula feeding for all infants of birthing parents with HIV.[1] However, evidence supports that the risk of perinatal HIV transmission from breast- or chestfeeding is very low (likely < 0.08%–16%) when a parent with HIV is on antiretroviral therapy (ART), virally suppressed, and under the care of a clinician.[2] This low risk, combined with the benefits of human milk and breast- or chestfeeding, means that Canadian guidance should be changed to present breast- or chestfeeding as an option equal to formula feeding, using a supportive shared-care and informed decision-making process. This would bring Canadian guidance in line with that in other high-income countries and that of the World Health Organization.[3–6]

A 2017 systematic review using data from low- and middle-income countries calculated the perinatal HIV transmission risk to be about 1% at 6 months and 2% at 12 months from breast- or chestfeeding people, most of whom were taking ART.[7] However, HIV viral load testing was not consistently measured in the studies included in the systematic review, potentially making these findings less applicable to high-resource countries like Canada. Since then, the PROMISE trial has compared perinatal HIV rates in participants randomized to postpartum maternal ART (n = 1220) or infant ART (n = 1211).[2] The perinatal HIV rate was only 0.58% overall, with a 16-month median duration of breastfeeding. This was the first study with routine, detailed postpartum HIV maternal viral load and infant testing. A subsequent analysis reported perinatal HIV transmission from 2 of 1220 mothers (0.16%) who were virally suppressed on ART during the breastfeeding period. However, neither mother was suppressed at randomization.[2] The PROMISE trial provided important information about the risk of perinatal HIV transmission through breast- or chestfeeding, but it did not provide information about the risk of HIV transmission through breast- or chestfeeding in parents who had sustained viral suppression before conception until the infant stopped breast- or chestfeeding.

To quantify the risk of perinatal HIV transmission under optimal virologic suppression (i.e., preceding conception, throughout pregnancy, and during breast- or chestfeeding), we examined case reports of breast- or chestfeeding parents from several high-resource countries. As of October 2024, there are reports of 431 parents with HIV in high-income countries, most on ART and virally suppressed, who breast- or chestfed their infant and in whom HIV polymerase chain reaction test results from their infant were available. Nineteen parents were lost to follow-up, 20 infant HIV results were pending at time of writing, and 392 infants had negative HIV results (Appendix 1, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.240441/tab-related-content). No instances of confirmed HIV transmission occurred. These data suggest that the risk of perinatal HIV transmission from breast- or chestfeeding in people who have optimal virologic suppression (meaning no detectable virus) is less than 0.2% (obtained by taking 2 transmissions in the maternal ART arm of the PROMISE trial and dividing by the number of participants), the upper range reported by PROMISE. Moreover, the approach is supported by reproductive rights.

Several high-income countries' recommendations now endorse breast- or chestfeeding and formula feeding as equivalent options.[3,4] In this approach, the onus is not placed on the person with HIV to advocate for their reproductive rights. Instead, they are presented both options, supporting an informed infant feeding choice.

Key points

- The risk of perinatal HIV transmission from breast- or chestfeeding has been shown to be very low (likely < 0.08%–0.16%) when a person with HIV is on antiretroviral therapy, virally suppressed, and under the care of a clinician.
- Breast- or chestfeeding by such parents has clinical equipoise with formula feeding, considering the benefits of human milk to infants.
- Infant feeding recommendations in some high-income countries have changed from promoting solely formula feeding to presenting formula and breast- or chestfeeding as equivalent options for parents whose HIV is suppressed.
- Canadian guidance should offer formula and breast- or chestfeeding as equivalent options, using a supportive shared-care and informed decision-making process.

Before the availability of highly effective ART, when an appreciable risk of perinatal HIV transmission existed, the right of people with HIV to make informed decisions about pregnancy and conception was supported. Although conception and breast- or chestfeeding are different (denying conception can be seen as a violation of human rights, whereas recommending formula can be seen as protecting an infant), we do not consider this a clinical distinction to make.

In high-income countries like Canada, HIV is now a manageable, chronic illness that remains highly stigmatized. It is possible that the ongoing reluctance to promote breast- or chestfeeding in Canada is from unconscious patriarchal biases that inform our health care systems. Some health care providers feel they have a duty to "protect" the infant from HIV. However, this protection exposes the infant and parent to potential stresses related to inadvertent HIV disclosure within some communities because the parent is not breast- or chestfeeding (particularly in communities with strong cultural expectations), sadness from perceptions of failure for not fulfilling parental roles, and isolation caused by avoiding social interactions as a way of concealing that an infant is being formula fed.

We cannot say the risk of HIV transmission via breast- or chestfeeding is nothing. However, we consider that the risk is low enough that people with HIV should be informed about the risks and benefits of breast- or chestfeeding, and parents should be supported to make the best choice for themselves and their infants. Using a supportive shared-care and informed decision-making process acknowledges the growing safety data that support clinical equipoise, the individual and cultural factors that inform parenting decisions, and the benefits conferred from human milk.

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Affiliations: Women's College Research and Innovation Institute (Loutfy, Kennedy), Women's College Hospital; Division of Infectious Diseases (Loutfy, Kennedy), Department of Medicine, University of Toronto, Toronto, Ont.

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Correspondence to: Mona Loutfy, mona.loutfy@wchospital.ca